ABSTRACT

GENDER BIAS IN ELEMENTARY SCHOOLS:
AN EXAMINATION OF TEACHER ATTITUDES

by Lori Melissa Slater

This study investigated the perceptions of early childhood teachers regarding the topic of gender equity in their classrooms and in education in general. A self-developed survey asked kindergarten through third grade educators to anonymously reflect on gender differences among their students in the areas of play activities, discipline and instructional needs, classroom structure, curriculum materials, and teaching methods. Data were analyzed by determining common trends in the teachers’ responses, thereby giving insight into their perceptions of the needs of male and female students. Results indicated that the respondents viewed their students as equal in abilities and considered gender equity to be an important issue. However, the teachers also stated that they do not consciously think about gender equity in their daily practices, indicating that this issue may still be part of the “hidden curriculum”.

GENDER BIAS IN ELEMENTARY SCHOOLS:

AN EXAMINATION OF TEACHER ATTITUDES

A Thesis

Submitted to the

Faculty of Miami University

in partial fulfillment for the degree of

Specialist in Education

Department of Educational Psychology

by

Lori Melissa Slater

Miami University

Oxford, Ohio

2003

Advisor _____________________________

Susan Mosley-Howard, PhD

Reader ______________________________

Kathy McMahon-Klosterman, PhD

Reader ______________________________

Alex Thomas, PhD

Reader ______________________________

Anne Bailey, PhD
Table of Contents

Table of Contents...........................................................................................................ii
List of Figures..................................................................................................................iv
Purpose and Need of Study.............................................................................................v

1. Introduction and literature review.............................................................................1
   1.1 Gender discrimination vs. gender bias.................................................................1
       a. Unintentional effects......................................................................................1
       b. Impact on female self-esteem.......................................................................2
   1.2 Differences in teacher-student interactions.......................................................3
       a. Differences in feedback.................................................................................3
       b. Differences in attention................................................................................3
       c. Differences in discipline..............................................................................4
       d. Differences in curriculum representation....................................................4
       e. Impact on student achievement....................................................................4
   1.3 Effects throughout childhood.............................................................................6
       a. Impacts in early adolescence........................................................................6
       b. Impacts in early childhood...........................................................................6
   1.4 The role of the school psychologist in gender equity..............................................7
       a. The “hidden curriculum”.............................................................................7
       b. Teacher attitudes..........................................................................................7
   1.5 Summary and conclusions...................................................................................8
   1.6 Statement of purpose.........................................................................................8

2. Method......................................................................................................................9
   2.1 Participants..........................................................................................................9
       a. Criteria for participation..............................................................................9
       b. Recruitment of participants.........................................................................9
       c. Characteristics of participating teachers.....................................................9
   2.2 Materials.............................................................................................................9
       a. Measurement instrument............................................................................9
       b. Questions under investigation...................................................................9
       c. Format of survey questions.........................................................................10
   2.3 Design and procedure.......................................................................................10
       a. Type of research design..............................................................................10
       b. Distribution of surveys................................................................................11
       c. Methodological issues and limitations......................................................11
       d. Protection of human subjects.....................................................................12
       e. Data analysis..............................................................................................12

3. Results....................................................................................................................13
   3.1 Teachers’ experiences as students.....................................................................13
   3.2 Differences in leisure activities.........................................................................15
   3.3 Differences in needs within the classroom.......................................................17
   3.4 Impact on daily teaching practices.................................................................18
4. Discussion .................................................................................................................. 20
   4.1 Generational differences in responses ................................................................. 20
   4.2 Disparities in curriculum materials and expectations ......................................... 21
   4.3 Impact of “hidden curriculum” ............................................................................ 22
   4.4 Implications for teachers and school psychologists ............................................. 23
   4.5 Summary ............................................................................................................. 27

5. References ............................................................................................................... 30

6. Appendices ............................................................................................................. 33
   6.1 Appendix A: Participant recruitment letter ......................................................... 33
   6.2 Appendix B: Teacher survey ................................................................................ 34
List of Figures

Figure 1: Past play activities for male and female students.................................13
Figure 2: Present play activities for male and female students...............................14
Figure 3: Differences among perceived male and female needs within the classroom…16
Purpose and Need of Study

Over the past thirty years, the topic of gender equity in education has become increasingly more prevalent in the research. Fortunately, we are learning more about the different types of interactions between teachers and their male and female students, the types of curriculum materials available to students, and the expectations held by school personnel for success in different subject areas according to gender. In exchange, it has also become essential to discover ways to combat any existing gender bias and discrimination within classrooms and educational institutions.

Educators and school psychologists typically hold compatible views regarding student success; both types of professionals wish to contribute to the success of all students, regardless of gender, culture, or socioeconomic status. By raising their awareness of gender inequities in the classroom, teachers can take actions which may result in decreased achievement gaps between male and female students, and develop curriculum materials that equally portray male and female characters. Likewise, school psychologists need to be aware of the assessment outcomes associated with gender bias and become actively involved in eliminating them.

Because the effects of gender bias can often be seen in children as early as kindergarten, I attempted to investigate teacher perceptions of gender differences within early childhood education. This study examined the perceptions of early childhood teachers on the topic of gender equity in their classrooms and in education in general. By doing so, I wished to add to the literature surrounding the topic of gender bias in education, particularly during a child’s first experiences in school.
Gender Bias in Elementary Schools:  
An Examination of Teacher Attitudes

*Introduction*

Over thirty years ago, Title IX of the Education Amendment Act was passed into law. The intent of Title IX is expressed in its preamble:

> No person in the United States shall, on the basis of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance (Women’s Educational Equity Act Program, 1975).

The passage of Title IX legally obligated schools to provide equal opportunities to and equal treatment of all students in our schools, regardless of gender. Has this been successful? Are gender inequities in our schools a thing of the past? Research suggests that gender discrimination is still thriving in today’s classrooms (Sadker & Sadker, 1994; American Association of University Women, 1991). Among those practices that can be seen as discriminating are the over- or under-representation of one gender in a curriculum offering; teacher expectations related to or affected by student gender; and classroom practices such as teaching methods or discipline that disproportionately affect one gender or group (Steitmatter, 1994). Less obvious and perhaps more pervasive than gender discrimination is the practice of gender bias. Bias is subtler than discrimination and therefore more difficult to identify (Streitmatter, 1994). Gender bias is defined as the underlying network of assumptions and beliefs that males and females differ in systematic ways in talents, behaviors, or interests (Women’s Educational Equity Act Program, 1975). For the purposes of this study, the terms “gender bias”, “gender discrimination”, and “gender inequity” will be used simultaneously because of their connection to one another.

Most teachers strive for fairness, yet even those who have an awareness of gender issues may interact differently with the boys and girls in their classrooms. These interactions are typically subtle, unintentional, and unnoticed by teachers and students alike (Sadker, Sadker, & Stulberg, 1993). Yet, if a teacher believes, however unconsciously, that a child of a particular sex is likely to do, think, or feel a particular way, these beliefs almost certainly will limit the opportunities of many of the learners in
the class (Streitmatter, 1994). Specific occurrences and effects of gender bias and sex discrimination ensue.

According to a survey conducted by the American Association of University Women in 1991, the consequences of gender bias seem to be more serious for female schoolchildren. Being treated differently by a teacher can have a detrimental effect on female students’ self-esteem and academic self-concept (AAUW, 1991). These effects seem to increase as young girls get older. Upon reaching high school, boys more often attribute successes to ability and failures to lack of effort, while girls attribute successes to luck and failures to a lack of ability (Siegle & Reis, 1998). One important reason boys maintain their self-esteem is that they feel capable of “doing things.” According to the AAUW survey, in elementary school 55 percent of boys said they were always “good at a lot of things.” This declined to 48 percent in middle school and 42 percent in high school. For girls the drop was much more drastic: 45 percent of girls in elementary school said they were always “good at a lot of things.” This belief tumbled 16 points between elementary and middle school and then declined another 6 points to 23 percent in high school. Interestingly, even in elementary school there was a 10-point difference between male and female perceptions of abilities, implying that even in the earliest educational environments, boys and girls have dissimilar self-concepts.

Schoolchildren spend more hours of the day in academic classes than in any other activity, and they can learn as much from what they experience in school as they can from the formal content of classroom assignments. Classroom interactions, both with the teacher and other students, are critical components of education (AAUW, 1992). Current practices in our schools make it apparent that gender bias and sex discrimination are alive and well. Examples include the different types of feedback boys and girls receive from their teachers. Boys get feedback for academic subjects, whereas girls get it for being neat, quiet, and having good handwriting (Brodkin, 1991). In a three-year study of fourth-, sixth-, and eighth-grade classrooms in four states and in the District of Columbia, Sadker, Sadker, & Stulberg (1993) found different types of interactions between girls and teachers and boys and teachers. These researchers found that teachers actually talk more to male students. When asked why, the teachers stated that boys are often more demanding, shouting out answers in a manner that’s difficult to ignore. The boys in this
particular study were eight times more likely to call out during a discussion—and teachers tended to accept this behavior. When female students behaved similarly, the observed teachers repeatedly discouraged and corrected their behavior, advising them to “remember the rule” and raise their hands (Sadker et al., 1993).

Furthermore, the quality of the attention also differs. When attention is given, boys seem to get specific, meaningful praise while girls are given vague, neutral reactions. In the classroom itself, boys dominate. Teachers generally interact with them more, whether it is to verbally reprimand them, answer questions, elaborate on their comments, or help them with schoolwork (Masucci, 1995). Boys are called on to answer questions more frequently, and receive more praise and correction. For example, a teacher might quickly move to another student when a girl gives a wrong answer, yet challenge a boy who has answered incorrectly to search for the right answer, giving him time to think and independently formulate a correct response (Sadker et al., 1993).

Boys and girls are also disciplined differently in the classroom. Boys are punished more severely than girls—their names are always on a list of those with behavior problems (Matthews, Binkley, Crisp, & Gregg, 1998). Girls are disciplined more for talking and calling out answers, events that are much more accepted when exhibited by male students.

Bias also surfaces in everyday curricula; students’ textbooks generally perpetuate male dominance. In literature, girls are not in the lead roles, and they are shown as less capable than main male characters (Evans, 1998). When girls do not see themselves in the pages of history textbooks, and when teachers do not point out or confront the omissions, young women learn that to be female is to be an absent partner in the development of our nation. And when teachers add their stereotypes to the curriculum bias in books, the message becomes even more damaging (Sadker & Sadker, 1994).

Impact of Gender Bias on Student Achievement

Over the past three decades, the topic of gender bias in education has become increasingly prevalent in the research (Sadker & Sadker, 1994; AAUW, 1991; Streitmatter, 1994). The effects of underlying gender bias can be seen in children’s self-efficacy, teacher-student interactions, discipline techniques within the classroom, and
gender representation in curricula. The following research illustrates that teacher expectations may also have a detrimental impact on a student’s achievement in school, particularly if a certain gender is encouraged to achieve in one subject area over another.

There do seem to be different expectations for boys and girls in different academic subjects. Girls generally receive little encouragement from teachers in math and science. It is also reported that ACT and SAT scores in these areas are generally lower for girls (Masucci, 1995). In elementary school and junior high, teachers are four to five times more likely to encourage boys than girls to go on with advanced math (Brodkin, 1991). Females, more than males, have been found to doubt their confidence in math. The Educational Testing Service reports that gender differences in perceptions of being good at math increase with age. Third grade girls and boys think they are good in math in about the same percentages (64 percent versus 66 percent, respectively); by seventh grade, 57 percent of the girls agree, compared to 64 percent of the boys; by eleventh grade the gap widens to 48 percent of girls versus 60 percent of boys (AAUW, 1992). Teachers also see boys as more capable scientists; they dominate lab experiments and are involved in 79% of student-assisted science demonstrations (Sadker et al., 1993). In general, students’ interest in and enthusiasm for math and science decline the longer they are in school. The poll commissioned by the AAUW in 1992 found that all students’ enthusiasm for math and science was greatest in the elementary years and dropped as they got older. However, losses for girls were greater than were those for boys.

Most recent data from the National Association of Educational Progress, also known as the “Nation’s Report Card”, indicated that on national mathematics assessments in 2000, male students in grades 8 and 12 had higher scores than their female peers. The difference at grade 4 was not statistically significant. In the area of reading, in 2000, as well as in previous assessment years, girls continued to outperform boys. The gap between boys’ and girls’ scores increased between 1998 and 2000, and more girls than boys reached or exceeded the “proficient” level in reading. On writing assessments in 1998, females also had higher average scores than their male peers at all three grades (NAEP, 2003). Also, research conducted by the AAUW Educational Foundation (2000) indicates a growing disparity between the genders in technology. To encourage girls’
involvement in challenging math, science, and technology coursework and activities, the Foundation’s Eleanor Roosevelt Teacher Fellowships provide grants of up to $9,000 for individual teachers to design projects that will give girls a jumpstart in these areas (Jordan-Meldrum & Coplan, 2000).

Profound effects of gender bias and discrimination occur in middle school, a stage of development in which children generally experience vulnerability and many life transitions. Messages, however unintentional, sent by teachers during this stage could have a lasting effect on self-concept and selection of future academic goals. Also, children at this stage tend to desire to exhibit behavior typical of the average teenager. Interviews with middle school-age gifted females revealed avoidance of displays of outstanding intellectual ability and a search for ways to better conform to the norm of the peer group (Masucci, 1995).

Because the effects of gender bias are generally observable during middle school, it stands to reason that the impact actually begins much earlier, in early childhood. Early childhood is when children are beginning to form perceptions of their abilities and make explanations for their successes and failures. By second grade, both boys and girls express gender stereotyping by describing math as a male domain. By third grade, females in comparison with males, rate their competence in mathematics lower—even when they receive the same or better grades (Perez, 2000). The beginning stages of gender differences are even apparent in younger age-group classrooms. In a study by Stroeher (1994), children 5-6 years of age were interviewed about which gender was appropriate for certain occupations and which jobs they would like to have when they grow up. The boys generally allowed for either gender to perform any job represented, whereas all girls associated themselves with more traditionally female gender-typed careers such as teaching and nursing.

The Role of the School Psychologist in Gender Issues

It is widely believed that most teachers do not intentionally set out to differentiate among their students based on sex alone; this is often an unconscious process. Caught up in the many daily decisions regarding the curriculum and classroom management, teachers have little time to reflect on and analyze their interactions with girls and boys in
their classrooms (Marshall & Reinhartz, 1997). For this reason, many teachers do not believe gender inequity to be a problem in their classrooms. In fact, studies show that the teacher’s personal communication with and informal instruction of students—often referred to as the “hidden curriculum”—have a major impact on the achievement and future success of both girls and boys (Gollnick & Chin, 1994; Welton & Mallan, 1996). To investigate the effect of gender bias on students, one must first examine teachers’ attitudes. Looking at how a teacher views issues such as discipline, attention, and curriculum will give insight into that particular educator’s perceptions of gender equity. By not reflecting upon their own teaching as it may be affected by gender stereotypes and bias, teachers may in turn perpetuate the problem (Streitmatter, 1994).

School psychologists can play a role in raising the awareness of teachers on the topic of gender equity in education. Among the many roles within the field of school psychology is that of the consultative professional. These specialists have been trained to give healthy and effective alternatives to teachers, parents, and administrators about problems in learning and behavior, help others understand child development and how it affects learning and behavior, and to strengthen working relationships between educators, parents, and community services (National Association of School Psychologists, 1998). Therefore, if equipped with the knowledge of ways to combat gender inequity, school psychologists can be integral in making this issue a main concern for all involved in maintaining a positive educational environment.

Because gender inequity is so common and familiar, it doesn’t always grab our attention (Matthews et al., 1998). Unfortunately, the effects of gender discrimination can have lasting consequences. Biased interactions with teachers can have profound effects on children’s self-esteem, academic interests, and their ability to become independent and assertive thinkers (Sadker, Sadker, & Stulberg, 1993).

This study examined teachers’ attitudes toward gender equity in their classrooms and in education in general. Given the vast difference in male and female children’s perceptions of abilities as early on as the beginning of elementary school, it seemed constructive to research this age group. Because early childhood is a critical time period for early self-concept development, teachers of kindergarten through grade three were involvement in this study. I attempted to further explore this age group by identifying...
trends in teacher attitudes toward gender differences among the grades taught, years of experience in education, and presence of training in gender issues.

Method

Participants

Kindergarten through third grade teachers from the Hamilton City School District in Butler County in southwest Ohio provided the data for this study. The principals in three elementary schools were contacted for permission to invite teachers for participation. The three schools were chosen due to the ease in accessibility of the buildings and principals. Surveys were distributed, via building mailboxes, to approximately fifty teachers, who were then instructed to return their responses anonymously to the researcher through inter-office mail.

Sixteen surveys were returned, producing a response rate of approximately 32%. Eighty-eight percent (88%; 14) of the respondents were female, and 12% (2) were male. The median number of years teaching among the respondents was 18 years, and the median year the respondents first began teaching was 1982. The median age of the responding teacher was 47 years old. When asked to provide information regarding their race, 94% (15) of the teachers responded that they were Caucasian, and 6% (1) responded in the “other” category.

Materials

A standardized survey that addressed the issue of gender bias in education could not be found. Therefore, utilizing existing research questions in this area, I developed a survey that examines teacher beliefs and attitudes surrounding gender issues in the classroom. An example of the teacher survey can be found in Appendix B. Questions under investigation included perceptions of interests of boys and girls, amount of classroom attention required by both genders, leaders in the classroom, curriculum issues, and the teachers’ previous training in gender equity. These issues have been raised in the literature as key areas when examining gender differences.

There were 18 total questions on this survey. Questions one through three asked educators to reflect on their past experiences as students in the grades they currently teach. They were required to check from lists of leisure activities and discipline techniques to indicate those that were popular in the past, and also reflect on an open-
ended question regarding any desire to be the opposite gender during their childhood. Teachers were then required to reflect on their experiences as teachers, and describe the needs of their current students. Question four asked teachers to check from a list of activities to indicate those that are now popular with their current male and female students. Question five asked educators to reflect on the topic of segregated play activities for boys and girls. Questions six through twelve required teachers to rate the needs of their students in various areas along a continuum, with boys on one side and girls on the other, with “no differences” in the middle. The remainder of the questions (thirteen through eighteen) were open-ended inquiries regarding teachers’ perceptions of the importance of gender equity and the impact this issue has on their daily teaching practices.

_Design and Procedure_

This is a descriptive study utilizing a qualitative research design. Human Subjects procedures were followed in accordance with the American Psychological Association guidelines. See Appendix A for an example of the participant recruitment letter. Through the survey, I investigated common trends in teachers’ perceptions of the role of gender in education. The principals of three elementary schools in the district were approached, asking for permission to distribute a survey on gender issues to their kindergarten through third grade teachers. The survey was distributed to teachers in the school district in their building mailboxes in February of 2003. Surveys were re-distributed in March of 2003 due to a low initial response rate. All completed surveys were returned directly to the researcher through inter-office mail. The survey asked teachers to reflect on student interests, behaviors of different genders, and the importance of gender equity in their profession. All survey responses remained anonymous and were seen only by the researcher. If interested in receiving a copy of the results of the study, teachers were instructed to contact the researcher after June 1, 2003.

_Methodological Issues and Limitations_

It is important to note that all data in this study were derived from self-report. There were no empirical observations of the interactions between the educators and their
students, which would validate the responses of the participants. Also, it has been
previously discussed that even those who have an awareness of gender issues may
interact differently with the boys and girls in the classroom, interactions which are often
unnoticed by the teacher and the students. Therefore, the teachers’ responses are from
their own perspectives and may not match what I may have observed in the classroom,
especially if they are unaware of the occurrence of any discrimination. It is possible that
the teachers may have responded in a way that would look good to the reader rather than
accurately. Also, the return rate of the surveys was lower than I desired, but is consistent
with the average return rate for survey methodology. The lower return rate may be
explained by the pressures of the state proficiency testing at the time of distribution of the
surveys, and possibly the length of the survey. Finally, this was a volunteer sample, and
the teachers who returned the instrument may have done so because they were interested
in the topic or had previous experiences surrounding the issue. Therefore, the
participants may have been more aware of gender issues and not have been a true
representation of all educators.

Protection of Human Subjects

The participants in this study were adults, and all responses remained confidential
and anonymous. Data were coded for each building, but subject names and identifiers
did not appear on the survey. The teachers were made clear of their rights throughout the
study and, if desired, received a summary of the general findings upon completion of data
analysis.

Data Analysis

The data were analyzed by determining common trends in the teachers’ responses
to the survey questions. By comparing the responses of teachers in the different grades
taught, years of experience of the teacher, and training in gender equity, I explored the
relationship between these factors and the responses. In addition, information was
provided about how some teachers perceive gender to be a factor in their teaching
methods, classroom management techniques, and selection of curriculum materials.

Results
This study was designed to investigate teachers’ attitudes toward gender equity in their classrooms and in education in general. Because the effects of gender bias can be seen in elementary school students, early childhood teachers of kindergarten through third grade were selected as the participants for this study. The intent was to identify trends in the teachers’ responses in the areas of selection of leisure activities, needs within the classroom, awareness of the importance of gender equity, and selection of curriculum materials and teaching methods catered to either gender. Also, I attempted to identify trends in attitudes stratified by the grades taught, years of experience in education, and the presence of any previous training in gender issues. The survey requested that teachers respond to various questions on the topic of gender equity and to relate their personal experiences within the classroom. The topic was introduced to teachers by asking them to reflect on their own experiences as students. Below I present the general findings by question and end with a summary of key themes.

Respondents were first asked to recall the types of play activities they believed were common interests of boys and girls in the past. Figure 1 displays the types of activities perceived to be preferences of boys and girls during the time the respondents were students. Results indicate that pretend play and cooperative play activities were perceived to be preferred by girls, and rough physical play and hands-on exploration were preferences of boys among children approximately thirty years ago. When asked about discipline techniques used when they were students, teachers noted that boys were more likely to be disciplined by being sent to the principal’s office or were given extra work. Girls were more likely to be given a private conference with the teacher as a form of discipline. Finally, the following question was posed to teachers: “As a student, was there ever a time that you wished you were another gender? If so, at approximately what age?” Only one teacher responded positively to this question, stating that she wished to be the opposite gender at ten years of age. These findings will be discussed later within the context of the literature.

Figure 1. Play activities selected by boys and girls when teachers were children. The scores indicate the percentage of respondents indicating this was a popular activity for either gender.
Figure 2. Play activities selected by boys and girls in present classrooms. The scores indicate the percentage of respondents indicating this is a popular activity for either gender.
Teachers were then asked to reflect on the preferences and needs of their current students. In question four, the educators first responded on the types of leisure activities preferred by their current students. Preferences are indicated in Figure 2. Respondents indicated that girls still prefer pretend and cooperative play and boys still prefer rough physical play and hands-on activities. However, the differences were much less dramatic than what this sample experienced as students approximately thirty years ago. Responses in the “other” category included activities such as Harry Potter and working on computers. In question five, teachers were also asked to respond to the following scenario: “On the playground (or playing field) a group of boys are going to play a ball game. Several girls want to play, but are told by the boys that they cannot. What do you do?” Each respondent indicated that he or she would intervene in some way, specifically by insisting that the boys allow the girls to play. One teacher responded that, “I would tell them girls need to have a fair chance at everything, just like boys need to have a fair chance at everything.” Some educators added that they would include the female students in their own activity. One teacher stated, “I would create a separate girls’ ball game or equally divide the girls among the two teams after talking it over with all concerned.” Regardless of the strategy, the main objective was clear: the female students should be included.

In question five, when asked whether is it helpful for girls and boys to have separate play activities, 94% (n=15) of the respondents indicated yes. One teacher stated that, “Girls and boys do need to occasionally have separate play activities so boys can socialize the way boys socialize and girls can socialize the way they socialize.” Another educator noted that choice of play activities should match interests, and therefore leisure activities will naturally become segregated. However, one teacher disagreed, stating, “I don’t think students should be forced to work apart from the other gender.” This response may be developmentally-specific based on the objectives of an early childhood educator.

Teachers were next asked to reflect upon the needs of their students within the classroom. Questions six through twelve on the survey asked teachers to classify certain behaviors in the classroom as being more representative of their male students, their female students, or no observed difference between the two. Respondents reported
generally no differences among the students who require more instructional attention in the classroom, those who are leaders in the classroom, those who excel in the subjects of math and science, and those who excel in the subjects of reading and language arts. Also, teachers reported that male and female characters, in general, are equally shown in the lead roles in curriculum materials. However, some differences were noted by teachers in regards to the students who required more discipline in the classroom. While 50% (n=8) of respondents indicated that no differences exist in this category, the other 50% (n=8) stated that their male students require more discipline. Also, 25% (n=4) of teachers answered that boys talk more, or in general dominate the class, 6% (n=1) believed girls talked more, and the other 69% (n=11) reported no differences in this category. Figure 3 displays the percentages of teachers who responded in each category.

Figure 3. Differences among perceived male and female needs within the classroom.

One survey question asked teachers to reflect on the instructional methods they use in the classroom, and whether some of these teaching methods or learning activities might be more effective for female or male students. Most respondents indicated that
gender does not play a role in their choice of teaching methods, but that the needs of the individual students do. For example, one teacher stated, “I think the teaching method or activity depends on the individual student. One teaching method could be effective for a boy and a girl but for another boy and girl it may not be as effective.” Another educator added, “No, I think each student as an individual may be more receptive to or benefit from different teaching methods.” However, 13% (n=2) of educators responded that working in groups of other girls, including cooperative activities where group decisions are made, is an effective strategy for teaching female students, and that activities involving movement may be more effective with male students.

When asked if teachers ever seat or group their students according to boys or girls, 75% (n=12) of educators indicated that they do not separate students by gender. One teacher did comment that she pairs her students as “two girls, two boys. I have also partnered boy/girl. It depends on the student and time of year.” Another teacher responded, “No. I seat my students in groups of students who can get along with each other – boys and girls together.” However, one did note, “Yes, it is one of the things I consider. Mainly, I consider behavior – who works quietly or who needs to sit near quiet workers.”

The final set of survey questions asked teachers to reflect upon the issue of gender equity in education and how this topic impacts their lives as early childhood educators. First, teachers were asked, “When selecting classroom materials, do you consider gender equity?” Overall, teachers replied that they did not consciously select particular materials based on gender. However, many did comment that they attempt to purchase materials that would appeal equally to boys and girls. One teacher responded,” No, useless you count books that I would read to the class. I wouldn’t read books on Barbies or cars for example. I would buy them for the students to read on their own.” Another teacher stated that she was conscious of gender when selecting supplies for her classroom (“I stay away from pink when selecting supplies”). Finally, another educator explained, “I select read-aloud books where sometimes a female is the main character and visa versa. Even with posters on the wall, I try to choose posters where males and females are equally displayed.”
Next, teachers were asked whether they received any education in gender equity during their training. Eighty-one percent (81%; n=13) of respondents indicated that this was not a part of their teacher preparation program. The other 19% (n=3) stated that they were provided with some information on this topic, including “video/data regarding ‘calling on’ students for answers and ‘wait time’ for boys versus girls.” One teacher noted that, “Yes, it was briefly discussed in several classes that boys are generally given more time to answer, and are complimented in academic areas while girls are complimented for neatness.” Finally, another educator described an internship experience in which, “a colleague came into our room and tallied how many times we asked a questions or received an answer from girls and also from boys. It was amazing to see that sometimes we called on one gender significantly more than the other.”

Finally, teachers were asked, “Do you think gender equity in classrooms is important?” Seventy-five percent (75%; n=12) of educators responded positively to this question. One teacher commented that, “Yes, I think gender equity is important because students need to be given the same opportunities no matter what their gender. Gender equity is also important because if it is modeled in the classroom it will hopefully carry over into students’ outside lives.” Another educator added, “Definitely! Every child, regardless of gender, should have equal opportunity to shine and also to receive feedback.” However, other teachers did not believe gender should be an area of focus in the classroom. One instructor stated, “I think gender should not be addressed; we don’t even line up boys and girls. It stereotypes children and adults. I have had both boys and girls who were big behavior problems.” Another teacher noted, “I don’t consciously think about it. I think about activities to meet objectives.”

Discussion

The results of this qualitative descriptive study both confirmed and contradicted previous research findings. By asking teachers to reflect upon the needs of individual students within the classroom, this study attempted to identify the underlying network of assumptions that can be so detrimental to students, even in early childhood. When teachers were asked to reflect on the types of activities preferred by their male and female students, the responses consistently indicated that girls were perceived to engage in more
pretend play activities, while boys were believed to engage in more physical play. As supported by Evans (1998) and Stroher (1994), this reinforces that even in early childhood there is a difference in the selection of play activities among male and female students. However, according to the responses of this sample, the gap between male and female selections of various play activities seems to have lessened throughout the years.

When requested to identify those students who were in need of more discipline in the classroom, the respondents were equally divided. While 50% (n=8) of teachers reported that they observed no differences in this area, the other 50% (n=8) reported that their male students typically require more discipline. This supports the research in this area stating that boys are typically punished more frequently and more severely than female students (Matthews et al., 1998).

Past research has shown that disparities have existed in the representation of male and female characters in curriculum materials. Often females are not shown in the lead roles in literature or dominantly portrayed in history textbooks (Evans, 1998). However, when teachers were asked to reflect upon this in their own lives, 88% (n=14) stated that they believe there are no differences among the lead roles in their current curriculum materials. Hopefully, this disparity is improving, and students are experiencing equal representation of genders starting in early childhood. Another explanation could be that educators are not consciously examining their curriculum materials in order to fully recognize any discrepancies.

Another positive trend in the responses was the perception of abilities within different subject areas. Research has consistently shown that females are perceived to be more capable in the areas of reading and writing, and males are perceived to be superior within the subjects of math and science (AAUW, 1992; Sadker & Sadker, 1994; Marshall & Reinhartz, 1997). However, the respondents somewhat contradicted this finding. Only 19% (n=3) of teachers responding to the survey stated that boys seem to excel in the subjects of math and science; the other 81% (n=13) reported no differences. However, it is also important to note that none of the respondents indicated that their female students seemed to excel more in math and science. Also, only 25% (n=4) of teachers reported that girls seem to excel in reading and language arts, while 75% (n=12) reported no
differences. Again, zero respondents perceived male students as excelling more in reading and language arts. Although the majority of respondents reported no differences among their students in these areas, if that category was eliminated from the analysis, disparities do still exist.

It is often believed that gender bias is part of a “hidden curriculum”, an unintentional, underlying set of pre-existing beliefs (Gollnich & Chin, 1994; Welton & Mallan, 1996). To examine this, respondents to the survey were asked to reflect on ways the issue of gender bias impacts their teaching philosophies, thereby giving some input into their underlying beliefs. Interestingly, 56% (n=9) of teachers stated that they do not consciously consider gender equity when selecting classroom materials. However, 75% (n=12) of the respondents also indicated that they believe gender equity is an important issue; most teachers also elaborated that they believed all students deserve a great education. This may reinforce the belief that although teachers strive to maintain fairness in their classrooms, biased interactions may occur without their knowledge (Sadker et al., 1993)

Some of the most informative data provided from the survey results came from the teachers’ comments regarding their previous training, if any, in gender equity. It was somewhat surprising to discover that 19% (n=3) of teachers did have some training in the form of either class discussion or actual video data on teacher/student interactions. However, all respondents describing this type of training had been in the field for two years or less. This may indicate that current training programs are initiating discussions surrounding gender equity at a higher rate than was done in the past. Outside of this finding, there were no other significant generational differences in the responses.

Generally, the findings from this study confirm previous research in the area of gender equity in education. However, positive trends were observed in the teachers’ perceptions of student ability in different academic areas, sensitivity to curriculum representation, and presence of training in gender equity.

**Implications for Educators**

This study raises several issues that relate to the daily functioning of educators within their classrooms. First, the experiences children have in school, including their
learning environments, may influence their choice of future careers. Also, the messages children may receive in school regarding different capabilities depending on gender are important. Finally, the perceptions educators hold on gender differences have an impact on how they craft their classroom climate.

As a result of these issues, educators can take many precautions to eliminate discriminatory practices within their classrooms. The first step is becoming aware of this issue and making a commitment to address it. Even when educators believe they are sensitive to the needs of individual students, they may find they have unrecognized biases. Becoming aware of these biases will allow educators to fully assess how the topic of gender equity fits into their overall teaching philosophies.

It may also be helpful for teachers to ask a colleague to observe interactions with different genders and tally specific exchanges in order to identify disparities. Some of the observations an outsider might look for could include the rate at which the teacher calls on boys and girls, the quality of the teacher’s responses to questions posed by boys and girls, the language used to address boys and girls, and whether the environment is one where both boys and girls see themselves reflected in the visuals in the room (Herr, 1996). Self-reflection is another way to identify and change some teaching behaviors and interactions. Teachers may wish to audio- or video-tape a lesson, and then record the thoughts and ideas that come to mind after listening to or viewing themselves as teachers (Marshall & Reinhartz, 1997).

Educators may also wish to evaluate their curriculum materials and consciously assess gender roles within textbooks. Including books that contain the contributions of both men and women and portray men and women in traditional and nontraditional roles will provide important sources of role models (Marshall & Reinhartz, 1997). Finally, educators may also utilize cooperative groups during lessons to facilitate the desegregation of the classroom. Having a gender balance in student groups has been shown to be particularly beneficial to girls (Perez, 2000). When students realize that participation is their responsibility, and when they do participate, the students’ confidence level may increase. This may also lead to an increase in self-concept, self-esteem, and a feeling of empowerment. (Marshall & Reinhartz, 1997).
Implications for School Psychologists

As assessors and consultants, school psychologists are in a unique position to benefit from the outcomes of this survey. Legal and ethical guidelines for school-based professionals emphasize the use of assessment practices that are unbiased, valid, and reliable for the individuals and concerns being addressed. School psychologists must also maintain high standards for educational and psychological assessment by respecting differences in age, gender, socioeconomic, cultural, and ethnic backgrounds. They select and use appropriate assessment or treatment procedures, techniques, and strategies (NASP, 1995). Therefore, it is important for psychologists working in the schools to be aware of potential bias in the content, administration, interpretations, and use of these assessments (McGivern & Marquart, 2000).

Assessment materials should adhere to three guidelines in the effort to ensure unbiased assessment of an individual (Salvia & Ysseldyke, 2001). First, test materials should present people of color and women in both nonstereotypic and traditional roles and situations. Also, to the extent that students of color, girls, and young women undergo different acculturation, test materials should account for differences in experiential background for acquiring the tested skills, information, and values. For example, tests should have an equal number of questions that are more advantageous for males and questions that are more advantageous for females. Alternatively, test makers could delete questions that elicit pronounced differences in results between males and females or among members of culturally diverse groups. Finally, the language and concepts within the materials describing students of color and women and girls should not be racist or sexist.

School psychologists increasingly utilize curriculum-based measurement to monitor intervention effectiveness and make decisions about eligibility for special education services. Curriculum-based measurement (CBM) refers to a specific set of brief, fluency-based measures of basic academic skills such as reading, math, writing, and spelling. Often, these measures have replaced the use of more traditional methods of assessment, such as standardized tests. Therefore, it is equally important for school psychologists to be aware of any potential bias within CBM, particularly if the results are being used to determine eligibility for and termination of special education and related
services. One study by Krantzler, Miller, and Jordan (1999) attempted to identify the presence of gender bias in CBM of reading with students across grades two through five. Their results indicated that CBM performance overestimated the reading comprehension of girls and underestimated that of boys at grade five, although differences between boys and girls on CBM reading were much greater at lower levels of performance than they were at higher levels. No evidence of bias was found at grades two, three, and four. According to the authors, their results may mean that, for girls at grade five, systematic overestimation of reading comprehension will result in the under-identification of children whose reading comprehension is in need of remediation, as defined by the CBM problem-solving model. Conversely, for boys at grade five, systematic underestimation will result in their over-identification in special education programs. Of course, this evidence does not mean that CBM should be rejected or only used with certain groups. The authors state that the systematic over- or under-identification can be eliminated by using different estimates of performance and different cutoff scores across groups for screening and for determining eligibility for and termination of special education and related services (Kranzler, Miller, & Jordan, 1999).

As professionals working directly with teachers, school psychologists are able to provide assistance and information regarding this issue during regular consultation with school personnel. They may use their training and skills to team with educators to ensure that every child learns in a safe, healthy, and supportive environment (NASP, 1998). Becoming knowledgeable about and providing opportunities for teachers to combat gender bias would assist school psychologists in accomplishing the goal of providing a positive and productive learning environment for all students. School psychologists may volunteer to observe in colleagues’ classrooms and tally exchanges between teachers and students, and provide a checklist for educators to use during self-reflection (see Perez, 2000). Teachers could also be provided with lists of books that reflect diversity for use in all types of lesson plans. See Derman-Sparks (1993) for an extensive list of books that address gender diversity, and criteria for evaluating classroom literature. Furthermore, content from this study would be useful for an in-service presentation to incoming or existing school personnel, particularly those who have not experienced training in gender equity as part of their teacher preparation programs.
Summary

Although educator training programs do not always address this issue, discussions of gender discrimination and bias in education have been on the horizon for the past thirty years. Beginning with the passage of Title IX, schools have been legally obligated to provide equal treatment of all students regardless of their gender. However, research has suggested that gender discrimination is still thriving in today’s classrooms (Sadker & Sadker, 1994; AAUW, 1991). Although most teachers strive to maintain fairness in their classrooms, most biased interactions are subtle, unintentional, and unnoticed by both teachers and students. However, it is these interactions, often referred to as the “hidden curriculum”, which can impact the self-esteem and actual achievement of male and female students. These interactions often take the form of different types of feedback for male and female students, variations in the quality of attention, different discipline techniques, biased curriculum offerings, and unequal expectations in language arts and mathematics for male and female students. Although the effects of gender bias are often observed during the vulnerable stage of early adolescence, it has been shown that differences can be observed in early childhood as well.

This study examined early childhood teachers’ attitudes toward gender equity in their classrooms and in education in general. The sample included sixteen kindergarten through third grade teachers in three elementary schools in southwest Ohio. The measurement instrument was a self-developed survey that investigated the perceptions of interests of boys and girls, differences in student needs according to gender, curriculum issues, and teachers’ perceptions of the importance of gender equity in their practices. The data were analyzed by determining common trends in the educators’ responses, including differences among the different grades taught, years of experience of the teacher, and previous training in gender equity.

The results of this study both confirmed and contradicted previous research findings. Girls continue to be perceived as choosing “pretend play” activities, while boys seem to prefer more physical play. However, this sample indicated that the differences are less dramatic than in the past. The majority of the teachers in this study also responded that they generally see no differences among the gender of lead characters in
their curriculum materials. Although the majority reported that they see no differences among the students who seem to excel in the subjects of reading versus mathematics, the remainder of respondents reinforced the belief that males excel more in math and science, while females excel more in language arts. Also, although the majority of respondents believe gender equity is an important issue in their field, the majority also do not consciously consider gender equity when selecting classroom materials. Training in gender issues remains a relatively rare occurrence, although some younger teachers did report discussions on this topic in some college courses.

Educators may take action to prevent the effects of gender bias by becoming more aware of the issue, objectively documenting and reflecting on their interactions with male and female students, and evaluating their curriculum materials. School psychologists may help educate teachers on this issue and provide direct assistance to remediate discriminatory practices through consultation. Also, school psychologists must educate themselves about the effects gender bias may have on the methods and instruments they use in assessment. Hopefully, together, school personnel may take steps to decrease or eliminate gender bias in schools, thereby creating a more positive learning environment for all students.
References


Middle School Journal, 15, 39-42.


Dear teachers,

My name is Lori Slater and I am a graduate student in the Department of Educational Psychology at Miami University. As part of the requirements for my Education Specialist degree, I am examining the issue of gender equity in education. I am asking kindergarten through third grade teachers to provide information about this topic because it is my belief that early elementary school is the best place to begin gathering information about children’s needs.

Enclosed you will find a survey that asks questions about gender differences in your classroom and in education in general. Your participation in this survey is completely voluntary and your responses will be anonymous. You may refuse to answer specific questions and you can discontinue participation at any time. Your return of the survey will indicate your consent to participate.

It is my hope that we will learn useful information on gender issues through your contributions to this survey. Upon completion, I will send a report to the principal of your school. If you would like a copy sent to you personally, please contact me after June 1, 2003. You can have the report sent even if you choose not to participate. If you have any questions concerning this study, please contact Lori Slater or Dr. Susan Mosley-Howard, faculty advisor, at: The Department of Educational Psychology, Miami University, Oxford, Ohio, 45056 (513-664-7298, slaterlm@muohio.edu). If you have any questions about your rights as a participant, you may contact the Office for the Advancement of Scholarship and Teaching at (513) 529-3734 for more information.

If you choose to participate, please send your completed survey in the provided envelope by March 7, 2003. Thank you for your time!

Sincerely,

Lori M. Slater, M.S.  Susan Mosley-Howard, Ph.D.
Graduate Student  Faculty Advisor
Dept. of Educational Psychology  Dept. of Educational Psychology
Please respond to the following questions on gender issues in education. Be as thorough as possible in your answers. Please return the forms in the enclosed envelope by March 7. All responses will remain anonymous.

In questions 1-3, please reflect on your own experiences as a student in the grade you currently teach. If you teach first grade, think about your experiences as a first grader, etc.:

1. Recalling your own school experiences, which of these activities were common interests of girls in school? Check all that apply.
   - ___ pretend play activities
   - ___ rough-and-tumble physical play
   - ___ cooperative play activities
   - ___ hands-on exploration (manipulating/taking apart objects)
   - ___ other (please explain) _______________________________
   - ___ other (please explain) _______________________________

Which of these activities were common interests of boys in school? Check all that apply.
   - ___ pretend play activities
   - ___ rough-and-tumble physical play
   - ___ cooperative play activities
   - ___ hands-on exploration (manipulating/taking apart objects)
   - ___ other (please explain) _______________________________
   - ___ other (please explain) _______________________________

2. How did your teacher discipline girls? Check all that apply.
   - ___ name/check marks on the board or discipline sheet
   - ___ verbal redirection or warning in front of the class
   - ___ visit to principal’s office
   - ___ private conference with the student
   - ___ time out or removal of an activity
   - ___ extra work/writing sentences
   - ___ other _______________________________

How did your teacher discipline boys? Check all that apply.
   - ___ name/check marks on the board or discipline sheet
   - ___ verbal redirection or warning in front of the class
   - ___ visit to principal’s office
   - ___ private conference with the student
   - ___ time out or removal of an activity
   - ___ extra work/writing sentences
   - ___ other _______________________________
3. As a student, was there ever a time that you wished you were another gender? If so, at approximately what age? Please describe.

For the remainder of the questions, please reflect on your experiences as a teacher. Think of your typical classrooms for the past 2-3 years:

4. In your classroom today, which of these activities are common interests of girls? Check all that apply.
   ___ pretend play activities
   ___ rough-and-tumble physical play
   ___ cooperative play activities
   ___ hands-on exploration (manipulating/taking apart objects)
   ___ other (please explain) _______________________________
   ___ other (please explain) _______________________________

Which of these activities are common interests of boys in school today? Check all that apply.
   ___ pretend play activities
   ___ rough-and-tumble physical play
   ___ cooperative play activities
   ___ hands-on exploration (manipulating/taking apart objects)
   ___ other (please explain) _______________________________
   ___ other (please explain) _______________________________

5. Consider this scenario: On the playground (or playing field) a group of boys are going to play a ball game. Several girls want to play, but are told by the boys that they cannot. What do you do?

Do you think it is helpful for girls and boys to occasionally have separate play activities?
For questions 6-12, place an X at the appropriate point on the line.

6. In general, who do you think consumes more instructional attention in your classroom (i.e., who needs more assistance with academic tasks)?

   Boys       No Difference       Girls
   ____________________________________________

7. The students who require more discipline in your typical classroom are:

   Boys       No Difference       Girls
   ____________________________________________

8. In general, who do you think talks more, or in general dominates the class?

   Boys       No Difference       Girls
   ____________________________________________

9. During group activities, who are the leaders in your classroom?

   Boys       No Difference       Girls
   ____________________________________________

10. In your curriculum materials, who is generally shown in the lead roles?

    Boys       No Difference       Girls
    ____________________________________________

11. In your classroom, the students who seem to excel in the subjects of math and science are:

    Boys       No Difference       Girls
    ____________________________________________

12. In your classroom, the students who seem to excel in the subjects of reading and language arts are:

    Boys       No Difference       Girls
    ____________________________________________
13. Do you think that some teaching methods or learning activities might be more effective for females? If so, which ones?

Do you think that some teaching methods or learning activities might be more effective for males? If so, which ones?

14. Do you ever seat or group your students according to boys or girls? If so, please explain.

15. When selecting classroom materials, do you consider gender equity? If so, how? If you’d like, please share an example.

16. In your own teacher preparation, did you have any education in gender equity? If so, what did this involve?

17. Do you think gender equity in classrooms is important? If so, why? If not, why not?
18. Please add any additional comments or concerns you have on the topic of gender equity:

Please provide the following information:

Grade you currently teach: ______________________ Your sex: _______
Your age: ___________ Your race: ___________________
Year you first began teaching: ____________________________________
Total number of years you have taught in a classroom: _________________