

TEACHERS' DIFFERENTIATED EXPECTATIONS
FOR KINDERGARTEN GIRLS AND BOYS

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS IN
EARLY CHILDHOOD EDUCATION IN
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CHAPTER I

INTRODUCTION

The increasing awareness of sex-role identification and of the overwhelming influence this self-identification has upon the future life style of girls and boys has begun to focus the attention of researchers upon the ways in which children are conditioned to accept their respective sex roles. The data, so far, are sparse and inconsistent, especially in the field of early childhood education. The kindergarten and elementary teacher has the opportunity to have a great influence in this developmental process. She has the young child in her classroom approximately 1,000 hours a year, during which her attitudes, expectations, and behavior exert a powerful conditioning effect, while providing the children with information about the appropriate behavior for girls and boys. Certainly, teacher awareness of this powerful influence is most important.

Teachers are mostly products of the middle class and, as such, adhere to traditional middle class expectations of appropriate sex-typed behavior for girls and boys. This study was an attempt to discover whether teachers held differential expectations for girls and boys and to determine

which intellectual and physical attributes and personality traits teachers judged as appropriate for girls, for boys, for neither, or for both.

Purpose of Study

The purpose of this study was to investigate the role of the kindergarten teacher in perpetuating sex-role stereotypes. One group of kindergarten teachers was asked to rank a selection of 32 attributes in the order of their appropriateness for kindergarten girls. A second group of kindergarten teachers was asked to rank the same 32 attributes in the order of their appropriateness for kindergarten boys.

Null Hypothesis

The null hypothesis formulated was: There will be no significant differences between the mean ranking for each attribute as ranked for girls when compared to that same attribute as ranked for boys. To determine if a significant difference existed the research data were submitted to an analysis of variance, one-way design. The independent variable was the sex of the child for which the rankings were made. The control variable was the grade level of the children and teachers. The intervening variable was the teachers' opinions, expectations, observations, etc. The dependent variables, ordinally scaled, were the 32 attributes to be ranked.

Definition of Terms

The terms specific to this study are defined below:

Sex-role identification--"the degree to which an individual regards himself [or herself] as masculine or feminine . . ." (Kagan, 1964, p. 144).

Sex roles--culturally prescribed behaviors and characteristics defined as differentially appropriate for females and males (Mussen, Conger, & Kagan, 1974).

Sex-typing--"the adoption of behavior, values, attitudes, and interests generally considered appropriate to the masculine or feminine role in the child's culture" (Mussen, Conger, & Kagan, 1974, p. 398).

Sex-role stereotyping--arbitrary assignment of narrow definitions of roles without regard for individual differences.

Hidden curriculum--the repetitious and continual incidental contacts students have in interaction patterns, a seductive reward system, unbalanced staffing, and curricular materials (Frazier & Sadker, 1973).

Sex-role standards--the extent to which the individual considers certain activities appropriate to males and certain other activities appropriate to females (Dwyer, 1974).

Limitations of Study

This study was limited by the following conditions:

1. The subjects were selected from kindergarten teachers

employed by the Dallas Independent School District.

2. The study was limited to only the 32 attributes specified.
3. The findings of this study may be descriptive of other kindergarten teachers' attitudes; however, sample procedures prohibit generalization of the findings to other kindergarten teachers.
4. This experiment is, of necessity, an ex post facto design to determine the effects of a naturalistically-occurring phenomenon. While a co-relational study of this type does not necessarily imply causation, it can serve a useful purpose in determining the relationship among measures and suggesting possible basis for causality (Tuckman, 1972).

CHAPTER II

REVIEW OF LITERATURE

The effects of teacher expectancy on the intellectual performance of students was the subject of Rosenthal's and Jacobson's controversial publication (1968), Pygmalion in the Classroom. They found evidence to suggest that labels denoting academic potential may become self-fulfilling prophecies because of subtle changes, which result from the use of labels, in the teachers' interaction with pupils. Since their publication in 1968, more than 200 studies have tested the hypothesis that the teacher's expectancy of how a student will perform affects the pupil's actual performance (Horn, 1974). The results have been mixed. One of the latest studies, by psychologist W. Burleigh Seaver, has supported the hypothesis that teacher expectancy does make a difference, and he believes it is possible to generalize the results of his study to the untampered-with, naturally functioning classroom (Horn, 1974). These studies generally concern the intellectual performance of the students, but it is possible that teacher expectancy can affect behaviors, interests, attitudes, and personality characteristics as well.

Parents, students, peers, teachers, and staff all bring attitudes, expectations, and behaviors into the educational

system. Institutionalized stereotyping certainly may occur in the teaching-learning situation itself (McLure, 1973). In 1966 Sears and Feldman investigated the teachers' role in the process of sex-role learning for elementary school children. They maintain that in some degree the teachers must support the values current in the culture in which they teach, and in most instances probably wish to do so because their own values are similar to those of parents and the culture in general. Their review of the educational literature lends support to the view that sex-typing impedes children's development in other areas. Zach and Price (1973) state that American schooling, in which the teachers hold differential expectations for girls and boys, jells the sex roles of children. They believe it is possible that the strong sex-role expectations teachers hold for their students may limit potential, stifle creativity, and restrict vocational choices. The powerful indoctrination of the school system teaches children that girls are innately passive, unaggressive, supportive, and domestic, and that boys are innately dominant, achieving, adventurous, and aggressive (Harrison, 1973). These official expectations are presented to children at a time when most of them have not yet attained a critical perspective on themselves and their backgrounds (Women on Words & Images, 1972). The pressure of this official version cannot help but become

the norm for young children vulnerable to the power of other peoples' expectations.

The differential expectations for the activities in which girls and boys engage in school are no doubt communicated to the students. Sex stereotypes introduced in the home are reinforced and refined in the school through total and constant immersion in the pervasive "hidden curriculum" (Frazier & Sadker, 1973). When information on the sex-specificity of an activity is available to a student, the student will perform at a higher level and place a higher value on the activity when it is labeled sex-appropriate than when it is labeled sex-inappropriate (Montemayor, 1971). A study that examined the relationship between sex-role standards and achievement in the areas of reading and arithmetic indicated that sex-role standards contributed significant variance to the reading and arithmetic achievement test scores (Dwyer, 1974).

The results suggest that reading and arithmetic sex differences are more a function of the child's perception of these areas as sex-appropriate or sex-inappropriate than of the child's biological sex, individual preference for masculine or feminine sex role, or liking or disliking of reading or arithmetic (Dwyer, 1974, p. 811).

There was a stronger effect of sex-role standards on males' than on females' achievement. That boys are under greater pressure than girls to exhibit sex-appropriate behavior is most probably a reflection of the greater latitude our culture allows females in participating in the female role. Even at

the preschool level, boys use far greater resistance responses and show more anxiety than girls to sex-inappropriate behavior (Ross & Ross, 1972). Is it possible that children receive the impression from their elders that male behavior is more acceptable from a girl than female behavior is from a boy?

A common research assumption is that a high degree of sex-role differentiation is a characteristic of increasing personal maturity. It would seem that as children grow older their sex-role choices are more closely related to society's expected sex-role behavior. However, in direct contradiction, Dwyer (1974) found in her sample of second through twelfth graders a trend of the younger subjects to show more rigidity concerning sex roles than the older subjects.

It is possible that this finding reflects a growing awareness of the personally limiting properties of strong sex role typing (as opposed to individual choice) and that a mature synthesis may give higher priority to personal abilities and interests than to maintenance of social sex role traditions (Dwyer, 1974, p. 815).

What are the different expectations a teacher has for girls as opposed to those she or he has for boys? Within the family girls receive more affection and praise; boys are subjected to greater achievement demands and discipline (Bronfenbrenner, 1961). Perhaps these rewards and demands are carried over into the classroom. Studies of teachers' sex-role stereotyped expectations and attitudes tend to

show: (1) teachers believe that girls are more passive and that boys are more aggressive, and (2) teachers tend to encourage the very behaviors they believe exist (Chasen, 1974). "On that first day of the first grade, the experienced teacher will be ready for more active, rambunctious behavior from her young male charges and will expect quieter compliance from the young girls" (Frazier & Sadker, 1973, p. 85). She also expects boys to be stronger than girls (Sadker, 1973) and compliments them on their strength more often than she does girls (Chasen, 1974). The dependent girl is the best liked of students, and the aggressive girl the least liked (Levitin & Chananie, 1972). The dependent girl is behaving in a manner appropriate for a student, as well as for a girl, in the opinion of the teacher. The aggressive girl violates both values, while the aggressive boy or dependent boy violates only one. The results of Hollender's study (1972), which seem to relate social self-esteem with status and power, are more consistent if it is assumed that females are more often valued for their person and personality and males for their behavior and achievements.

Some researchers believe that the stereotyped expectations of the teacher are particularly damaging to boys. Sexton (1969) states that the educational system, through the agency of the teachers, rewards naturally "feminine" behavior such as passivity, obedience, and conformity with disastrous results

for males. A frequently mentioned explanation for girls' superior achievement in the early grades in school is that the almost exclusively female faculty may prefer girls to boys and/or be less able to teach boys as successfully as girls. Brophy and Good (1973) find little evidence to support this common assumption. In fact, the few data available suggest the opposite.

Thus, it appears that the achievement differences favoring girls over boys typically found in American schools results from an interaction between the role of the student and the sex-role expectations applied to boys and girls in our society. Sex of the teacher, as such, appears to be of little or no importance (Brophy & Good, 1973, p. 565-566).

Maccoby (1966) asserts that girls generally excel in elementary school programs due to the congruence of expectations with traditional feminine activities.

More research tends to support the hypothesis that, in the long run, schools are more damaging to girls. Despite the findings that boys receive more teacher disapproval and girls receive more teacher approval (Herrmann, 1972), it is plausible that this disapproval could reflect the higher expectations held for boys (Zach & Price, 1973). In fact, teacher criticism, seemingly negative, may actually help boys to be more independent, autonomous, and active than girls (Bardwick, 1971). For girls, the double-barreled message of the schools' expectations, plus the traditional sex-role expectations, furnishes reinforcement for obedience, docility,

and dependence too strong for most to overcome (Levy, 1972). The school's expectations for boys often conflict with traditional sex-role expectations, resulting in a confusing double message--but with more options. Sex-typing in the elementary school is particularly damaging to girls since the roles and characteristics assigned to females are less positive and less desirable than those assigned to males (Levy & Stacy, 1973). Male superiority and female incompetence seem to be accepted beliefs of children as early as the first grade, as demonstrated by the fact that even when the best performers of a certain task are girls, they make very low judgments of their own performance skills (Pollis & Doyle, 1972). "Boy behavior has greater societal approval than girl behavior . . . for both sexes" (Zach & Price, 1973, p. 4). Boys receive more attention--from both male and female teachers--even though the sex ratio is 50/50 (Dennis, 1973).

Despite widespread cultural beliefs that boys and girls have innate biological feminine and masculine behaviors, this researcher is in agreement with the following statement by experts eminently qualified in the field of child development:

There is no firm evidence that males and females are destined by nature for the arbitrary roles and characteristics frequently assigned to the two sexes in this or any other culture. The behaviors we label masculine and feminine in our culture are not inevitable consequences of the biological differences between males and females. Masculine and feminine behaviors

are culturally prescribed; youngsters are socialized into the work, activities, and personality characteristics defined as differentially appropriate for males and females in their own culture (Mussen, Conger & Kagan, 1974, p. 398).

CHAPTER III

METHOD

Subjects

The population consisted of current kindergarten teachers in every elementary school in the Dallas Independent School District in early 1975. This metropolitan public school district encompasses inner city and suburban schools and represents all socioeconomic and racial distributions typical in these areas. The sample was composed of one kindergarten teacher selected by the principal of each school. Randomization of the sample was complicated by district policy against the release of a complete list of kindergarten teachers. The principal was requested by letter to select one teacher for participation in the study (see Appendix A). The teachers' replies were anonymous except for identification by school. No attempt was made by the researcher to obtain additional demographic information about the teachers.

The 134 schools to be included in the study were randomly divided into two groups of 67 each. One group was mailed packets coded with the number one, the other group packets coded with the number two. The first group was asked to respond for kindergarten girls only, the second group to respond for kindergarten boys only. Neither group was informed

of the other participating group responding for the opposite sex. The teachers were asked to respond voluntarily; no payments or promises were given.

Of the 134 packets distributed to the subject schools, 104 were returned for utilization in the study. The 104 responses were equally divided between the two groups of teachers, 52 from Group One and 52 from Group Two.

Collection of Data

Every school principal was mailed a packet of materials containing a letter of explanation to the principal (see Appendix A), a letter of explanation to the teacher (see Appendix B), 32 coded and imprinted computer cards, an instruction sheet (see Appendix C), a record sheet (see Appendix D), and a pre-addressed, return envelop. No postage was required for return through school district delivery.

The 32 computer cards were each imprinted with one possible attribute appropriate for a kindergarten child and an identification number for that particular attribute. The 32 attributes were compiled by the researcher specifically for this study. One-half of the attributes were selected by the researcher as being more often associated with male behavior, the other half as more often associated with female behavior (see Table 1). An effort was made to select attributes with a positive rather than negative connotation. The order of the

Table 1

32 ATTRIBUTES COMPILED BY THE RESEARCHER

| <u>Female</u> | <u>Male</u> |
|-----------------------------|------------------------|
| Artistic Ability | Mathematical Ability |
| Musical Ability | Scientific Ability |
| Reading Skills | Physical Endurance |
| Proficiency in Writing | Physical Agility |
| Verbal Communication Skills | Skill in Sports |
| Attractiveness | Self-confidence |
| Obedience | Aggressiveness |
| Politeness | Independence |
| Neatness | Initiative |
| Promptness | Bravery |
| Generosity | Physical Strength |
| Friendliness | Competitiveness |
| Quietness | Cleverness |
| Patience | Activeness |
| Wittiness | Desire for Achievement |
| Pleasing Personality | Competence |

cards was scrambled and presented to every subject in the same scrambled order (see Table 2). In addition to the imprinting, each card was code punched for the attribute number, the sex of the child (number one for girls and number two for boys), and the school identification number.

Procedure

Authorization to conduct research in the Dallas Independent School District was obtained by submitting a research proposal form to the Development Council of the school district.

The packets were assembled and sent through school delivery to each elementary school principal. After collection of the returned materials the cards were assembled in order by teacher number and grouped by sex number. The ranked order in which each teacher had sorted her packet of 32 cards was maintained throughout the procedure.

For each packet of 32 ranked cards one master card was computer punched. This resulted in 52 master cards coded number one (girls) and 52 master cards coded number two (boys). The 104 cards were coded and run through a one-way analysis of variance computer program. This program yielded complete information necessary for analysis. A nonparametric t-test, the Mann-Whitney U-test, was considered due to the unconventional distributions. However, the one-way analysis of variance was used to analyze the data despite the unconventional

Table 2

ORDER OF ATTRIBUTES AS PRESENTED TO TEACHERS
FOR RANKING

- | | |
|----------------------------|----------------------------|
| 1. Attractiveness | 17. Competence |
| 2. Cleverness | 18. Activeness |
| 3. Artistic Ability | 19. Pleasing Personality |
| 4. Physical Endurance | 20. Independence |
| 5. Patience | 21. Neatness |
| 6. Bravery | 22. Initiative |
| 7. Scientific Ability | 23. Competitiveness |
| 8. Wittiness | 24. Verbal Communication |
| 9. Musical Ability | 25. Physical Strength |
| 10. Aggressiveness | 26. Politeness |
| 11. Obedience | 27. Reading Skills |
| 12. Skill in Sports | 28. Desire for Achievement |
| 13. Promptness | 29. Generosity |
| 14. Proficiency in Writing | 30. Friendliness |
| 15. Mathematical Ability | 31. Physical Agility |
| 16. Quietness | 32. Self-confidence |

distributions since Norton (cited in Linquist, 1953) has shown that the analysis of variance is robust to the violation of the assumption of normality.

CHAPTER IV

RESULTS

Of the 32 attributes, six were found to vary enough between the two groups to be considered significant (see Table 3). The levels of significance vary from .05 to .001. Group One teachers ranked quietness and neatness as significantly more appropriate behavior for girls than Group Two teachers ranked those same two attributes for boys. Group Two teachers ranked physical endurance, bravery, scientific ability, and skill in sports as significantly more appropriate behavior for boys than Group One teachers ranked those same four attributes for girls.

The stated null hypothesis, that there will be no significant differences between the mean ranking for each attribute as ranked for girls when compared to that same attribute as ranked for boys, was retained for 26 of the attributes. The null hypothesis was rejected for six of the attributes: neatness and quietness were ranked as significantly more appropriate for girls; physical endurance, bravery, scientific ability, and skill in sports were ranked as significantly more appropriate for boys.

Table 3

ANALYSIS OF VARIANCE OF GROUP ONE AND GROUP TWO
TEACHERS' RANKING OF 32 ATTRIBUTES

| Attribute | Group 1 Mean Rank (Girls) | Group 2 Mean Rank (Boys) | F Ratio | p Value |
|----------------------------------|---------------------------------|--------------------------------|------------|------------|
| Attractiveness | 20.00 | 22.12 | 1.3350 | 0.2506 |
| Cleverness | 19.62 | 18.65 | 0.4099 | 0.5235 |
| Artistic | | | | |
| Ability | 20.08 | 19.90 | 0.0178 | 0.8942 |
| Physical | | | | |
| Endurance | 22.96 | 19.81 | 4.2233 | 0.0424* |
| Patience | 15.67 | 18.52 | 2.3601 | 0.1276 |
| Bravery | 25.79 | 21.73 | 7.8947 | 0.0059** |
| Scientific | | | | |
| Ability | 24.46 | 19.21 | 14.8823 | 0.0002*** |
| Wittiness | 22.67 | 22.63 | 0.0006 | 0.9801 |
| Musical | | | | |
| Ability | 20.10 | 21.92 | 2.0116 | 0.1591 |
| Aggressiveness | 19.62 | 17.35 | 1.5504 | 0.2159 |
| Obedience | 9.73 | 11.52 | 1.5117 | 0.2217 |
| Skill in Sports | 25.96 | 22.27 | 8.9979 | 0.0034** |
| Promptness | 16.37 | 18.25 | 1.5715 | 0.2128 |
| Proficiency in | | | | |
| Writing | 18.08 | 20.98 | 3.2529 | 0.0742 |
| Mathematical | | | | |
| Ability | 18.25 | 15.98 | 2.7584 | 0.0998 |
| Quietness | 18.29 | 24.06 | 13.5227 | 0.0004*** |
| Competence | 13.44 | 13.90 | 0.0947 | 0.7590 |
| Activeness | 15.48 | 12.56 | 2.7474 | 0.1005 |
| Pleasing | | | | |
| Personality | 10.92 | 10.69 | 0.0309 | 0.8608 |
| Independence | 12.02 | 9.77 | 2.2910 | 0.1332 |
| Neatness | 13.77 | 19.25 | 15.0223 | 0.0002*** |
| Initiative | 9.94 | 8.92 | 0.4675 | 0.4957 |
| Competitiveness | 16.52 | 16.75 | 0.0212 | 0.8845 |
| Verbal Communi- cation Skills | 6.92 | 8.77 | 1.8946 | 0.1717 |

Table 3--Continued

| Attribute | Group 1 Mean Rank (Girls) | Group 2 Mean Rank (Boys) | F Ratio | p Value |
|-----------------|---------------------------------|--------------------------------|------------|------------|
| Physical | | | | |
| Strength | 25.27 | 23.48 | 1.6499 | 0.2018 |
| Politeness | 12.06 | 13.54 | 1.1926 | 0.2773 |
| Reading Skills | 14.75 | 16.58 | 1.4139 | 0.2371 |
| Desire for | | | | |
| Achievement | 4.58 | 6.27 | 2.5292 | 0.1148 |
| Generosity | 16.87 | 16.96 | 0.0036 | 0.9520 |
| Friendliness | 11.35 | 10.10 | 0.8550 | 0.3573 |
| Physical | | | | |
| Agility | 20.27 | 17.58 | 3.3473 | 0.0702 |
| Self-confidence | 6.21 | 7.98 | 1.3845 | 0.2420 |

* $\underline{p} < .05$
 ** $\underline{p} < .01$
 *** $\underline{p} < .001$

CHAPTER V

DISCUSSION

Conclusions

Results of this study support the following conclusions:

1. The teachers in this sample held differential expectations for kindergarten girls and boys.
2. Although the study determined that teachers judged certain attributes as more sex-appropriate for either kindergarten girls or boys, generally speaking, these attributes are not as highly prized by the teachers as are some important same-sex attributes.
3. The attributes selected by the teachers as more appropriate for boys are more valued in our society than the attributes selected as more appropriate for girls.
4. The study supports the contention that teachers have higher expectations for boys than they have for girls.

Clarifications

The teachers in this sample had significantly different opinions of appropriate behavior for girls or boys in six of the areas included in the study. These six attributes had a definite masculine or feminine label attached to them, making

them less appropriate for the opposite sex in the opinion of the teachers. Whether these expectations of appropriateness actually help to cause these behaviors in children of that particular sex, or if they are simply a result of that behavior being exhibited by children of that sex, becomes a hopelessly entangling question--like, which came first, the chicken or the egg? If Rosenthal's and Jacobson's 1968 study and later studies that have supported their hypothesis (Horn, 1974) are considered, we must accept the possibility that teacher expectancy can affect behavior. Teachers in this study can be encouraging those differential behaviors they believe exist (Chasen, 1974).

The belief that girls should be neater and quieter than boys and that boys should excel more than girls in physical endurance, bravery, scientific ability, and sports abilities is congruent with the current values in this culture in general. This is in agreement with Sears' and Feldman's (1966) hypothesis that teachers support current cultural values. Rewarding the evidence of these six attributes according to their sex-appropriateness would indeed tend to further differentiate sex roles (Zach & Price, 1973). A boy who has a tendency toward developing skills in sports activities would continue to do so if rewarded for it; a girl who is not reinforced for similar behavior is unlikely to develop those same skills.

In each of these six areas, limited potential, reduced creativity, and restriction of vocational choices are likely to occur.

Since neatness and quietness are considered by the teachers as more appropriate attributes for girls, the results of this study certainly seem to support Harrison's (1973) contention that the school system teaches girls to be passive and unaggressive. Conversely, if boys are expected to be brave, scientifically able, skilled in sports, and physically robust, they will learn to be dominant, achieving, adventurous, and aggressive. The expected quieter compliance of girls and the physical endurance of boys seem to be a reality in this sample. However, when the ranked order of the attributes for girls is compared to the ranked order of the attributes for boys (see Table 4), it becomes evident that only one of the six sex-labeled attributes--neatness--obtained an importance level above 20 out of 32 positions. In fact, aside from activeness, the same attributes are listed in the top 10 for girls and boys, many in the same order of importance. This indicates that although there are indeed some sex-appropriate attributes, generally speaking, those attributes are not as highly prized for either sex of kindergarten students as are same-sex attributes.

Table 4

ORDER OF MEAN RANKING OF APPROPRIATE ATTRIBUTES
FOR GIRLS AND BOYS

N = 32

| <u>Girls</u> | <u>Boys</u> |
|----------------------------|----------------------------|
| 1. Desire for achievement | 1. Desire for achievement |
| 2. Self-confidence | 2. Self-confidence |
| 3. Verbal communication | 3. Verbal communication |
| 4. Obedience | 4. Initiative |
| 5. Initiative | 5. Independence |
| 6. Pleasing personality | 6. Friendliness |
| 7. Friendliness | 7. Pleasing personality |
| 8. Independence | 8. Obedience |
| 9. Politeness | 9. Activeness |
| 10. Competence | 10. Politeness |
| 11. Neatness | 11. Competence |
| 12. Reading skills | 12. Mathematical ability |
| 13. Activeness | 13. Reading skills |
| 14. Patience | 14. Competitiveness |
| 15. Promptness | 15. Generosity |
| 16. Competitiveness | 16. Aggressiveness |
| 17. Generosity | 17. Physical agility |
| 18. Proficiency in writing | 18. Promptness |
| 19. Mathematical ability | 19. Patience |
| 20. Quietness | 20. Cleverness |
| 21. Cleverness | 21. Scientific ability |
| 22. Aggressiveness | 22. Neatness |
| 23. Attractiveness | 23. Physical endurance |
| 24. Artistic ability | 24. Artistic ability |
| 25. Musical ability | 25. Proficiency in writing |
| 26. Physical agility | 26. Bravery |
| 27. Wittiness | 27. Musical ability |
| 28. Physical endurance | 28. Attractiveness |
| 29. Scientific ability | 29. Skill in sports |
| 30. Physical strength | 30. Wittiness |
| 31. Bravery | 31. Physical strength |
| 32. Skill in sports | 32. Quietness |

Are the four attributes selected as more sex-appropriate for boys more "positive" than the two attributes selected as more sex-appropriate for girls? In this researcher's opinion, neatness and quietness are less desirable attributes than the four attributes selected as more male-appropriate. This tends to support the contention that teachers have higher expectations for boys (Zach & Price, 1973). Our society heaps adulation and respect on individuals who exhibit heroism, skills in sports, and scientific brilliance--most of whom are males. Neatness and quietness are not equally honored.

Speculations

A study of this nature is bound to raise certain speculations and questions. For example, were the teachers aware of the purpose of the study? Did they suspect that it was a study to compare differences in teachers' opinions of sex-appropriate behavior? It is very possible that some did. The researcher expected more areas of significant difference. Some teachers could have been consciously making an effort to be unbiased. In addition, this study was conducted in the spring following the summer 1974 release by the Department of Health, Education and Welfare of their proposed guidelines to implement Title IX of the Higher Education Act of 1972 to eliminate sexism in schools. The Dallas School Board and the administration

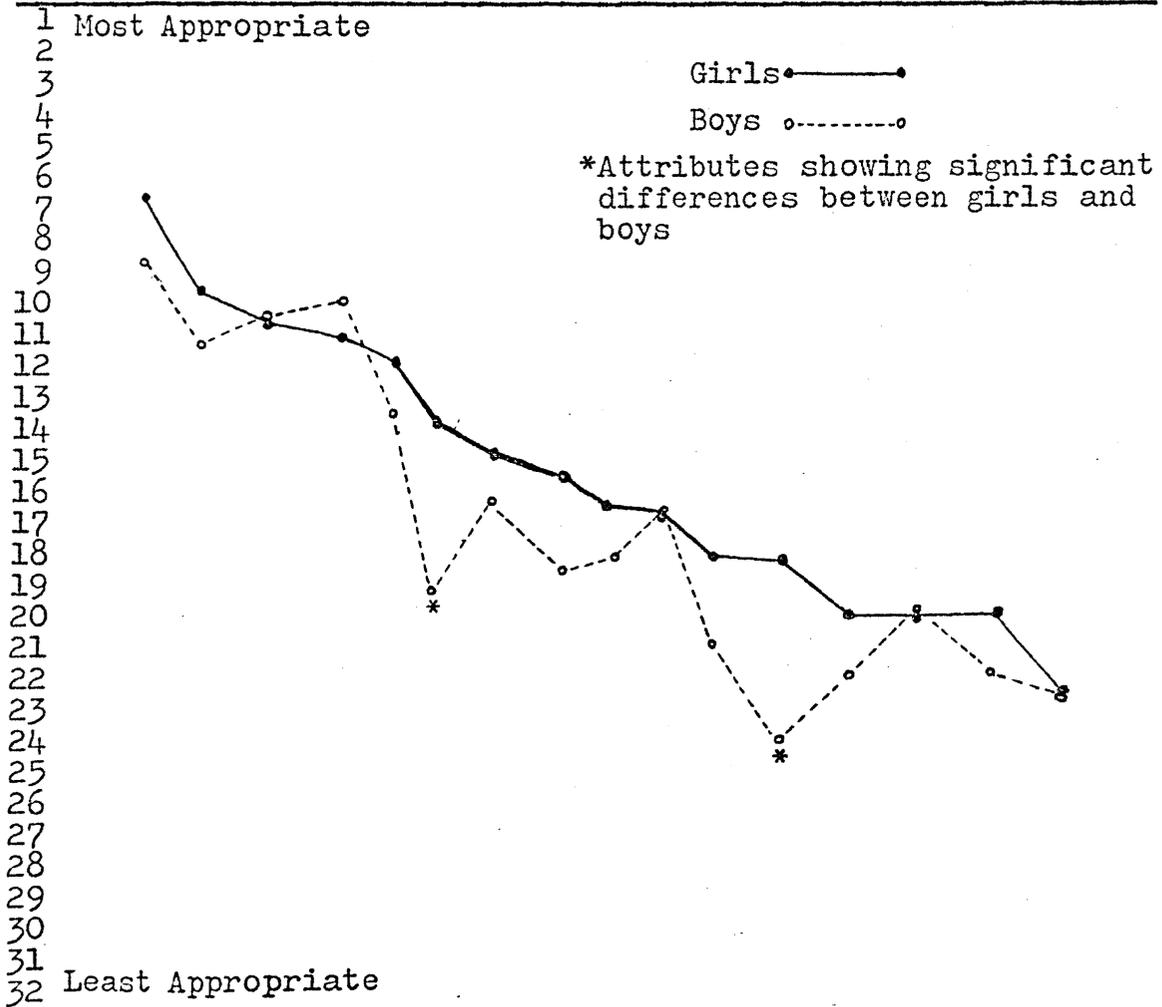
were reluctant to accept the guidelines and the resultant furor was widely publicized. These events could have created a temporarily increased awareness of sex-role stereotyping.

The high percentage of mailed-in responses can be explained by the manner in which the teachers were contacted. It is assumed by the researcher that the teachers were individually contacted by their principals who gave them their packets personally or placed the packets in their mailboxes with a note. The letters of explanation were signed by the Assistant Superintendent of Elementary Operations and were sent and returned through official school channels. These circumstances combined to give an impression of urgency and priority to the study.

An additional finding in this study--not formally hypothesized and not statistically significant, but nonetheless interesting--is the tendency of the Group One teachers to rank the 16 attributes, chosen by the researcher as most often associated with female behavior higher than the Group Two teachers ranked those same 16 attributes (see Table 5). The reverse is true for the 16 attributes selected by the researcher as more often associated with male behavior (see Table 6). The exceptions to this trend are more interesting than the trend itself. Friendliness received a slightly higher average ranking for boys than for girls. More surprising

Table 5

ATTRIBUTES SELECTED AS MORE OFTEN ASSOCIATED WITH FEMALE BEHAVIOR

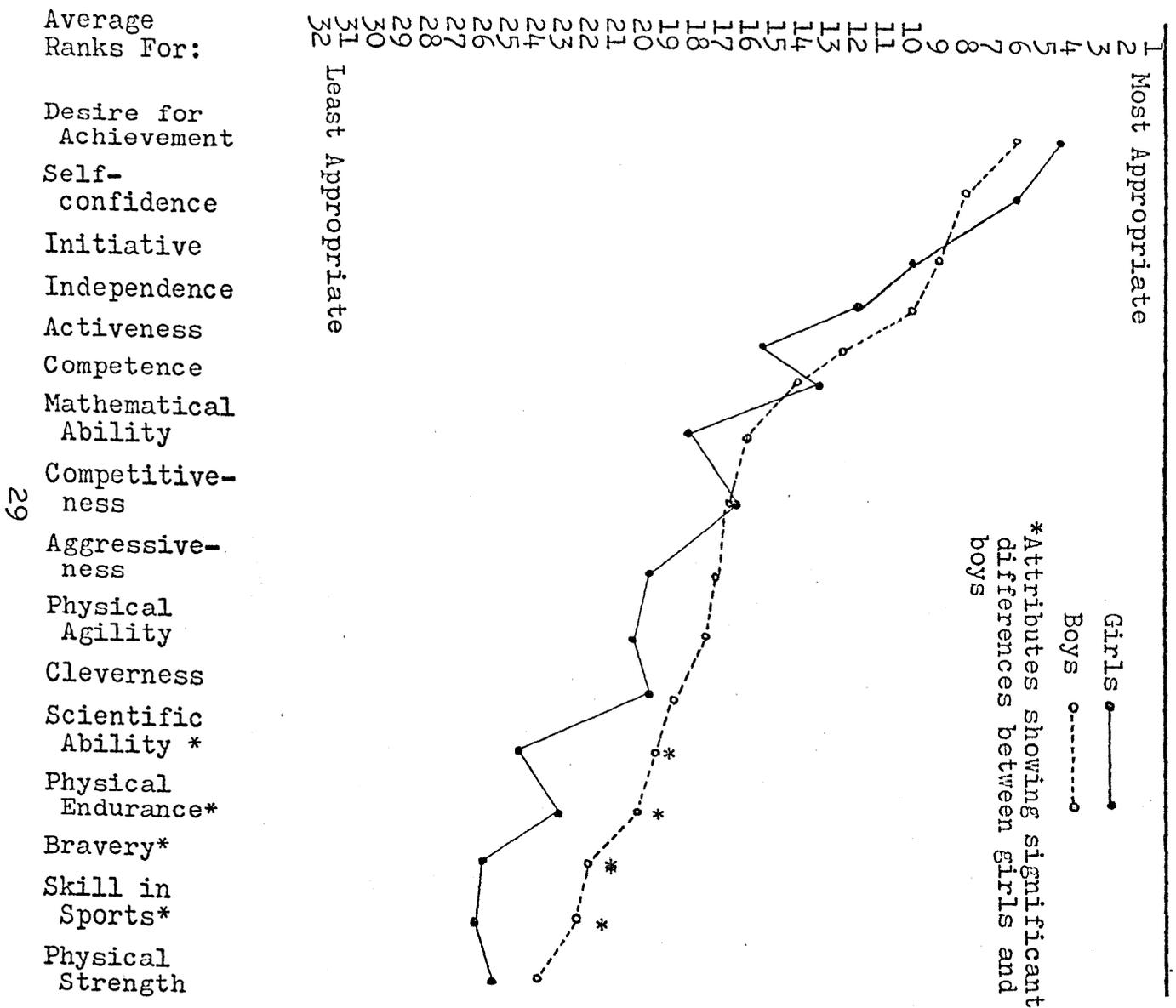


Average Ranks For:

Verbal Communication
Obedience
Pleasing Personality
Friendliness
Politeness
Neatness *
Reading Skills
Patience
Promptness
Generosity
Proficiency in Writing
Quietness *
Attractiveness
Artistic Ability
Musical Ability
Wittiness

ATTRIBUTES SELECTED AS MORE OFTEN ASSOCIATED WITH MALE BEHAVIOR

Table 6



is that desire for achievement, self-confidence, and competence received higher average rankings for girls than for boys. It was expected that boys would receive significantly higher rankings in these three areas. On contemplation, perhaps the researcher was not sufficiently accounting for the young age of the children and the tendency of girls to exhibit superior achievement in the early grades (Brophy & Good, 1973). It would be interesting to discover if these same three attributes "hold" their higher rankings for girls in the high school grades.

Implications

The implications for a study using ex post facto design must, of necessity, be qualified by the limitations of the design itself. The difficulty of studying a naturalistically-occurring treatment will always exist. At most, a co-relational study can show that a relationship existed, after-the-fact, between the two sets of data (Tuckman, 1972). It cannot reveal exactly what accounts for the relationship; it merely samples the existence of the variables. However, Tuckman (1972, p. 125) states:

Co-relational studies serve a useful purpose in determining the relationship among measures and suggesting possible bases for causality. While correlation does not necessarily imply causation, causation necessarily implies correlation.

Recommendations for Future Research

In view of this study the following suggestions for further research are offered:

1. A study of this nature, but with an additional control group of teachers' ranking for children's attributes in general, with no regard to sex, would offer an interesting comparison.
2. A study with fewer attributes, or with specialized attributes--only personality traits or academic abilities, for example--might yield more definitive results.
3. The questions raised in some research concerning the age of the child respective to sex-role identity and teacher expectations (Dwyer, 1974; Women on Words & Images, 1972) suggests the need for research conducted through all grade levels of children and teachers, and longitudinal studies.
4. Teachers' and children's sex-role adaptations and expectations at exclusively girls' and/or exclusively boys' schools should be researched and compared to children and teachers in coeducational schools.
5. The male teachers' sex bias as compared to the female teachers' sex bias with both sexes of children has not been fully studied (Brophy & Good, 1973).

6. A complicated but fascinating study would be a comparison of children, their teachers, and parents with regard to sex-role identities and expectations.

The field of sex-role identity appears to be wide open at this time and vitally in need of valid research to add to the growing body of knowledge.

REFERENCES

- Bardwick, J. Psychology of women: A study of bio-cultural conflicts. New York: Harper & Row, 1974.
- Bronfenbrenner, U. Some familial antecedents of responsibility and leadership in adolescents. In L. Petrullo & B. M. Bass (Eds.), Leadership and interpersonal behavior. New York: Holt, Rinehart & Winston, 1961.
- Brophy, J. E., & Good, T. L. Feminization of American elementary schools. Phi Delta Kappan, 1973, 54, 564-566.
- Chasen, B. Sex-role stereotyping and prekindergarten teachers. The Elementary School Journal, 1974, 74, 220-235.
- Dennis, V. C. Patterned teaching behavior: A study of dyadic intracommunication. Paper presented at the Annual Meeting of the American Educational Research Association: New Orleans, Louisiana, 1973. (ERIC Document Reproduction Service No. ED 076 576)
- Dwyer, C. A. Influence of children's sex role standards on reading and arithmetic achievement. Journal of Educational Psychology, 1974, 66, 811-816.
- Frazier, N., & Sadker, M. Sexism in school and society. New York: Harper & Row, 1973.
- Harrison, B. G. Unlearning the lie: Sexism in school. New York: Liveright, 1973.
- Herrmann, R. B. Classroom status and teacher approval and disapproval--Study of children's perceptions. The Journal of Experimental Education, 1972, 41(2), 32-39.
- Hollender, J. Sex differences in sources of social self-esteem. Journal of Consulting and Clinical Psychology, 1972, 38, 343-347.
- Horn, J. Pygmalion is alive and working in Chicago. Psychology Today, 1974, 7(12), 102; 104.

- Kagan, J. Acquisition and significance of sex typing and sex role identity. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child development research (Vol. 1). New York: Russell Sage Foundation, 1964.
- Levitin, T. E., & Chananie, J. D. Responses of female primary school teachers to sex-typed behaviors in male and female children. Child Development, 1972, 43, 1309-1316.
- Levy, B. Do teachers sell girls short? Today's Education, 1972, 61(9), 27-29.
- Linguist, E. F. Design and analysis of experiments in psychology and education. Boston: Houghton Mifflin, 1953.
- Maccoby, E. E. Sex differences in intellectual functioning. In E. E. Maccoby (Ed.), The development of sex differences. Stanford, Calif.: Stanford University Press, 1966.
- McLure, G. T. Sex role stereotyping and evaluation: A systems approach. Paper presented at the North Central Association of Colleges and Secondary Schools: Chicago, Illinois, 1973. (ERIC Document Reproduction Service No. ED 078 326)
- Montemayor, R. Children's performance on and attraction to an activity as a function of masculine, feminine or neutral labels on sex-role performance. East Lansing, Michigan: Michigan State University, 1971. (ERIC Document Reproduction Service No. ED 068 875)
- Mussen, P. H., Conger, J. J., & Kagan, J. Child development and personality (4th ed.). New York: Harper & Row, 1974.
- Pollis, N. P., & Doyle, D. C. Sex role, status, and perceived competence among first-graders. Perceptual and Motor Skills, 1972, 34, 235-238.
- Rosenthal, R., & Jacobson, L. Pygmalion in the classroom: Teacher expectation and pupils' intellectual development. New York: Holt, Rinehart & Winston, 1968.
- Ross, D. M., & Ross, S. A. Resistance by pre-school boys to sex-inappropriate behavior. Journal of Educational Psychology, 1972, 63, 342-346.
- Sadker, M. Schools against boys! Schools against girls! Instructor, 1973, 82(7), 92-96; 98-99.

- Sears, P. S., & Feldman, D. H. Teacher interactions with boys and with girls. In J. Stacey, S. Bereaud, & J. Daniels (Eds.), And Jill came tumbling after: Sexism in American education. New York: Dell, 1974.
- Sexton, P. The feminized male: Classrooms, white collars and the decline of manliness. New York: Random House, 1969.
- Tuckman, B. W. Conducting educational research. New York: Harcourt Brace Javanovich, 1972.
- Women on Words & Images. Dick & Jane as victims: Sex stereotyping in children's readers. Princeton, N. J.: Author, 1972.
- Zach, L., & Price, M. The teacher's part in sex role reinforcement. New York, N. Y.: Yeshiva University, 1973. (ERIC Document Reproduction Service No. ED 070 513)

APPENDICES

LIST OF APPENDICES

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APPENDIX A

12639 High Meadow Mews
Dallas, Texas 75234
March 10, 1975

Dear Principal,

The enclosed packet of materials is the instrument for a study I am conducting for partial fulfillment of the requirements for a Master of Arts degree at Texas Woman's University. The Development Council of the Dallas Independent School District has authorized this research.

All of the enclosed materials are to be given to any one kindergarten teacher in your school. Following your selection of a teacher, delivery of the enclosed letter to her will request that she perform the task and return the materials by March 24.

I appreciate your cooperation in this matter. If you desire further information, don't hesitate to call me at 247-8885.

Sincerely,

Jeannie Lewis
Jeannie Lewis

Approved: *Otto M. Fridia, Jr.*

Mr. Otto Fridia, Jr.

Assistant Superintendent-Elementary Operations

APPENDIX B

12639 High Meadow Mews
Dallas, Texas 75234
March 10, 1975

Dear Teacher,

The Development Council of the Dallas Independent School District has authorized me to request information from selected kindergarten teachers in the Dallas schools. I am conducting this research as partial fulfillment of the requirements for a Master of Arts degree at Texas Woman's University. Your participation is voluntary but your contribution is important and very much appreciated. It will only take a few minutes of your time and you will have the satisfaction of helping to add to the growing body of knowledge about how children are taught and how they learn. In fact, the study calls for your own personal opinions.

Please follow the enclosed instructions and return the cards and recording sheet to me by March 24.

I offer my heartfelt appreciation to you for your time and trouble. If you want any further information, don't hesitate to call me at 247-8885.

Sincerely,

Jeannie Lewis

Jeannie Lewis

Approved:

Otto M. Fridia, Jr.

Mr. Otto Fridia, Jr.
Assistant Superintendent-Elementary Operations

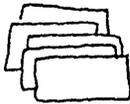
APPENDIX C

STEP ONE

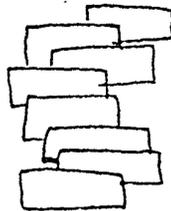
GENERAL DIRECTIONS

The enclosed 32 computer cards are each printed with one possible attribute characteristic of kindergarten girls. Sort these cards in rank order according to your personal opinion of their appropriateness. This selection is for kindergarten girls only.*

I. First,



Most
Appropriate



Undecided



Least
Appropriate

Sort the 32 cards into 3 temporary piles according to appropriateness: most appropriate, undecided, least appropriate. All the cards are important--there are no right or wrong answers. Quick, sensible decisions that represent your honest opinion are the best so you need not spend time going back over your earlier choices.

- II. Next, from the "Most Appropriate" pile select the one most appropriate attribute and place it face down to the side of the three piles. Then select the second most appropriate attribute from the same pile and place it face down on top of the first card. Continue this procedure for all the cards in the most appropriate pile, then sort the undecided pile in the same manner and finally the least appropriate pile until you have one pile of cards face down with each attribute ranked within the pile.
-

III. Then, turn the pile of cards over and take the identification number at the top of each card and record it on the enclosed record sheet. Start with the most appropriate attribute's number recorded by the number "1" on the record sheet and continue, maintaining the rank order throughout.

IV. Finally, keep the cards themselves in the order in which you have ranked them with the most appropriate on top and enclose them with the record sheet in the return envelope provided. Send by return mail as soon as possible.

Thank you.

*An identical form was sent to the second group of teachers with the following change in instructions: This selection is for kindergarten boys only.

APPENDIX D

STEP TWO
RECORD SHEET

MOST APPROPRIATE

- | | |
|-----------|-----------|
| 1. _____ | 17. _____ |
| 2. _____ | 18. _____ |
| 3. _____ | 19. _____ |
| 4. _____ | 20. _____ |
| 5. _____ | 21. _____ |
| 6. _____ | 22. _____ |
| 7. _____ | 23. _____ |
| 8. _____ | 24. _____ |
| 9. _____ | 25. _____ |
| 10. _____ | 26. _____ |
| 11. _____ | 27. _____ |
| 12. _____ | 28. _____ |
| 13. _____ | 29. _____ |
| 14. _____ | 30. _____ |
| 15. _____ | 31. _____ |
| 16. _____ | 32. _____ |

LEAST APPROPRIATE