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Influence of Male Teachers on Elementary School Children's Stereotyping of Teacher Competence[1]

Dianne Sirna Mancus
Illinois Wesleyan University

Children from two elementary schools, one with thirty-three percent male teachers and the other with no male teachers, were asked to attribute a series of descriptive statements regarding teacher competence to a hypothetical male or female teacher pictured in a cartoon drawing Students with male teachers were found to make significantly more non-stereotyping attributions than students with no male teachers (F (1,183) = 15 07, p < 001) Multivariate analysis (MANOVA) was carried out on nine competency subscales and for a general competence composite score with school and subject gender as factors No significant differences between schools were found but significant effects of sex and of a sex by school interaction were found A discriminant analysis uncovered two canonical variables that discriminate among the four groups female treatment, male treatment, female control, male control. The first function, number of female selections overall, discriminated the females from the males The second canonical discrimination function, attribution of mismanagement, revealed that the responses of boys and girls are not the same from school to school Control school children made negative attributions in the mismanagement subscale to opposite sex teachers, while treatment children made negative attributions to same sex teachers In the assignment of mismanagement items, the presence of male teachers significantly influenced responses which ran counter to theories of sex-role identification, including projection by elementary school age children of negative qualities to the opposite sex An analysis of descriptive data indicates that boys with male as well as female teachers made the most egalitarian attributions to male and female teachers Data suggest that the inclusion of men as members of the elementary school faculty could be most beneficial to boys The presence of male teachers

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was not found to influence boys' interest in becoming teachers Interest in teaching was found to differ significantly by sex (X^2 = 24 036, df = 1,183, p < 001) but not by school. Neither control school nor treatment school boys wanted to become teachers, while girls overall reported significant interest in teaching careers Limits in generalizability of the study due to differences in the two schools, a college laboratory school and a Catholic parochial school, are discussed Similar patterns in responses of girls from the two schools and of boys from the control school suggest that parental and curricular differences of the two schools cannot of themselves account for significant differences

THE FEMINIZATION OF THE SCHOOLS

Gage and Berliner (1988) reported that "feminine" school norms requiring passivity and inhibition contribute to underachievement in girls and maladjustment to school by boys Moreover, elementary school boys do not perform as well as girls on tests and grades (Gage and Berliner, 1988) and receive more reprimands in school (Stake & Katz, 1982) Some gender differences in intellectual functioning have been identified but these cannot account for different performances of boys and girls (Maccoby & Jacklin, 1974, Hyde, 1981) Rather, these problems have been linked to the "feminization" of the elementary school and the corresponding dearth of male teachers

Twenty-five years ago, Sexton (1965) described school as "a woman's world governed by women's roles and standards" (p 57) Finn, Dulberg, & Reiss (1979) discussed the feminization of school and Fagot (1981) found that even when male teachers are employed, both male and female teachers reward "feminine" behavior of boys and girls

In a 1982 study of a British Post Graduate Certificate in Education course, Spender and Sarah found that "initial trainees hold deeply entrenched beliefs regarding gender" (Acker, ed , 1989) Skelton and Hanson described teacher trainees as having " *learned* during (their own) primary years that boys are noisier, more disruptive and better at technical subjects, and girls are quieter, less adventurous and more adept at learning to read" (Acker, ed., 1989). Skelton (1985) found that gender concerns were not featured in the written content or lectures of a particular PCGE course and that this deficiency in the program actually reinforced stereotypes formed in early school days

In 1973, Lyon and Saario reported that elementary school teachers were overwhelmingly female Male teachers comprised only 12.8% of elementary school faculties in 1976 and 13 8% in 1986 (United States Bureau of the Census, 1989) Long (1982) reported that although

androgenous individuals did not base career choices on stereotypes, "feminine" females chose elementary teaching and "masculine" males chose secondary teaching.

Poll's (1979) findings indicated that education is a late-college decision for men and usually a compromise career choice for them Males crossed sex-typed job lines for financial reward, better working conditions, and upward mobility (Poll, 1979), but Robinson (1988) reported that men are leaving child care professions due to lower teacher salaries and prejudices against men. In one study, principals favored hiring male teachers but described men who want to teach young children as exceptions (Seifert and Lyons, 1976)

SOCIAL LEARNING, IDENTIFICATION, AND SEX-ROLE STEREOTYPES

The importance of school employees as social and academic role-models for children cannot be overestimated "From others' actions a person becomes familiar with society's demands and the rules he is expected to obey Others become his social models as he imitates or selectively responds to them during social learning" (Horrocks & Jackson, 1972, p 110) Gaeddert et al. (1981) reported that males and females predominantly chose same-sex models and Finn et al (1979) found that children imitate same-sex more than opposite-sex teachers

During the 1990-91 school year much controversy ensued as a result of the establishment of inner-city Afrocentric classes taught by black males for black male students. Nine out of ten school dropouts are known to be black males and they are disproportionately represented among prison inmates, illegal drug users, and victims of violent crimes Special classes in Washington, Baltimore, and Milwaukee are reported to be a desperate effort by public schools to save black males, viewed by school personnel as an endangered species (Whitaker, 1991) Although some argue that this is a step backward, a return to destructive segregation, support for the radical restructuring of a few inner-city schools comes from social learning theory which emphasizes the importance of role models. The absence of positive male role models in impoverished urban neighborhoods and the feminization of the black family are given as the primary justification for assigning black male teachers to classes of black male students

Sex-role identification is considered a natural and desirable function of childhood However, over-identification with a "masculine" or "feminine" orientation and singular gender models can result in sex-role stereotyping and restrict development of the individual. Traditional staffing

practices of elementary schools contribute to popular and restrictive sex-role stereotypes, particularly in the areas of authority, academic competence, and nurturing behavior Although principals are often male and teachers female, modification in this pattern has been found to decrease sex-role stereotyping by children. First graders in schools with female principals were less likely to stereotype the occupations of teacher and principal (Paradise, 1986). Sloan and Cunneen (1982) found that primary students' perceptions of school, teachers, and programs were influenced by teacher gender. However, Goodman (1984) reported that the adult's perspective toward role was more influential than teacher gender on children's views of society

Girls and Boys Suffer

Lee and Gropper (1974) described disadvantages for girls, as well as boys, in the absence of male teachers at the elementary school level Their summary of the research indicated that "sex-role encultured boys are effectively deprived of the option of imitating their female teachers" while "most girls lose the option of not imitating their teachers" (Lee and Gropper, 1974, p 393) Gage and Berliner (1989) and Lee and Gropper (1974) reported that the teacher is "incidental" for male students who develop instrumental competence outside of school Conversely, over-identification with female teachers causes girls to confuse "good behavior" with learning and to take few risks "The boys, while being relatively discontent in school are forced to develop their personal resources, while the relatively contented girls are encouraged to rely upon institutional resources The outcome of unequal access to the resources of the school is demonstrable stress for boys and insufficient personal challenge for girls" (Lee and Gropper, 1974, p. 395).

In a 1991 study of 4th-10th grade students commissioned by the American Association of University Women, gender stereotypes were found to shape career aspirations A link among self-esteem, career aspirations, and attitudes toward mathematics and science was found Decline in self-esteem during childhood and adolescence with a negative impact on ability was found to be more significant for females than males, most notably for white girls ("National Study Finds," 1991)

Lack of male teachers has been cited as a barrier to educational equity (Young et al., 1982) Father's absence was shown to decrease instrumentality in children, particularly girls, and the employment of male elementary school teachers was recommended to offset this problem (Fields, 1980)

The presence of male and female teachers in schools allows children to select characteristics from the "male" culture and the "female" culture so that they can become "bi-cultural" (Lee & Gropper, 1974). This does not undermine healthy sex-role identification but does give children greater flexibility from situation to situation. The optimum arrangement would be a faculty with female teachers who are high in instrumental competence and male teachers who are high in nurturing capacity, while both groups maintain healthy sex-role identities (Lee and Gropper, 1974). Riley (1985) reported improved self-concept in preschool children when a significant male lived in the home and there was a male teacher at school

STATEMENT OF THE PROBLEM

The proportion of male teachers has not increased significantly since Lee and Gropper (1974) recommended hiring them in elementary schools Still, we wanted to know (1) what effect the presence of some male teachers has on (a) school children's stereotyping behaviors, (b) their relative assessment of male and female teacher competence, and (c) male students' interest in becoming teachers We also wanted to know (2) whether the presence of male teachers would have different effects on boys than on girls in relation to these questions. Finally, (3) the school child's assessment of the relative competence of male and female teachers could be examined as a potential reflection of the child's own sex-role expectations for school

METHODOLOGY

Two private schools in a small Southeastern city, population 35,000, were involved in the study. The control school included four year old preschool through eighth grade. It was a parochial Catholic school and had had no male teachers or aides in many years The treatment school was a college laboratory school with kindergarten through grade five In the previous four years, male teachers had comprised 20%, 20%, 40%, and 33 1/3% of the faculty, respectively In addition, male college students served as instructional aides in the school on a regular basis Both schools had female principals and were similar in stated concern for a warm school climate Tuition at the two schools was modest and equivalent Both schools offered open enrollment on a space-available basis The majority of children in both schools were from two-parent intact families Both served a predominantly white, middle class population with a balance of working class and professional families

Teacher salaries at the treatment school were notably higher than those at the control school. This factor of itself has been shown to influence the employment of male teachers (Poll, 1979; Robinson, 1988)

The schools differed markedly in curricular orientation The control school was a fairly traditional one, while the treatment school was patterned after the British infant school or open classroom philosophy Its open education approach led to the recruitment and hiring of male teachers. Differences in philosophical orientation of the schools and student demographics must be considered as possible intervening variables influencing the outcome of the study and, therefore, will be addressed later in the discussion of results

A total of 103 (43 girls and 60 boys) from the control school and 85 students (41 girls and 44 boys) from the treatment school participated in the study Only first through fifth grades were involved

The Teacher Gender and Competency Instrument was developed to test children's attributions of positive and negative descriptor statements to male and female teachers The instrument included items which described the behaviors of hypothetical teachers some examples of these items are included here "The teacher comforted the crying child with a hug" (Nurturing Item) "When the teacher walked in the room, the children stopped yelling and running around right away" (Authority Item) "The teacher explained the math problem, but the boys and girls were more confused than ever" (Academic Competence Item).

Seventy-seven adults, including college students and classroom teachers from the two schools, helped establish content validity for the instrument Adults were directed to respond in a sex-role stereotyping fashion to each statement describing a teacher's behavior by selecting "male" or "female." Seventy-five percent agreement among the adults on any statement was required to identify the item as a stereotypical descriptor.

Children from each school were tested class by class, using the Teacher Gender and Competency Instrument They were given a response sheet with 20 rows and 2 cartoon faces on each row The figures were identical, except that one had longer hair, giving a more "feminine" appearance, and one had short hair, giving a more "masculine" appearance Directions were provided on an audiotape player by a child who told the respondents "This is a study to find out what you think about teachers and the jobs they do Thank you for helping us find out more about what kids think. In each numbered row, you will see pictures of two teachers These two teachers are both at the same school They are the same age and teach the same grade You have not met either one of them, but they are like the teachers you have known You will hear a statement about a teacher read on the tape recorder Listen carefully Your job is to decide

whether it is the first teacher in the row or the second teacher in that row. There are no right and wrong answers. Put an X on the teacher you think is described by the statement" The children responded to 20 descriptors. Finally they were asked, "Do you think that you would like to be a teacher some day?" Children responded by circling yes or no for item 21

The researcher distributed the instruments and remained in the classroom while they were completed The children were told that the statements could be repeated by the researcher as needed. The researcher also answered questions about the *procedure* to be followed *before* the testing and *about the study* in general *after* the testing

A comparison was made between the children's individual responses and the stereotypical responses identified by the adults Each child received a score which was the sum of non-stereotypical attributions Comparisons by school and by sex were made regarding future interest of the subjects in becoming teachers

In addition, survey items were grouped into clusters which included nurturing descriptors, authority descriptors, classroom mismanagement (not behavior) descriptors, statements of general incompetence/negative descriptors, statements of general competence/positive descriptors, and statements of academic competence. Each time the "male" teacher was selected, a score of zero was awarded Each time a "female" was selected, one point was awarded Points were summed within the above categories to statistically compare cluster scores for specific kinds of attributions to male and female teachers made by the children in the two groups A general competence variable was also generated from all positive descriptors and all negative descriptors by first reversing the scoring of the latter

A multivariate analysis of variance (MANOVA) was carried out on nine subscales taken from the inventory and for a general competence composite score with school and subject gender as factors The analysis permitted tests of three hypotheses (1) no effect of sex, (2) no effect of school, (3) no interaction between the effects of sex and school. Univariate ANOVAs and discriminate analysis were carried out to determine the dimensions along which the groups differed

There was some concern that effects of male teachers on students' assessment of male and female teacher competence in the particular cluster areas might be overlooked with the conservative statistical analysis Campbell and Stanley (1963), citing Wilk and Kempthorne (1955), stated that "Possible underestimation of significance is greatest when there are only two experimental conditions and all available subjects are used" The two experimental conditions for the study were male teachers and no male teachers All available first through fifth graders from the two schools were used. Therefore, descriptive data was generated to uncover hidden effects.

Table I. Summary of MANOVA[a] and Univariate Analyses (Repeated Measures ANOVA)

Source	Wilks	F	Numerator df	Denominator df	P
Sex	0 944	1 03	10	174	0 000
School	0 811	4 06	10	174	0 420
Sex × school	0 895	2 04	10	174	0 032

Source	df	Sum of squares	F	P
Academic competence				
Sex	1	616 55	16 177	001*
School	1	45 46	1 192	0 276
Sex × school	1	20 39	0 535	465
Error	183			
Nurturing behavior				
Sex	1	64778	1 159	001*
School	1	1 388	2 484	117
Sex × school	1	01244	022	882
Error	183			
Mismanagement				
Sex	1	05125	125	724
School	1	04712	115	735
Sex × school	1	06925	169	682
Error	183			
Academic incompetence				
Sex	1	15 39188	19 061	001*
School	1	1 61149	1 996	159
Sex × school	1	2 30325	2 852	093
Error	183			
Authority				
Sex	1	32 72156	27 034	001*
School	1	1 09494	905	343
Sex × school	1	3 24963	2 685	103
Error	183			
Management				
Sex	1	35 91935	24 732	001*
School	1	1 43781	990	321
Sex × school	1	4 17654	2 876	092
Error	183			
Positive				
Sex	1	02284	059	807
School	1	00044	001	973
Sex × school	1	11271	294	588
Error	183			

Table I. Continued

Source	Wilks	F	Numerator df	Denominator df	P
Negative					
	Sex	1	79 31580	30 067	001*
	School	1	97319	369	544
	Sex × school	1	2 20692	837	362
	Error	183			
Female					
	Sex	1	137 75489	29 049	001*
	School	1	7 89737	1 665	199
	Sex × school	1	61951	130	718
	Error	183			
General competence					
	Sex	1	1 46511	863	354
	School	1	00279	002	968
	Sex × school	1	87571	516	473
	Error	183			

[a]MANOVA Academic Competence, Nurturing, Mismanagement, Academic Incompetence, Authority Management, Positive Attributions, Negative Attributions, Female Selections, General Competence
*Statistically Significant

Percentages of "male" and "female" choices within the various clusters were compared for the two groups

STATISTICAL FINDINGS AND DISCUSSION

Multivariate Analysis of Variance

Multivariate analysis of variance showed that the responses of students were not statistically different between the two schools However, males and females gave significantly different responses, regardless of school. The interaction of sex by school was also significant A discriminant analysis helped to determine the variables contributing to both the sex effect and the interaction

The discriminant analysis uncovered two dimensions that discriminated among the four groups (female treatment, male treatment, female control, male control) (See Table I) The first discriminant function differentiates males from females, regardless of school Those attributions with the highest coefficients or correlations and, therefore, contributing the most, were the composite competence cluster, the positive cluster, and the

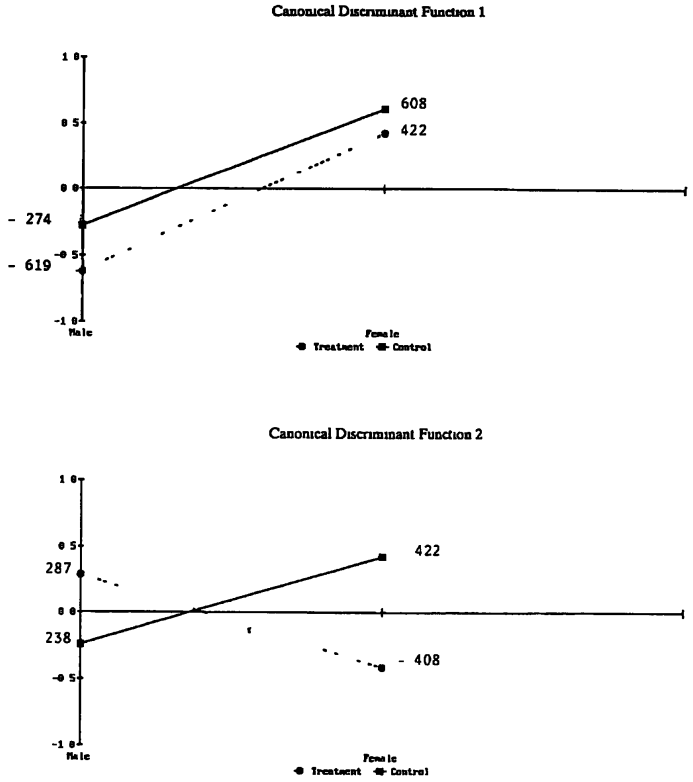

Fig. 1 Interaction of school by sex

cluster for lack of negative attributions Girls had higher loadings on this function, indicating more attributions by them to females in these clusters

The second discriminant function reflects the sex by school interaction seen in the MANOVA Control school boys and treatment school girls have similar group means on Function 2 and control school girls and treatment school boys have similar group means on Function 2 The interaction is interpreted as a failure of the differences (in mean vector) between sexes to be the same in one school as in the other A graphic display of the mean vectors is seen in Fig. 1 The mismanagement cluster has a strong negative correlation with Function 2 Control school children exhibited

traditional patterns of attributions. Boys made negative attributions to females while girls made negative attributions to males Their responses followed expected sex role identification patterns. Treatment school children, on the other hand, were more egalitarian in the attribution of mismanagement behavior, with girls making moderately more negative attributions to female teachers, and boys making moderately more negative attributions to male teachers.

The mismanagement cluster called for perhaps the strongest judgmental behavior. It appeared that the presence of male teachers in the school moderated children's negative attributions in either direction Perhaps boys and girls in this non-traditional elementary school environment with male role models were now attempting to over-compensate or readjust for socially expected stereotyping behavior

Univariate, Repeated Measures ANOVA

A univariate, repeated measures ANOVA, identified no significant differences by school on the various competence clusters However, significant differences were found by sex for seven subscales (See Table I.) Girls and boys from both schools attributed academic competence most often to female teachers but girls did so with far more enthusiasm, making for a significant difference by sex ($F(1,183) = 16\,177, p < 001$) (See Table V) Girls from both schools and boys from the control school to a lesser degree attributed nurturing behavior to females, while treatment school boys were fairly egalitarian in their attributions (See Table VI) Because control school boys were less decided than their female counterparts, differences by sex for attributions of nurturing behavior were significant ($F(1,183) = 1.159, p < .001$). Girls were most likely to attribute academic incompetence to male teachers Control school boys to a lesser degree attributed academic incompetence to male teachers Treatment school boys followed an egalitarian pattern of attributions, with slightly more (2 28%) made to females Significant differences were found by sex for academic incompetence ($F(1,183) = 19\,06154, p < 001$) (See Table VII) Girls and boys from both schools attributed authority to male teachers, but boys overall were less decisive than girls with treatment school boys least decisive of all. (See Table VII) There was a significant difference by sex for authority attributions ($F(1,183) = 28.03601, p < .001$) Significant differences by sex were found for management items ($F(1,183) = 24\,73248, p < .001$) Girls were more likely to attribute management skills to females

Table II Pooled-with-in Groups Correlations Between Discriminating Variables and Canonical Discriminant Functions

Variable	Canonical discriminant function 1[b]	2[c]
Competence	91094[a]	01551
Positive attributions	79639[a]	-11830
Negative attributions	-71369[a]	-04002
Academic competence	61856[a]	01390
Nurturing	61694[a]	-18020
Academic incompetence	-54925	27729
Authority	-53026	28898
Management	52090	02517
Mismanagement	-34334	-69872[a]
Female selections	12226	-15013

[a]Statistically significant
[b]Difference between sexes
[c]Reveals the interaction between sex and school

Girls attributed negative attributions in general to male teachers and boys attributed negative attributions to female teachers However, boys on the whole were more egalitarian than girls (See Table X) A significant difference by sex for negative attributions was found ($F(1,183) = 30\,06741$, $p < .001$) Overall girls made significantly more attributions to females than did boys ($F(1,183) = 29\,04913$, $p < 001$) No significant differences were found on repeated measures ANOVA for mismanagement, positive composite, and the general competence composite score (See Table II)

SEX ROLE STEREOTYPING

A large number of attributions made by both groups were sex-role stereotypical responses However, children from the treatment school made more non-stereotypical attributions than did children from the control school Non-stereotyping scores were compared using an ANOVA procedure and found to differ significantly by school ($F = 15\,07$, $df = 1, 183$, $p < .001$), and by sex ($F = 4\,14$, $df = 1, 83$, $p < 05$). Boys made more non-stereotyping responses than girls No significant difference was found when considering school by sex (See Table III)

Table III Observed Means by Sex and School for Competency Clusters

Variable	No of items	Treatment		Control	
		Boys (N = 43)	Girls (N = 41)	Boys (N = 60)	Girls (N = 43)
Academic	3	1 659	2 195	1 983	2 419
Nurturing	2	1 00	1 439	1 237	1 465
Mismanagement[a]	2	1 068	1 146	1 271	767
Academic incompetence	4	2 068	1 390	1 814	1.535
Authority	3	1 364	610	1 051	767
Management[a]	3	886	1 293	1 00	1 372
Positive descriptors	12	4 909	6 878	5 44	6 837
Negative descriptors	8	4 636	3 220	4 271	2 954
Total Female choices	16	9 705	10 098	10 017	10 000
General competence	16	8 295	11 659	9 17	12 140

[a]Not discipline

INTEREST IN TEACHING

Three-way categorical analysis was carried out to see whether an individual's interest in becoming a teacher was related to either sex or school To start, SPSS loglinear, saturated model was used All interactions involving school were found to be insignificant and were dropped from the model. The model having only the *interest by sex* interaction gave a good fit to the data More boys (74 76%) than girls (39 29%) said that they would not like to be a teacher when they grew up (Chi-square = 24 0358255, 1 df, $p < 001$)

ANALYSIS OF DESCRIPTIVE DATA

Descriptive data were generated for the proportion of male attributions to female attributions in each scale by each group. The unequal number of items in each subscale was standardized by reporting percentage of female and male attributions within each category Although generalizations from descriptive data cannot be made to other groups, similarities, differences, and patterns were observed by sex, by school, and for school by sex (See Tables IV-XI)

When items were grouped into two categories, positive and negative descriptors, responses for positive items were fairly evenly divided between males and females As sex-role identification theory and positive projection to the same sex would predict, girls generally gave slight favor to female

Table IV Percentage of Academic Competence Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	n = 41	26 830	73 170	-46 340
Boys	n = 44	43 939	56 061	-12 122
Total	N = 85	34 510	65 098	-30 588
Control school				
Girls	n = 43	19 379	80 620	-61 241
Boys	n = 60	34 444	65 556	-31 112
Total	N = 103	28 155	71 845	-43 690

Table V. Percentage of Nurturing Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	n = 41	28 050	71 950	-43 900
Boys	n = 44	47 727	50 000	-2 273
Total	N = 85	37 647	61 176	-23 529
Control school				
Girls	n = 43	26 744	73 256	-46 512
Boys	n = 60	38 888	61 667	-22 779
Total	N = 103	33 495	66 505	-33 010

teachers and boys to male teachers regardless of which school they attended as shown in Table XI Negative attributions were made to opposite-sex teachers by both school groups as shown in Table X Boys were more even handed, while girls were decisive in assigning negative descriptors to opposite sex teachers

When items were grouped into specific competency clusters, girls from both schools and boys from the control school, to a lesser degree, exhibited a similar pattern. They attributed academic competence items and nurturing items to females as shown in Tables IV and V Girls, overall, and control school boys attributed authority items to males as shown in Table VII

Table VI Percentage of Academic Incompetence Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	65 25	34 76	30 49
Boys	$n = 44$	48 86	51 14	-2 28
Total	$N = 85$	56 76	13 52	43 24
Control school				
Girls	$n = 43$	61 63	38 37	23 26
Boys	$n = 60$	55 83	44 17	11 66
Total	$N = 103$	58 25	41 75	16 5

Table VII Percentage of Authority Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	78 049	20 325	57 724
Boys	$n = 44$	53 030	45 455	7 575
Total	$N = 85$	65 098	33 333	31 765
Control school				
Girls	$n = 43$	74 419	25 581	48 838
Boys	$n = 60$	65 000	35 000	30 000
Total	$N = 103$	52 592	23 704	28 888

TREATMENT SCHOOL BOYS MADE EGALITARIAN ATTRIBUTIONS

The pattern for treatment school boys was different Boys from the school with male teachers made egalitarian attributions Percentage of male and female attributions neared fifty-fifty for the category clusters which included nurturing items, academic incompetence, authority items, and mismanagement items (Tables V, VI, VII, VIII, respectively), as they did for negative and positive attribution clusters. (See Tables X and XI)

Table VIII Percentage of Management Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	56 91	43 09	13 82
Boys	$n = 44$	70 45	29 55	40 90
Total	$N = 85$	63 22	36 08	27 22
Control school				
Girls	$n = 43$	54 26	45 74	8 52
Boys	$n = 60$	67 22	32 78	34 44
Total	$N = 103$	61 82	38 18	23 00

Table IX Percentage of General Incompetence/Negative Items Attributed to Male and Female teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	58 537	40 108	18 429
Boys	$n = 44$	46 465	53 030	-6 565
Total	$N = 85$	52 288	46 797	5 491
Control school				
Girls	$n = 43$	60 724	39 276	21 448
Boys	$n = 60$	47 593	52 407	-4 814
Total	$N = 103$	53 074	46 926	6 148

Classroom mismanagement, not behavior, included items having to do with an untidy and disorganized classroom and not opening windows when the room is too hot. Girls and boys from the treatment school assigned these negative descriptors fairly evenly with a slight edge to female teachers, as shown in Table XII Boys and girls from the control school opposed one another and were more extreme in their assignments Control school girls blamed male teachers and their male schoolmates blamed female teachers

Table X. Percentage of General Competence/Positive Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	40 798	58 437	-17 639
Boys	$n = 44$	53 719	45 248	8 471
Total	$N = 85$	47 487	51 657	-4 170
Control school				
Girls	$n = 43$	43 340	56 660	-13 32
Boys	$n = 60$	52 576	47 424	5 152
Total	$N = 103$	48 720	51 280	-2 560

Table XI Percentage of Authority Items Attributed to Male and Female Teachers

		Male teacher	Female teacher	Difference
Treatment school				
Girls	$n = 41$	42 683	57 317	-14 634
Boys	$n = 44$	46 591	53 409	-6 818
Total	$N = 85$	44 706	55 294	-10 588
Control school				
Girls	$n = 43$	61 628	38 372	23 256
Boys	$n = 60$	35 833	64 167	-28 334
Total	$N = 103$	56 602	53 398	3 204

DISCUSSION

Results of this study suggest that the presence of male teachers in an elementary school affects boys and girls but has greatest influence on boys A pattern of egalitarian attributions to male and female teachers by treatment school boys may mean that boys with male and female teachers take a more androgenous view of teacher capability than do the other groups

Similarities in the attribution profiles of girls from the two schools provided evidence that it is not the difference in family background or curricular orientation of the two schools which accounts for differences in the

profile of the boys from the treatment school The presence of male teachers must be the influential element in the treatment school boys' divergent pattern of attributions.

Preference for females as academically competent teachers shown by all the girls and by the control school boys characterizes school as a feminine place for these groups Furthermore, the dramatic contrast regardless of treatment in girls' interest in becoming teachers to boys' disinterest in teaching strongly indicates that the elementary school remains a feminine domain for all the children in the study. The presence of some males on the teaching staff did not alter traditional views of teaching as a female career It is nonetheless curious why girls with nurturing male teachers did not ascribe more nurturing items to males It is also curious why girls with a female principal (treatment school) and boys and girls with a female principal and female teachers exclusively (control school) did not attribute more authority to female teachers

Problematic for control school boys is the attribution of academic competence to opposite-sex teachers. Treatment school boys who differed somewhat from control school boys on this factor have an advantage They saw male role models as more academically competent than did the other boys; therefore, they can see themselves as more suited for academic endeavors. Treatment school boys saw males and females as nurturing and as having authority These perceptions give them a wider range of behavioral choices than the other boys or all the girls may have

Male teachers in the treatment school were outnumbered by female teachers 3.1 This may account for differences found between the attribution patterns of treatment school girls and boys As greater balance between male and female elementary school teachers is achieved, non-stereotypic responses and egalitarian projections of positive and negative qualities on male and female teachers are likely to increase for girls and boys.

Although boys receive immediate and noticeable benefits from teacher gender balance, girls benefit too The passive adjustment of many girls to school due to over-identification with same-sex teachers is a sleeping menace to healthy sexual-social development and to academic achievement later Significant increases in number of non-stereotyping responses made by treatment school children over control students, regardless of sex, provides evidence that girls and boys are less rigid in their gender-role assignments when they have both male and female teachers

Based on responses to the Teacher Gender and Competency Instrument used in this study, we predict that boys will be more likely to see themselves as academically competent and thus be more inclined toward achievement when they have some male teachers Likewise, they will be more likely to share authority and express nurturing behavior when they

see male teachers doing so. It also appears from our data that the presence of some male teachers in the school is not enough to influence boys to consider careers as teachers. Sadly, the degree to which men avoid elementary school teaching may be the simplest and most direct indicator of what boys think of school.

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