

Are Boys Disabled Readers Due to Sex-Role Stereotyping?

Carole Schulte Johnson and Gloria R. Greenbaum

Of all the arguments presented, it appears to be cultural expectations that account for the difference in reading achievement between boys and girls.

Research in the United States shows that, in general, boys have more trouble learning how to read than girls. Boys are designated for special reading classes by margins of anywhere from 2:1 to 10:1. Why are so many boys disabled readers? Explanations presented in the literature fall into four categories: maturational/biological; influence of female teachers; content of readers geared to girls; and cultural expectations.

Maturational/Biological

If there is a biological basis for boys being disabled readers, then the same results should be substantiated in cross-cultural studies. But, according to Downing and Thomson (1977), England has not found significant differences in reading achievement between the sexes. Preston (1962) found that

among German students, boys demonstrated superior reading achievement. Abiri (1969) reported the same results from studies conducted with Yoruba-speaking children in Nigeria. Dale Johnson (1973-74) reported a study comparing elementary children in Canada, England, Nigeria, and the United States. In England and Nigeria, boys scored higher on reading tests; while in Canada and the United States, girls' reading achievement outranked the boys'.

Thorndike (1976) studied reading comprehension in 15 countries (12 Western and developed countries and three developing countries), using 10-, 14-, and 18-year-olds. He found that sex differences in reading achievement scores were not dramatic in any of the countries but rather that there were differences between countries. In the majority of countries, girls per-

formed slightly better on reading tests than did boys. But, boys read better than girls at age ten in three out of 14 countries; and better at age 14 and 18 in one-third of the countries (five out of 15).

Gross (1978) studied kindergartners, second-, and fifth-graders from an Israeli kibbutz system. She found that boys and girls achieved in reading at equally high levels, and had an equal incidence of reading disability; both groups felt reading appropriate for their sex.

Money and Ehrhardt (1972), through studies of false hermaphrodites and children whose true sex gender was misjudged at birth, have provided strong evidence against a biological theory as a total explanation of sex differences.

Based on the foregoing, the conclusion can be drawn that a maturational/biological explanation does not account for sex differences in reading achievement.

Influence of Female Teachers

A second explanation often presented is that female teachers negatively affect the reading achievement of boys. The major points related to this issue are that:

1. Boys receive more negative treatment from female teachers;
2. Boys with the same achievement or IQ scores as girls receive lower grades;
3. Boys' achievement will be higher when taught by male teachers; and
4. Boys are alienated by the way female teachers structure the classroom (Brophy and Good, 1973a, 1973b; Dwyer, 1974; Lee, 1973; Smith, 1973).

Negative Treatment

The research dealing with negative treatment of boys by female teachers was broadened to include treatment by male teachers. It also included a study of multiple types of teacher-student interac-

tions. This research indicates the following:

1. While boys do receive more disapproval and blame from female teachers than do girls, they receive more from male teachers as well.

2. When individual children were observed, it was found that boys in general do not receive frequent teacher criticism, but only the boys who are discipline problems and generally low-achievers.

3. Viewing the total classroom situation, boys receive more praise and have more teacher contacts, including work-related contacts, than do girls.

4. Some studies find that female teachers do use harsher tones in criticizing boys, while other studies do not. Male teachers, however, have not been studied on this variable. One strong possibility is that the misbehavior of some boys could be more severe or defiant, thus creating stronger negative responses from teachers.

5. The marked difference between teacher treatment of high-achieving and low-achieving boys indicates that there is *no such thing as teacher treatment of boys as a single group*.

Considering all the data, it appears that boys have more of almost every type of interaction with both male and female teachers, and it is the high-achieving, nondisciplinary-problem boys who receive the best teacher treatment.

Grades

Girls do receive higher grades than boys who score the same on achievement or IQ tests. The few studies involving male teachers found similar results. However, there is no data to support the assumption that in the classroom boys and girls do equivalent work. It may be that girls study harder, do better on tests and assignments, and/or complete and turn in as-

signments more often. There is no indication that higher grading represents bias on the part of female teachers.

Higher Achievement

The argument that boys' achievement will be higher when they are taught by male teachers is not supported. One recent investigation (Preston, 1979), of almost 1,000 German boys and girls who had had the same teacher for the first four grades, found that sex of teacher did not influence favorably the reading achievement of pupils of the same sex. Additionally, three studies found that boys taught by males had higher masculinity scores and/or better attitudes toward school, while 15 studies found that teacher sex made no difference on achievement scores of either boys or girls.

Alienation

Teaching differences are found between male and female teachers, but the results are inconsistent and thus inconclusive. However, it was found that teachers in general do promote a student role which has traditionally been passive, docile, and teacher-centered. This role fits girls better than it does boys and will be discussed under cultural expectations.

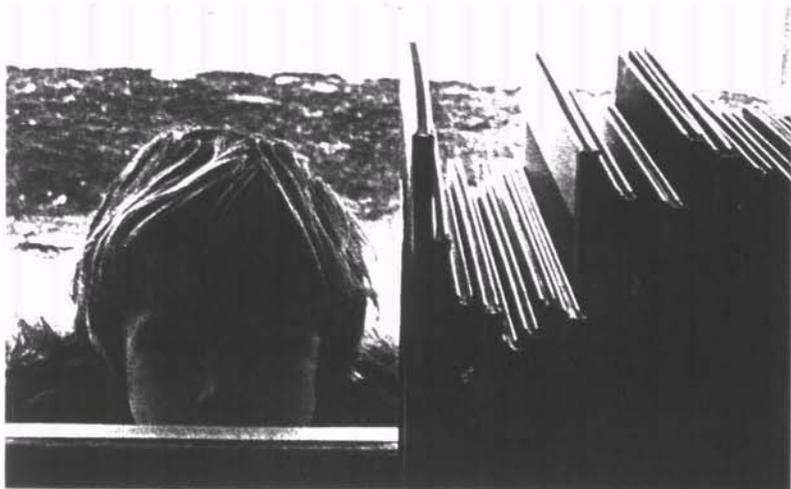
There does not appear to be support for the claim that female teachers structure the classroom in ways that alienate boys.

Content of Readers

Back in the middle 60s, one reading expert stated that basal readers in general were sterile, repetitious, and not as challenging to boys as to girls. (Why these sterile and repetitious readers should be challenging to girls is unknown.) Girls did learn to read from them, but that is less likely attributable to the challenge of the basals than it is to girls' acceptance of the student role.

Several studies (Blom, Waite, and Zimet, 1966, 1970) investigated basal readers to find out why so many boys were having problems reading them. These studies found: 1. The appeal of the stories was about the same for boys and girls; 2. The activities depicted were not those most commonly associated with girls; and 3. Masculine activities did not result in failure more frequently than feminine ones.

Since then, when basal readers have been investigated from the viewpoint of how they depict girls and women, they have not fared nearly so well. One study of 2,760 stories in 134 books found that the ratio of boy-centered stories



to girl-centered stories was 5:2. It also found that the boy-centered stories were over three times as likely to involve an active mastery theme while girl-centered stories were over three times as likely to involve a passive/constricted/incompetent theme (Women on Words and Images, 1972). Thus, there appears to be no basis for the belief that it is the content of readers that gives girls a reading advantage.

Cultural Expectations

To understand cultural differences in reading achievement, the following arguments will be examined: 1. expectations for student role and traditional sex-roles, 2. studies investigating same-sex, cross-sex models/experimenters, 3. studies of attitudes toward reading, 4. special reading classes, and 5. use of technology in teaching reading.

When boys and girls go to school, they are expected to act in the appropriate student role. This role emphasizes obedience, conformity, and learning by reading or listening rather than active manipulation and participation. These behaviors fit the traditional female sex-role better than the traditional male sex-role.

A recent study by Gallimore, Tharp, and Speidel (1978) supports the idea that boys do not fit the traditional student role. They found that boys from families that assigned child care tasks to male siblings are more attentive to classroom tasks. They concluded that "male sibcare ratings may index the degree to which families train boys to be responsible and task-oriented at home" (p. 272). These same attributes would help boys better fit the student role. It could also be that in these families there is less male sex-role stereotyping overall, resulting in an easier acceptance of behaviors helpful in the student role but, heretofore,

traditionally labeled feminine. These boys might be more likely to view the student role as appropriate for themselves.

For girls, the student role and the sex role are congruent. These roles in effect reinforce each other as they are two of the strongest forces in young children's lives, both sending the same message to girls: be passive, be dependent, be obedient. It would be expected, therefore, that girls would achieve in elementary school. However, the danger for girls is that while achieving they will be socialized too greatly into behavior not compatible with effective adult functioning.

For some boys, there is a conflict between the student role and the sex role. Boys receive a double message: be passive, quiet, and conforming as a student but also be aggressive, active, achieving, and independent socially. Therefore, some boys will experience conflict and stress in school and this could result in dissatisfaction, lower achievement, and/or lower self-esteem.

Research indicates that children show a range of association with traditional sex roles; that is, there are high masculine and low masculine boys; high feminine and low feminine girls. It seems logical to suggest that young boys who are high on the scale acceptance of the masculine stereotype are more likely to experience conflict and stress in school. It is this factor that could interfere with academic achievement.

Same-Sex, Cross-Sex Models/Experimenters

Kohlberg (1966) suggested that while children have a stable gender identity by age five, they are not sure which behaviors are appropriate for their sex. In 1963, Epstein and Liverant reported that among high-masculine scoring boys aged five to seven, more ef-

fective learning took place when reinforced by a male experimenter than by a female experimenter. In contrast, low-masculine scoring boys in that age group scored equally well with a male or female experimenter.

Using word recall, Halperin (1977) investigated the achievement-oriented behaviors of first- and fourth-graders under either a neutral or an achievement emphasis and with either a female or male experimenter. Students in the fourth grade were not influenced by the sex of the experimenter; however, boys who were encouraged to achieve in the first grade responded significantly more positively to the male experimenter than did the girls. The study did not investigate whether the results for first-grade boys continued to be significant over an extended period of time.

Perhaps it is not boys in general who react more positively to male experimenters but only high-masculine boys. The only conclusion that can be drawn at this time is that further study needs to be done, particularly investigation of high and low masculinity and high and low femininity.

Attitude Toward Reading

A number of studies considered attitude toward reading. Mazurkiewicz (1960) studied fathers and their eleventh-grade sons. Both classified reading as a feminine activity (fathers, 71 percent; sons, 80 percent). Kagan (1964) found that second- and third-graders considered many school related objects and activities feminine. Stein and Smithells (1969) reported that second-, sixth-, and twelfth-grade boys and girls considered reading activities feminine and arithmetic activities masculine. Stein, Pohly, and Mueller (1971) found that two determinants of achievement motivation—attainment value and expectancy of suc-

cess—were influenced by the individual's perception of the sex-role appropriateness of the task. That is, when viewed as sex-appropriate, attainment value and expectancy of success were higher.

Askov and Fischback (1973) found that in grades one to three girls have more positive attitudes toward reading than boys do. Dwyer (1974) studied the relationship between sex-role standards and reading and arithmetic achievement in grades two, four, six, eight, ten, and twelve. She concluded, "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" (p. 811).

Downing and Thomson (1977) asked subjects to consider whether the activity depicted in a picture was more suitable for a six-year-old boy or girl. Analysis dealt with one picture, a stick figure reading a book. Subjects were drawn from several groups: the adult population of a Canadian community, university students training to be teachers, and students in grades one, four, eight, and twelve. In every group except first grade, there were significantly more responses identifying the stick figure reading as female-appropriate. The authors concluded that the study supports the hypothesis that because of its cultural expectations, the community perceives reading as being more suited for young females than for young males.

The research is highly consistent; reading is generally viewed as a feminine activity. It could be that one effect for some boys is a decrease in motivation to excel in reading, since they believe in or have even experienced taboos against participating in any aspect of the feminine role.

Special Reading Classes

Research suggests that cultural expectations may bias the special reading class referral process. Naiden's study (1976) of the fourth-, sixth-, and eighth-grades of a large city found the ratio of disabled readers was three males to two females. The same ratio was found for first grade readers identified by their teachers as quite below the expected reading level at the end of first grade. Thus the special reading classes in that city should reflect the 3:2 ratio. But, in fact, the boy/girl ratio in special reading classes was 4:1.

Orlow (1976) in comparing reading in West Germany and the United States reported that in one large city in Germany, boys outnumbered girls receiving help in special reading classes. Yet the school administrator in charge of remedial services reported that "the actual number of boys and girls who had not learned to read by the end of grade two was equal. The disproportionate number of boys placed in remedial classes is the result of personality factors, not reading skills" (p. 463).

If there is bias in the referral process, why is this so? It could be that teachers believe it is more important for boys to have their reading problems corrected or perhaps teachers, expecting boys to be problem readers, are more sensitive to their needs. Maybe low-achieving girls are not discipline problems and are therefore overlooked by teachers; the German report lends support to this idea. Vernon (1960) claims that, in England, the preponderance of boys in remedial classes is due to their resistance to school discipline.

Certainly more research needs to be done, but even with these limited reports it would be well to realize that there probably is bias in the referral process, avoid using the boy/girl ratio which is based only on those receiving special

reading help, and recognize that a large number of girls with reading deficits are not receiving special reading help.

Use of Technology

Only a few studies have looked at the differential reading achievement of boys and girls when taught with technology. In general, what little data there is supports the idea that both boys and girls benefit, with some evidence that the benefits are greater for boys. A likely explanation for these benefits to boys would be cultural; it's OK for boys to do mechanical things.

Conclusions

Based on the foregoing, we can conclude that:

1. Several explanations for the difference in reading achievement between boys and girls are not convincing:

- a. Cross-cultural data do not support a maturational/biological explanation.

- b. The supposedly negative influence of female teachers is not borne out.

- c. There is no basis for the belief that the content of readers is geared more to the interests of girls.

2. The cultural explanation is presently the only one which can account for the actual achievement or lack of achievement of both boys and girls.

3. Further research is needed regarding the relationship between reading achievement and high/low masculinity and femininity. If boys are disproportionately represented among disabled readers, it may be due to a subgroup of highly masculine boys.

4. Further research investigating the proportion of boys and girls who are disabled readers is needed. Recent studies suggest that the difference in achievement may

not be as great as formerly thought: that is, test score differences between boys and girls are only a few points (Thorndike, 1976) and girls do not appear to be receiving special help in reading in proportion to their need (Naiden, 1976; Orlow, 1976).

Recommendations

Until further research is done, ratios of boy/girl disabled readers should be regarded as very tentative, in terms of the true population. If the Naiden study (1976) accurately reflects the U.S. population, 40 percent of disabled readers are girls. This is a large minority which should not be ignored.

There may be a subgroup of high-masculine boys who have problems with reading. These boys may reject reading because they perceive it as feminine and/or because a woman is teaching it; it appears to be a compound effect of a "feminine" activity taught by a female.

What can be done? Certainly more male primary teachers are part of the answer, but the effect they would have on girls is unknown. Based on present research, it is not women who are doing the damage; it is the sex-role stereotype. Thus, it is this stereotyping that must be eliminated. *EL*

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Carole Schulte Johnson (left) is Professor of Education, Washington State University, Pullman; Gloria R. Greenbaum is Director, Augusta Country Day School, Augusta, Georgia.

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