A study examined whether exposing children via reading and discussing books in which the main characters are depicted in a non-sexist manner would have any effect upon the degree of gender stereotyping expressed by the children. Eighteen third-grade children at a suburban elementary school in New Jersey completed a pretest to determine the degree of gender stereotyping expressed by the children. The children were then exposed to a series of six stories in which the characters were portrayed in a non-sexist manner. Upon completion of the lessons, the children were once again tested. Analysis revealed that although there was a slight positive trend, no significant difference was found between the pre- and posttest scores. Findings suggest that exposing children via reading and discussing stories in which the characters are portrayed in a nonsexist manner does not result in a significant change in attitude. However, had the study been extended over a longer period of time, the results may have varied. (Three tables of data are included; the survey instrument, six lesson plans, and an appendix of data are attached. Contains 34 references.) (Author/RS)
Gender Bias in Reading and Related Literature

Judith Zerring Goldberg

In Partial Fulfillment of the Requirements for the
Master of Arts Degree in Education

Kean College of New Jersey
April 1994
ABSTRACT

The aim of this study was to determine if exposing children via reading and discussing books in which the main characters are depicted in a non-sexist manner would have any effect upon the degree of gender stereotyping expressed by the children. Eighteen third grade children, at a suburban elementary completed a pre test to determine the degree of gender stereotyping expressed by the children. The children were then exposed to a series of six stories in which the characters were portrayed in a non-sexist manner. Upon completion of the lessons, the children were once again tested. Analysis revealed that although there was a slight positive trend, no significant difference was found between the pre and post experiment scores.

It was concluded that exposing children via reading and discussing stories in which the characters are portrayed in a non-sexist manner does not result in a significant change in attitude. However, had the study been extended over a longer period of time the results may have varied.
I wish to thank and express my gratitude to Mr. Michael Antolino and Mrs. Kathy Barrett for their cooperation, enthusiasm and time. To Dr. Mazurkiewicz for his step-by-step guidance. To Dr. Joan Kastner for making my time at Kean enjoyable. To Robin Bastolla for her help and encouragement. To Joan Diamont, Sue Firsichbaum, Janet Maslow, Terri Walters and Ellen Winter for their friendship. To my mom, Sarah for her help and encouragement.

My deepest appreciation goes to my husband Michael, for the countless ways in which he has shown his love and support throughout the completion of this project, and over the past eighteen years. Last but not least, I wish to thank my wonderful children Zachary, Ashley and Shaina for being my constant inspiration.
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    Non-gender Biased Responses of Boys and
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The portrayal of gender roles in children's literature has been scrutinized over the past two decades. It is generally believed that the reader is in some way influenced by the thoughts and behavior of story characters. In the 1970's a resurgence of the women's movement influenced the study of basal readers, which were at that time the mainstay of most elementary reading programs.

On the whole, the readers were found, not surprisingly, to be reflective of the cultural mores of the 1950's and 1960's. Graebner (1972) found males were main characters in 75% of stories examined and five years later Britton & Lumpkin (1977) found 61% of the main characters were male. In basal readers published before 1980, main female characters were portrayed as teachers, nurses, clerks, stewardesses and cooks, while males were doctors, science teachers, mayors, ministers and writers. In the older stories, mothers were in the kitchen wearing aprons and making cookies for the children to eat when they come home from school (Hitchcock & Thompkins, 1987, p. 288).

More recently, Hitchcock & Thompkins (1987) examined 6 updated basal series and compared them to books used in older studies. Their results indicated that publishers have reduced the degree of sexism in basal reader stories. The percentage of male characters dropped from 61% to 18%, while the percentage of female
characters remained the same. Female main characters portrayed 37 occupations. This represented a dramatic increase in roles available to females. However, it was also noted that publishers appear to be avoiding questions of sexism by creating neutral and neutered characters in textbook stories (p. 289).

Since then, many school districts have moved away from a basal reading curriculum and toward a literature based reading program. Research indicates that basal readers are no longer blatantly sexist, but what about the picture book or novel that is chosen by a curriculum committee, teacher or student? Temple (1993) discusses a study of the works of Theodore Gisel - Dr. Seuss. In a review of nearly all of his books it was found that the active characters were all male (p. 89). Temple (1993) also notes a study of sexual stereotyping in books that won Caldecott awards. Of the books examined, the majority show females as caretakers: mothers, princesses, helpers in the kitchen, teachers, nurses. The males act in the larger sphere, as fighters, explorers, adventurers of various sorts (p. 90).

Mem Fox, a popular children's author, maintains that "Gender stereotyping in literature prevent the fullness of female human potential from being realized by depriving girls of a range of strong alternative role models. In addition male human potential is also
stunted by such material" (Fox, 1993, p. 84).

Yet, Nikola-Lisa (1993) has observed that the role of the female in the picture-book pirate fantasy has changed over the past decade. For example, the central characters in Holabird's, Alexander and the Magic Boat, are representative of the major step forward some children's literature has taken in recent years. The main characters, Alexander and his mother, display an array of overlapping personality characteristics. They are both caring, independent, capable and compassionate. However, inspite of creating a new generation of children's literature that is reflective of less prejudicial attitudes, the actual influence of such literature is unknown. Research indicates that one cannot predict with desired certainty the consequences of reading, and since a reader's predispositions, far more than the content of what is being read, determine the material's effect on the reader (Beach 1976), it follows that the individual who is apparently influenced by sexist material has already been indoctrinated by other environmental factors that may or may not include previous reading. Thus, those who look for solid, scientific evidence from the research on the effects of reading find themselves frustrated by the fact that there is no guarantee that a particular piece of literature will influence a certain child or adolescent; or if an
influence exists, that it will operate in the direction desired (Edwards 1972) or anticipated (Young 1963).
(Tibbetts, 1978, p.167)

On the other hand, some research has demonstrated that reading can affect one's attitudes, values, and development but results are extremely individual personal, varied and unpredictable (Tibbetts, 1978, p.166). Yet, even though research regarding the influence of reading upon the reader is complicated and inconclusive, the fact remains that each of us has at some point been moved or enlightened by something we have read. Furthermore, commonsense dictates that children are influenced by what they see, hear and read. Certainly, literary content in the classroom remains a large influence.

Continued exploration of this area is justified since a lessening of sexual stereotypes by any means will promote a more realistic non-sexist environment. The effects of reading and discussing non-sexists books is one aspect of the whole problem that could be examined.

HYPOTHESIS:

For the purpose of this study it was hypothesized that exposing children via reading and discussing books in which the main characters are depicted in a
non-sexist manner would not have any effect upon the degree of gender stereotyping expressed by the children.

PROCEDURES:

One class of eighteen students at Sandmeier School in Springfield, New Jersey were studied. The children completed a survey in order to determine the extent of their gender bias. They were asked to choose between a stereotypic response, a nontraditional response and a response of both or neither. Choices within the questions represent roles, adjectives and behaviors typically associated with gender.

For the purpose of scoring, each response was assigned a numerical value according to the following guidelines. A response of both was scored as a three, the nontraditional response received a score of two, a choice of the more stereotypic response received a score of one. The choice of neither was counted as zero. A higher score indicated a greater number of nontraditional choices and, therefore, for the purpose of this study, a lesser extent of gender bias. The number of each type of response was also tabulated and later compared to the responses on the post-test. (See Appendix I)

A series of lessons were then presented revolving around stories in which the main characters were
portrayed in nontraditional ways. One lesson was completed each week for six weeks. (See Appendix II)

When the lessons were completed the children were surveyed again and their responses compared to the first survey to determine mean score differences. (See Appendix III). A \( t \) test was used to determine the significance of the differences.

**RESULTS:**

As indicated in Table I, there was a mean difference the pre and post test survey responses following instruction of 1/28. This difference however, was not significant as shown by a \( t \) of .53.
Tables II and III show analysis of the responses of the samples. These results indicate a small

**Table II**

**Total Gender Responses**

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre Experiment</th>
<th>Post Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>Nontraditional</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Both</td>
<td>122</td>
<td>168</td>
</tr>
</tbody>
</table>

**Table III**

**Comparison of Pre and Post Experiment Non-gender Biased Responses of Boys and Girls**

**Total Non-gender Biased Responses**

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Experiment</td>
<td>49</td>
<td>73</td>
</tr>
<tr>
<td>Post Experiment</td>
<td>47</td>
<td>82</td>
</tr>
</tbody>
</table>

increase in the total responses of the sample in the
post experiment score toward a less gender oriented view, as well as a higher score by the girls. The boys attitudes shifted slightly to a more gender biased view.

CONCLUSIONS

At the outset of this study it was hypothesized that exposing children to non-sexist role models in storybooks, via reading and discussing the stories, would not have any effect upon the degree of gender bias expressed by the children. The t analysis revealed a value of .53. Therefore, although there was a slight positive trend, no significant difference was found between the pre experiment and post experiment test scores. The hypothesis, therefore, was accepted. However, had the study been extended over a longer time period the results may have been more positively skewed.

The results of this study support the findings of researchers who have concluded that the effect of reading material upon a group of readers or an individual reader, is difficult if not impossible to predict (Beach (1976), Tibbetts (1978), Kingston & Lovelace (1977 -1978). In addition, it is widely believed that background knowledge and predispositions have a greater effect upon the reader's reaction to
Further analysis of the data reveals that girls choose a higher number of non-gender biased responses than did boys, in both the pre and post experiment tests (see Table III). This implies that girls began the experiment with less gender biased attitudes than did the boys and that these attitudes remained fairly consistent. This provides additional evidence that it is our predispositions that more greatly influence our reaction to story content than does the content of the story. The girls, who on the whole showed a greater disposition towards non-gender biased responses, showed a small increase in their score. Whereas the boys, who were more gender-biased to begin with showed a very slight decrease in their score toward more bias.

However, story discussions throughout the experiment indicated that the children understood and accepted the premise of the story that was presented. On the whole, the children were in agreement that both sexes could fulfill a variety of roles. The children agreed that a princess could easily rescue a prince, a dad could whip-up a delicious pudding and that girls are no more or less terrified of roller-coasters than are boys. Yet, these same children, who were quick to agree with these comments, displayed different attitudes on the gender-bias test.

One possible explanation for this result is a
flaw in the test that was designed to measure gender bias. The intention of the test was to measure children's basic beliefs and underlying biases in regard to sex roles. However, the test might have been a more valid reflection of how children see gender roles and expectations rather than a personal measure of belief. In addition, the discrepancy between the test responses and the verbal responses may be attributable to the fact that conditional responses were not included in the test. That is, responses that reflect the belief that although both sexes "can" fulfill most roles, in actuality, beliefs and actions remain gender bound. Therefore, whether or not this type of broadening of opinions took place was not measured. Further research into establishing more reliable means of gauging children's attitudes needs to completed if we are to assume that presenting non-sexist or non-racist material to children is having an impact.

While educators are not in the business of altering personal opinions, we are responsible for creating thoughtful individuals who are able to recognize bias. The results of this experiment imply that, while exposing children to non-sexist material via reading and discussions might have a small positive effect, such exposure alone is not sufficient to change biased attitudes. Further research needs to be conducted to determine other ways to help children
to broaden their attitudes and thereby, perhaps fulfill a greater potential.
Gender Bias in Reading and Related Literature
Recent literature regarding equitable education for females, indicates that equity for girls in our educational system remains at best superficial. Gender bias, as well as other forms of discrimination continue to permeate our schools. This occurs on both the conscious and unconscious level.

For those who believe that equitable education for all young Americans is the greatest source of our nation's strength, "The A.A.U.W. Report: How Schools Shortchange Girls", will not be reassuring. Commissioned by the American Association of University Women Educational Foundation and developed by the Wellesley College Center for Research on Women, the study challenges the common assumption that boys and girls are treated equally in our public schools.

The implications of the reports findings are disturbing. Women and children are swelling in the ranks of the poor, at a great cost to society. A well-educated work force is essential to our country's economic development, yet girls are systematically discouraged from courses of study essential to their future goals and economic well being (A.A.U.W. Report 1992a).

Indications are that the educational system is not meeting girls' needs. Girls and boys enter school roughly equal in measured ability. Twelve years later, girls have fallen behind their male classmates in
key areas such as higher-level mathematics and measures of self-esteem. Yet gender equity is still not a part of the national debate on educational reform. Neither the National Education Goals issued by the National Governors Association in 1990 nor America 2000, the 1991 plan of the President and the U.S. Department of Education "to move every community in America toward these goals," makes any mention of providing girls equitable opportunities in the nation's public schools (A.A.U.W. Report 1992a).

Research spanning the past twenty years consistently reveals that from pre-school to college males receive more teacher attention than do females. In pre-school boys receive more instructional time, more hugs and more teacher attention. The pattern persists throughout elementary and high-school.

One reason that boys receive more attention is that they demand more attention. Sadker & Sadker (1985) sent field workers to observe students and teachers in over a hundred fourth-, sixth- and eighth grade classes. The researchers found that if a boy calls out the most common teacher response is to attend to the comment or question. If a girl calls out she is often told to raise her hand before speaking. It was determined that teachers praise boys more than girls, give boys more academic help and are more likely to accept boys comments during classroom discussion.
Too often girls remain in the dark about the quality of their answers. Teachers rarely tell them if their answers are excellent, need to be improved or are just plain wrong. Active students receiving precise feedback are more likely to achieve academically. Through this advantage boys increase their chances for a better education. Numerous researchers, most recently John Goodlad author of A Place Called School, have shown that when students participate in classroom discussion they hold more positive attitudes toward school and their positive attitudes enhance learning.

Sadker & Sadker (1985) note that classroom biases are not etched in stone, and training can eliminate these patterns. Sixty teachers in their study received four days of training to establish equity in classroom interactions. These trained teachers succeeded in eliminating classroom bias. Classes taught by these teachers had a higher level of intellectual discussion and contained more effective and precise teacher responses for all students.

The A.A.U.W. has established numerous recommendations to address this issue. They include: strengthening reinforcement of Title IX regulations, upgrading state teacher certification standards to include work related to gender issues, on-going professional development of teachers and
administrators, allocation of funds for the
development of gender-fair multicultural curricula.

The subject of non-sexist educational material
has been a likely starting point for addressing the
issue of sex-equity in the schools. It is only
recently that we are addressing the more subtle forms
of discrimination.

In order to discuss gender roles and sex
stereotyping in children's literature it is important
to define what is meant by gender role identity.
Mischel (1966) defines gender-type behaviors as:
"behaviors that have different consequences depending
on the gender of the person exhibiting the behavior"
(Henshaw, 1992, p.229). Gender role identity can
also be seen as a multidimensional construct (cf.
Huston, 1985) which can include both clusters of
personal attitudes (Bom,1974; Spence & Helmreich,
1978) and gender-typed behaviors. When gender role
identity is measured as clusters of personality
attributes the traits subsumed under the term
"masculinity" may be thought of as socially desirable
"instrumental" traits and the cluster of traits
subsumed under the term "femininity" as socially
desirable "communal" traits (Brody, Hay, & Vandewater,

It is commonly believed that the male child
adheres more closely to the masculine role than does the female to the feminine role. Research has shown that teachers and peers both criticize for stereotypic feminine behavior such as playing with dolls, whereas girls playing with toys traditionally regarded as suitable for boys were less likely to receive negative comments (Henshaw, 1992, p.230).

A descriptive study by Henshaw (1992) focused on crossgender behaviors (girls playing with trains, boys playing with dolls) and whether children saw the feminine role as more flexible than the masculine role. Two main findings emerged. First, it was evident that the children clearly differentiated between toys, activities, occupations and colors that they saw as appropriate for males and females. Secondly, it was evident that the children viewed male gender roles and activities as more rigidly proscribed than those of females.

A study conducted by Brady, Hay & Vandewater (1990) in which children's reported feelings toward the same and the opposite sex were analyzed indicated that girls were more angry at males than at females, and that both sexes tended to be more hurt and disgusted by opposite sex than by same sex children. Girls also tended to report more fear than did boys, and both sexes tended to report more fear of males than of females. Most importantly, a measure of gender
role identity and attitudes accounted for more of the variance in predicting the quality of reported emotions than did biological gender. In general, both boys and girls who scored highly on a measure of feminine gender role identity were high in reported emotions of liking, fear and hurt. One implication of this finding might be that nurture as well as nature plays a strong role in determining attitudes toward that same and the opposite sex. If this is the case, then non-sexist educational materials have their place in education as a means of influence, that is as a tool that may be used in building a construct of greater role flexibility and positive attitudes.

The portrayal of gender roles in children's literature has been scrutinized over the past two decades. It is generally believed that the reader is in some way influenced by the thoughts and behavior of story characters. In the 1970's a resurgence of the women's movement influenced the study of basal readers, which were at that time the mainstay of most elementary school reading programs. On the whole, the readers were found, not surprisingly to be reflective of the cultural mores of the 1950's and 1960's.

In 1972, Women on Words and Images, conducted an extensive study of 134 elementary readers in use in three New Jersey cities to determine if females
and males were portrayed in stereotyped roles. This study, "Dick and Jane as Victims", found that males were portrayed more often, in more roles, and as being more active than females, who were often shown in passive or domestic roles.

Graebner (1972) found males were main characters in 75% of stories examined and five years later Britton & Lumpkin (1977) found 61% of the main characters were male. In basal readers published before 1980, main female characters were portrayed as teachers, nurses, clerks, stewardesses and cooks, while males were doctors, science teachers, mayors, ministers and writers. In the older stories, mothers were in the kitchen wearing aprons and making cookies for the children to eat when they come home from school (Hitchcock & Thompkins, 1987, p.288). This is not to imply that baking cookies for one's children is not admirable or important, yet role models for girls were clearly limited.

Acknowledgment of the extent of sex-stereotyping in basal readers and supplements led to publishing companies developing guidelines meant to address the problem of sex/race/career bias hidden in textbooks. In 1972 Scott, Foresman issued the following statement: Although many factors determine the content of textbooks - authors, permissions, space, time, money, the market, etc. - these limitations should not be
used to excuse bias, prejudice or insensitivity...

Women and girls should be given the same respect as men and boys. Other publishers were quick to issue similar statements.

However, Britton & Lumpkin (1977) found the ideals expressed in the guidelines were slow in finding their way into the readers. A comparative analysis of research data to determine if objective analysis and documentation could support the notion bias in textbooks was being eradicated, was undertaken. Textbook analyses were done for bias in forty-nine reading, literature and social studies published during the years 1958-1979. The researchers: 1) counted male/female major character roles, 2) counted and listed male/female career roles, 3) counted ethnic and listed male/female character roles, and 4) counted and listed ethnic male/female career roles. The findings on the Pre-guidelines (older) series revealed that males were assigned 60% of the major character roles in contrast to 14% assigned to females. The category of other was 26%. The documentation related to the newer (Post-guideline) texts indicate that 61% of the stories had males as their main characters (an increase of 1%), 16% had females as their main character (an increase of 2%) and 23% was assigned to the category of other. In sum, the researchers found that as of 1976 there was little change noted
in children's textbooks despite publishers claims to the contrary.

However, the bulk of the texts in the 1974-76 time period were actually developed prior to the wave of concern for equal representation of the sexes. Whereas, some research efforts in sexism in children's reading materials occurred prior to 1974, it should be noted that the time required to identify authors, assemble an editorial staff, write text content, revise and edit content, field test and print a reading series often amounts to four to six years. Therefore, a text with a 1974 copyright was most likely begun in the early 1970's, a period when equal treatment of both sexes was not a focus of concern (Rupley et.al., 1981).

To address this issue, Rupley, Garcia & Longnion (1981) analyzed reading materials published between 1976-78 to see whether publisher guidelines pertaining to bias had been applied. The results for 1978 revealed substantial change. The authors found that there were almost equal numbers of male and female main characters in the newer basals. When tallies from 1974-76 readers were compared with 1769 and both of these with 1978, a trend toward equalization was apparent. This trend was not seen in supplementary materials.

It is important to note, that not all researchers
accepted the validity of the experimental designs used in the study of sexism in children's literature. Kingston & Lovelace (1977) in a critical review of the literature question the assumption of traditional roles as stereotypes. They note that the portrayal of females in children's literature is not a representation of stereotypes but rather a true reflection of society. The question is raised as to whether children's literature should present an ideal world view or a more realistic one. Written between the lines is the question: If we are to present an ideal world view then whose judgment of ideal will be represented?

Additionally, the authors contend that the criteria, employed by investigators for determining sexism in basal readers, textbooks and children's literature are either nonspecific, over-simplified or subjective. Frequency tallies, percentages and opinion polls cannot measure the impact of incidents of alleged sexism. Terminology including sexist, sexism, bias, stereotype and degrading must be defined in a measurable, reliable, valid and unemotional fashion. Longitudinal, well designed studies must be conducted to determine not only the effects of pre-school socialization on the development of sex roles, but also the impact of the school environment including "sexist" textbooks on children. Although
Kingston & Lovelace raise some interesting questions ultimately no specific criteria or proof that might invalidate prior research is offered.

More recently, Hitchcock & Thompkins (1987) examined six updated basal series and compared them to books used in older studies. Their results indicated that publishers have reduced the degree of sexism in basal reader stories. The percentage of male characters dropped from 61% to 18%, while the percentage of female characters remained the same. Female characters portrayed 37 occupations. This represented a dramatic increase in roles available to females. Interestingly the stereotypic occupations of nurse and stewardess were not presented in the 1985-86 basal stories. However, it was also noted that publishers appear to be avoiding questions of sexism by creating neutral and neutered characters in textbook stories (p.289).

Finally a replication of the 1972 study "Dick and Jane as Victims" (Women on Words and Images) was conducted by Pucell, Piper & Stewart (1989). It was found that although there are still differences in the rate of portrayal for males and females and in the variety of roles assigned to each, the differences are not as pronounced as they were in 1972. It appears that the depiction of females in basal readers has mirrored changes in society.
Advancements have been made, but some concerns remain. Even though girls are now shown in active roles, they are still shown as needing rescue in many more instances than boys. Girls are shown being brave while waiting for rescue, but they still cannot help themselves out of trouble. Although stories do show boys baby-sitting and crying over a bruise, boys are still portrayed as being forced to deny their feelings in other stories. Also, girls need a wider variety of working role models (Purcell, Piper & Stewart, 1989, p.184).

In the 1980's and 1990's many school districts have moved away from a basal reading program and toward a literature based curriculum. Accordingly research has focus upon other types of educational materials, including award winning books, magazines and comics. Weitzman et. al. (1972) examined the sex role distribution of characters in a sample of Caldecott Medal-winning picture books published during the 1940's, 1950's, and the 1960's. The Caldecott Medal is given by the children's service committee of the American Library Association to the most distinguished picture-book of the year. The data indicated that females were greatly underrepresented in titles, central roles and illustrations. Most of the activity was done by males, and males were the focus of the story in most cases.
Nilsen (1971, 1978) also analyzed Caldecott Winners and Honor books. Her original study examined the winners from 1950-1970. Later she added a five year update - 1971-1975. She found that male representation as measured by number of characters increased greatly during those twenty-five years. Engel, replicating Nilsen's study for the years 1976-80 found less male dominance than during the preceding decade, but the change was slight (1981). However, a more recent analysis of the 1981-85 winners shows a dramatic change toward sex equity in number of characters (Dougherty, Holden & Engel, 1987). Studies by Kinman & Henderson (1985), analyzing Newberry Award winning books for sexist content and by Collins, Ingoldsby & Dellman ((1984) assessing Caldecott books yielded results similar to those reported by Dougherty et al. The indications are that differences in the degree of representation of male and female characters have decreased substantially toward more sexual equity.

Of prime importance is that in the books in which the female is cast in the central role, she is often portrayed as active and adventurous.

Hillman (1974) surveyed children's literature published during two time periods, the 1930's noted as the "Early Period" and 1963-73 noted as the "Recent Period. The goal of the analysis was to discover what occupational roles were assigned to each sex
and how diverse these roles were. Hillman found differences in the working world of the two periods. First there was an increase in the number of work roles for women. Second there was some movement into professions traditionally dominated by males. In the "Early Period" no female owned a business. In the "Recent Period" there were three businesswomen. The professional realm gained a lawyer, a doctor and a neurologist. However, there were no women politicians, editors, executives or athletes. In both periods, most of the occupations for women were those traditionally associated with the feminine sex: the women worked as maids, housekeepers and teachers. Hillman concluded that the representational roles of women's occupations in both periods did not accurately reflect reality because women have always and continue to fill a wide variety of jobs.

Recent research completed by Kortenhaus & Damarest (1993) aimed to determine whether the sex bias portrayed in picture books is still as prevalent as in the past. In particular, they were interested in whether the frequency of males and females in pictures and their characterizations had changed. One hundred and fifty picture books, both award and nonaward winners published between 1940-1980, were analyzed for gender role content. For frequency, analysis the procedure used by Collins et. al. (1984)
was replicated with the books tabulated according to eight characteristics: 1) Males in titles 2) Females in titles 3) Females in central roles 4) Males in central roles 5) Females in pictures 6) Males in pictures 7) Female animals 8) Male animals. In addition, a content analysis was done on the major activities of the central character in each book. Using only those activities that were clearly delineated, the eighteen most prevalent were categorized as either instrumental independent (i.e. actions that involved a lot of self-initiated movement, decision making, and/or creativity) or passive dependent (i.e. actions that required little movement and/or more help from others). A frequency count was done by decades to determine the number of central role males and central role females portrayed in these eighteen activities (Kortenhaus & Damarest, 1993, p.223). Results indicated that prior to 1970, children's literature contained almost four times as many boys as girls in titles, more than twice as many boys in central roles, almost twice as many boys in pictures and nearly four times as many male animals as female animals. Children's literature published after 1970 shows a more equitable distribution of male and female characters in all categories. This was true for both Caldecott winners and nonaward books. However, males are still depicted
in titles nearly 50% more often than females in nonaward books and male animals are still represented twice as often as female animals in both types of books.

Content analysis of the activities of the children depicted in these books were shown to be strongly stereotyped by sex, especially in the earlier literature. A role analysis of activities engaged in by male and female characters across all decades showed that males dominated the instrumental behaviors (males=293 females=54) while females out-numbered the males (females=293 males=29) in almost all passive and dependent roles. Boys displayed energy whereas girls demonstrated placidity in an overwhelming number of the books. Even when females were depicted as active, there was usually a more independent male character. For example, a girl might be described as showing instrumental independent action along with her brother. As noted by Jacklin and Mischel (1973), there are other ways than frequency counts for sexism to reveal itself. It occurs in the presence of disparaging statements, character traits or physical attributes. Such as young girls being valued for their beauty while older women are often denigrated as hags or witches or are stereotyped in limiting domestic roles. A study conducted by Freid (1982) which analyzed 299 children's stories from 1974 and
1981, drew the disturbing conclusion that girls were portrayed with docile and inferior qualities more often in the 1981 literature than in 1974 (Kortenhaus & Demarest, 1993, p.227).

In sum, Kortenhaus and Demarest concluded that whether or not there have been significant changes in the presentation of male and female role models in children's literature depends on the way the data are analyzed. Their findings concurred with Collins et. al. (1984), that the trend is toward decreasing sexism in children's books. However close analysis of the type of roles portrayed by males and females continue to characterize boys as instrumental independent and girls remain passive and dependent. Additionally, girls were cast in a nurturing role more often than boys. In the last two decades boys were still shown engaging in active outdoor play three times as often as girls, and they solved problems five to eight times as often as girls. Temple (1993) notes a study of the works of Theodore Gisel - Dr. Seuss. In a review of nearly all of his books it was found that the active characters were all male (p.89). Girls, it would seem, are still busy creating problems that require male solutions.

Research conducted by White (1986) supports these findings. White investigated dependency themes in fiction for children and adolescents. Females and
males were compared in situations where one character helped or influenced another. Regardless of the context in which help was given, and regardless of whether it was of an active or passive nature, females were more likely to receive than to give help, and males were more likely to give than to receive help. Males were even more likely to provide emotional support or encouragement, a stereotypically female virtue. The cultural stereotype of the dependent female, however, was reflected in the girl and women characters (p.251).

In juxtaposition to these findings in an annotated bibliography compiled by Pat Rigg. Rigg (1985) analyzed past and present children's literature noting many "spunky gals" who are anything but "damsels in distress". Rigg reminds us of Gretel outwitting the wicked witch and saving herself and Hansel, Dorothy, slapping the Lion's nose when he threatens Toto, Charlotte, saving her friend Wilber by spinning one final message with her last bit of strength. "Spunky gals" face terrifying situations and don't look away. They stick to the job they have undertaken and they don't give up. They don't wait for someone else to solve the problem, to rescue them or to wake them with a kiss..."spunky girls" have a moral strength that shines through all their actions (p.154).

The truth is, that despite the prevalence of literature
portraying women in stereotypic dependent roles, one does not have to search too hard to find wonderful literature with instrumental and complex female characters.

Levstik in her article, "I am no lady!": the tomboy in children's fiction" (1983) points out that until Jo March appeared in the nineteenth century, the most popular heroine in children's fiction was a saint. She lived a short, holy life, and died in a scene calculated to produce tears. Jo's unsaintly behavior paved the way for a host of tomboys. Jo and the other tomboys of children's fiction protested against the restrictions inherent in the traditional lifestyle of an American lady ( p.14 ).

Caroline Zilboorg's historical novel Caddie Woodlawn explores the role of the heroine in children's fiction of this type. Zilboorg points out that in spite of the marginalization and weakening of female characters in adult literature of the early twentieth a number of works with strong female role models were developed by female authors writing for a young audience. Caddie Woodlawn, written by Carol Ryrie Brink in 1935, is in many ways typical of this genre of books.

As in other works of this genre, Caddie is her father's child and in many ways male-identified. The author introduces her as a "wild little tomboy
... the despair of her mother and her elder sister Clara". Zilboorg notes that;

"Brink's tone is frequently humorous, but the reader is to take Caddie's character seriously throughout the work, for the novel finally depends on character and on Caddie's own developing awareness of herself as, on the one hand, a special child and, on the other, an American pioneer at the edge of womanhood (p.110)." Among other novels of this ilk are Dorothy Canfield Fisher's Understood Betsy (1916) and Laura Ingalls Wilder's Little House books (1932-1943).

The study of gender bias in children's educational materials extends beyond the analysis of readers, picture books and novels. Science, mathematics and social studies texts have been examined. Additionally, specific aspects of the female experience such as representation of sports participation has been studied. Weller & Higgs (1989) analyzed basals and library books to determine if males and females were portrayed differently in regard to their involvement in sports. The data indicated that while books in school reading series were largely nonsexist analysis of school library books had a much different outcome. A total of 1,380 books were examined. Females were predominately depicted in traditionally feminine activities; in dance and tennis
females were represented six out of six times. In addition, females were represented 5 out of 6 times in gymnastics, as opposed to 3 out of 8 times by males. In team sports female representation was minimal. The authors conclude that, though reading is only one way that learned helplessness in sports is promoted, classroom teachers and librarians of elementary schoolchildren should become aware of this problem and discuss it with the children they teach (p. 66).

Deanna Chitayat author of the Sex Equity Pamphlet (1980) created the Superperson Comic Book, as an attempt to overcome sex stereotyping in elementary school children by exposing them to nontraditional role models in a cartoon format. Currently most comic books exacerbate the problem of sex stereotyping rather than reducing it. In that, the nature of many comic books is to exaggerate stereotypes and simplify role models. However, the comic book is a popular format and a motivational way to present material. Chitayat developed a series of comic books that portrayed female characters in a nontraditional role. For example, in "Jane and the Beanstalk" Jane helps her family by taking a job doing heavy farm work. Jane finds a weed which she plants at home. Jane eventually climbs the beanstalk to rescue Jack. Three stories, overtly and covertly,
deliver the messages such as; females as well as males have exciting adventures, both men and women love to take care of children, although some men and women have other interests too and females as well as males succeed as carpenters, electricians, and auto-mechanics (p.4).

The most recent analysis of children's literature has taken a slightly different bent, examining the text not only for activity and gender identity, but for the character's need achievement motive and its correlation to ethnicity and gender. Eyia & Bader (1993) devised a study the purpose of which was to examine a sample of widely used elementary literacy materials to determine the extent to which they include the n-Ach motive across gender and ethnic groups. McClelland (1961) defines n-Ach (need achievement) motivation as competition with a standard of excellence. The individual strives to do something well or to accomplish a goal for personal satisfaction, for intrinsic awards (p. 209).

Three publishers of children's literature series were selected: Silver, Burdett & Ginn (19991); Holt, Rinehart & Winston (1989); and Houghton Mifflin (1989). A statistically significant difference was found amongst the series in relation to the presence of need achievement. Silver, Burdett & Ginn scored the highest with n-Ach in 80% of their stories for grade
two and 72% for grade three. In all three series significant correlation was found between n-Ach and the male role. The researchers conclude that the mere presence of a female or an African American within a story is not sufficient but that we most consider the values that they represent.

Another interesting, though seemingly limited development, is the study of the male role within the story. Blair (1991) conducted a study to determine the extent to which the roles of fathers depicted in picture books published between 1980 - 1990 reflect the changing role of fathers in the today's family. Analysis of the findings revealed that whereas fathers were portrayed as actively involved with their children, the involvement was not in the area of caregiver or housekeeper. In some cases, as Nikola-Lisa (1993) notes the role of the mother in the picture book is also changing. For example, the central characters in Holabird's, Alexander and the Magic Boat, Alexander and his mother, both display an array of overlapping characteristics. They are both sensitive, caring, independent, capable and compassionate. Not only do they subdue their pirate assailants together but they help them as well. This final act of compassion is the defining characteristic of the female (or male) hero who successfully integrates two basic and differing orientations into
one personality (p. 109). Yet, the fact remains that no matter how unbiased or enchanting a story may be, reading material represents only a fraction of what a child is exposed to. Therefore, the question arises as to what effect, if any, the presentation of non-biased material has on the reader or listener.

Clarissa Pinkola Estes, Ph.D. author of Women Who Run With the Wolves (1992) writes, "Stories are medicine . . . They have such power; they do not require that we do, be, act anything - we need only listen" (p.15). Throughout time humans have transmitted their values, cultures and histories through oral and written stories. Although the power of stories is widely accepted the extent of influence, of a particular story, depends on a complex array of factors e.g. the listener/readers background, propensity toward being open-minded and ability to infer meaning.

Tibbetts (1978), noted that since research has indicated that one cannot predict, with desired certainty, the consequences of reading and since a reader's predispositions, far more than the content of what is being read, determine the materials effect on the reader (Beach, 1976), it follows that the individual who is apparently influenced by sexist material has already been indoctrinated by other environmental factors. This argument supports the
ideas of Kingston & Lovelace (1977-78) who advise that the impact of "so-called sexist" material on children be studied before it is judged harmful. Tibbetts (1978) citing Schneyer (1969), notes that the problem of assessing the effects of reading on children's attitudes may be too complex and individual to be solved (p.167).

On the other hand, numerous researchers have devised ways to study the effect of reading material on children. Scott (1980) notes that studies have been made of the effect of materials on children's reading interests, on their attitudes toward sex roles and on their comprehension. In one such study, Scott & Feldman-Summers (1979), asked children to evaluate a set of eight stories in which the sex of the main character was systematically varied. The study was designed to address the following questions; 1) Will exposure to female characters presented in nontraditional roles alter children's perceptions of the roles of males and females in our society? 2) Will stories in which female characters are portrayed in nontraditional roles be positively evaluated by children? 3) Will girls respond differently to stories in which females are portrayed in nontraditional roles? The results yielded two findings of particular interest. First, exposure to female characters engaged in nontraditional
activities increased children's perceptions of the number of girls who could engage in these same activities but did not alter perceptions of other sex role activities. Second, although females evaluated the stories more positively than males, across experimental conditions, story evaluations did not vary as a function of the sex of the main character. The implication being that both boys and girls will accept stories in which females are portrayed in nontraditional roles.

Schau, Kahn and Tremaine (1978) measured the impact of nontraditional occupations for women and men, as portrayed in elementary school reading materials, on children's attitudes about work roles. The researchers found no significant changes. The materials were then re-written to present the role models in an interesting way that would encourage children to identify with the main characters who successfully overcome obstacles to pursue a nontraditional occupation. When the revised stories were read the children's attitudes toward both females and males in nontraditional careers were affected positively.

Flerx, Fidler, and Rogers (1979) found that attitudes of pre-school children who listened to presentations of stories with nontraditional role models were less stereotyped than the attitudes of
children who heard traditional stories. McArthur & Eisen (1976) reported that pre-school boys were more likely to persist in a task after hearing a story about a boy who achieved than after hearing about a girl who achieved or a neutral story. These types of changes in children's behavior and attitudes indicate that stories can impact upon children in a significant way.

Thomas and Margaret Yawkey summarize the issue of the influence of picture books on children as follows:

"The impact of these materials upon the development of all young children regardless of race, sex, and socioeconomic status seems to be very clear in the current research on the formative years. At an early age, young children are not only developing their intellectual structures but also busily assimilating sex role and race concepts . . . There is also a great amount of research that literacy materials can develop and shape attitudes of children toward themselves and others (qtd. in Blair, 1991).

Mem Fox, a popular children's author, maintains that gender stereotyping in literature prevents the fullness of female potential from being realized by depriving girls of a variety of role models. In addition, male human potential is thwarted by portraying males in
limited circumstances.

Frasher (1977) in an attempt to determine whether boys shunned books with female main characters because the character was female or whether it was the role portrayed by the female that produced a negative reaction, read *Pippi Longstockings* to her third grade class. Pippi, as is well known, is an outspoken, clever, impertinent and incredibly strong nine year old girl. After completion of the book the children were asked to write down the name of the character they liked the best and their reasons for choosing that child. They were also asked to write down the name of the character that was most like herself or himself.

The children's responses revealed the following:

1) The girls overwhelmingly choose Pippi as their favorite character. 2) Pippi and Annika (Pippi's mild-mannered friend) were equal choices when it came to identification and preference for association. 3) The boys also selected Pippi as their favorite character. 4) Although most of the boys indicated identification with Tommy, as expected, two actually selected Pippi as their choice in answer to the question, "Which child is most like you?". The results of this study clearly indicate that boys do not necessarily reject fictional characters simply because they are female (p. 862).
The choice of identification with Annika, in spite of the overwhelming choice of Pippi as their favorite character, is reflective of a larger issue. Wendy Kaminer, in her recent article "Feminism's Identity Crisis" (1993) notes that in general, polls conducted over the past three years indicate strong majority support for feminist ideals. But, the same polls suggest that a majority of women hesitate to identify themselves with the movement. Kaminer states, "To the extent that feminism challenges discrimination and the political exclusion of women, feminism is easy for many women to embrace. It appeals to fundamental notions of fairness; It suggests that social structures must change but that individuals, particularly women, may remain the same. But to the extent that feminism challenges those roles and the underlying assumptions about sexuality, it requires profound individual change as well, posing an unsettling challenge that well adjusted people instinctively avoid (p.52).

The research has shown, that over the past twenty years the degree of gender bias portrayed in children's literature has decreased. However, it is also important to note that censorship of sexist material is unacceptable. It seems that a balanced approach, inclusion of stories where main characters are portrayed in nontraditional roles plus "reading against
the grain" (Temple 1993) of traditional material, is a reasonable way to proceed. Sister Regina Alfonso (1968) notes that it is the teacher's responsibility to raise children's consciousness of the sexism they are absorbing from books. Providing criteria for judging, books to evaluate, and time to discuss and compare themes and characters offer students an excellent opportunity to improve their skill in critical reading. The challenge to provide equality and excellence in education enormous. Yet, it must be wholeheartedly embraced if we are to succeed in the twenty-first century.

Research needs to continue to explore the issue of whether or not the exposure of children to literature in which the main characters are portrayed in nontraditional roles, has any effect upon the degree of stereotyping expressed by the children. Although there has been research conducted that shows certain action resulted in a positive effect, there remains a need for additional research specific to various age groups and methods of presentation. Large sums of money are being spent to update reading curriculum, more information is needed as to the best ways to address gender bias in educational materials.
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Appendix I
Place an X on the line next to the answer that you think is best. More than one answer may seem correct, but you must only choose one.

1) Who is more likely to scream and close their eyes when they go on a roller coaster?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

2) Who is more likely to earn extra money at home by babysitting?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

3) Who is more likely to say baseball is their favorite sport?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

4) Who is more likely to cry if they fall off their bike?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

5) Who is more likely to play in the rough waves at the beach?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

6) Who is more likely to jump on a chair if they see a mouse?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both

7) Who is more likely to choose "The Evil Invaders From Planet Zeno" as their favorite movie?
   _____ Susan
   _____ Michael
   _____ Neither
   _____ Both
8) Who is more likely to take a long time choosing their clothes?
   ⬜️ Susan
   ⬜️ Michael
   ⬜️ Neither
   ⬜️ Both

9) Who is more likely to be told that the most important thing to be in life is brave?
   ⬜️ Susan
   ⬜️ Michael
   ⬜️ Neither
   ⬜️ Both

10) Who is more likely to make a surprise desert for dinner?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

11) Who is more likely to catch a cold after being out in the rain?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

12) Who is more likely to bring home a bird with a broken wing?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

13) Who is more likely to get into trouble at school?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

14) Who is more likely to become a scientist?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

15) Who is more likely to climb a high tree to rescue a kitten?
    ⬜️ Susan
    ⬜️ Michael
    ⬜️ Neither
    ⬜️ Both

16) Who is more likely to help clean the house?
    ⬜️ Susan
17) Who is more likely to be told that the most important thing to be in life is kind?
   - Susan
   - Neither
   - Michael
   - Both

18) Who is more likely to protect a little child from a bully?
   - Susan
   - Michael
   - Neither
   - Both

19) Who is more likely to enjoy reading adventure stories?
   - Susan
   - Michael
   - Neither
   - Both

20) Who is more likely help carry in the groceries?
   - Susan
   - Michael
   - Neither
   - Both
Lesson 1
Purpose: To discuss the traditional portrayal of the princess in fairytales and to contrast that to nontraditional portrayals.

Opening Set: Have student volunteer wear "princess hat". Jessica is dressed as a princess. Can you tell me some stories in which a princess is one of the characters? (Mention: Cinderella, Snow White, Sleeping Beauty) Instruct to children to think about these stories and about what the princess is like. Complete semantic map about the word princess.

DRESS & HAT                     PRETTY

CASTLE                           FUSSY

PRINCESS

TIMID

NICE                     KIND                WANTS TO MARRY A PRINCE

Guided Oral Reading: The Princess And The Pea retold and illustrated by Sucie Stevenson.

1. Introduce story: While you are listening to this
Appendix II
story I would like you to think about whether or not the princess in this story is like the princess we described.

2. Guided Oral Reading: What did the prince mean by a real princess? (p.1&2) What was wrong with the princesses he met? (p.3&4) How did the Queen test to see if she was a real princess?

Closing Set: Refer back to word chart and compare the princess in the story to the princess we described. Add any additional traits that children offer. Explain that we will be reading a few stories about princesses and we will be paying attention to whether or not they are like the princess that we described in our chart.

Materials: Word Chart, Princess And The Pea by Sucie Stevenson
Princess hat
Lesson 2

Purpose: To read the story "Petronella" by Jay Williams and to compare and contrast the actions and personality of the princess to the traditional model as described in our semantic map.

Guided Oral Reading: "Petronella" Choose girl to act out part of Petronella while I read story. Read pages 53-54; What does Princess Petronella look like? What did she set out to do?
Read pages 56-57 (top); How did Petronella help the old man? Why did she ask him if there was anything she could do to help him? What was her reward? What three items did the old man tell Petronella to ask for? (Give items to children in their seats.) How did Petronella manage to survive her night with the hounds...the horses...the falcons? (have children give Petronella her rewards as they are given in the story). Lead children to recognize that Petronella is a "read princess". She is brave, kind and talented.
Complete story. How is this fairy tale different from most fairy tales that you know? Possible answers; Petronella rescues the prince but she doesn't marry him. Petronella is beautiful but she is also brave, smart, kind and talented.
Closing Set: Compare character traits portrayed by Petronella to word map for "princess". Add traits to word map using a different color paper. Discuss briefly what it means to be a "real princess" in both stories.

Materials: Word Chart (New Words), Don't Bet on the Prince by Jack Zipes, black comb, silver mirror, diamond ring, princess hat

Lesson 3

Purpose: To read the story Secret Of The Peaceful Warrior by Dan Millman to compare and contrast the portrayal of the male and female characters and to note how the boy changes within the story.

Opening Set: Have child dress in a shield and hold a sword. Elicit responses as to what child is pretending to be. He is a warrior. Show pictures of typical warriors in book Voltron. Complete a semantic word map about the word warrior.
Guided Oral Reading: Today I am going to read a story about a boy who becomes a warrior. While I am reading the story I want you to think about how this boy compares to the typical warrior we described. Discuss picture and title. What might happen in this story?

Pages 1-4 Why was Danny going to give the bully the money?
How did Joy help Danny?

Pages 5-10 Why did Danny gasp when the old man opened the door.
(Don't read end of last sentence on page 10)

Pages 11-15 How did Soocrates tell Danny that he would help him become? What was he going to have to do to become a warrior?

Pages 16-24 What do you think Socrates meant when he said, "The true warrior is a peaceful warrior."

Pages 25-end What happened to make things change between Danny and Carl?
Closing Set: Refer back to word chart about the word warrior. Delete and add words that apply to Danny, a "peaceful warrior".
Discuss Joy and how she is also a peaceful warrior.

Lesson 4

Purpose: To read and discuss "The Pudding Like a Night on the Sea" by Ann Cameron.

Opening Set: Is there a special food that your dad, mom, grandma or grandpa makes for you? When do they make it? How does it taste. Discuss picture and title on pages 6&7. What do you think this story is about? Let's find out and while we're reading the story let's think about the father and what type of man he is. What he looks like, what he sounds like and what his personality is like.

Guided Oral Reading: Read page 7 to class. How does the father describe the special pudding? What do you think that means?
Pages 9-11 What do you think the father is going to do when he finds the boys?
Pages 12-14 Were we correct? Did the father _the boys?
Do you think the boys learned a lesson? What lesson was that?

Closing Set: Do you think that the father in this story is a good father? Why? Have children write down their thoughts.
Share stories.

Materials: Now I Get It (Celebrate Reading Series)

Lesson 5

Purpose: To read and discuss the characteristics of Jane in the comic book story "Jane and the Beanstalk"

Opening Set: Discussion of the story "Jack and the Beanstalk".
Present comic book version "Jane and the Beanstalk" and choose children to read various parts.

Guided Oral Reading: Read story with class reading characters parts aloud.

Closing Set: Jane is the heroine of this story. What is a heroine? Have children work in groups to complete worksheet in which they must find all the things Jane did to prove that she is a heroine.
Jane is a heroine, because she worked hard on the farm in order to help her family. was not afraid to climb the beanstalk. rescued Jack. made the giant fall.

Materials: Copies of "Jane and the Beanstalk"

Lesson 6

Purpose: To read and discuss the book Harriet and the Roller Coaster by Nancy Carlson.

Opening Set: Where do you go to go on rides? What is your favorite ride? Which rides don't you like? Do you think boys or girls like bumper cars? Do you think boys or girls like roller coasters?

Guided Oral Reading: Harriet and the Roller Coaster

Read story. What wound up happening? What lesson did George learn? What did Harriet learn? What did you learn? Sometimes boys are more afraid than girls.
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Summary of Results of First Survey - Jan. 6, 1994
### Table V

**Summary of Results of Post Experiment Survey**  
February 24

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