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SEXISM IN ELEMENTARY PHYSICAL EDUCATION LITERATURE: A
CONTENT ANALYSIS

The University of North Carolina at Greensboro

ED.D.

1979

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SEXISM IN ELEMENTARY PHYSICAL EDUCATION

LITERATURE: A CONTENT ANALYSIS

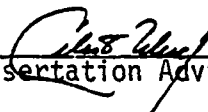
by

Kathleen Hildreth

A dissertation submitted to
the faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
1979

Approved by


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APPROVAL PAGE

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October 2, 1979
Date of Acceptance by Committee

October 2, 1979
Date of Final Oral Examination

HILDRETH, KATHLEEN. Sexism in Elementary Physical Education Literature:
A Content Analysis. (1979) Directed by: Dr. Celeste Ulrich.
Pp. 110.

The purpose of this study was to analyze the current elementary physical education literature and determine whether sexist content was present, and if so whether the sex of the authors had any relationship to the degree or presence of sexist content.

After a pilot study was done to evaluate the selected categories, the investigator examined the written content and pictures of twenty-three elementary physical education textbooks. Materials published after 1972, the date of the Title IX passage which barred sex discrimination in the schools, were selected to study.

Chi Square statistical analysis as well as percentage comparisons yielded the following results: (1) the sex of the authors did appear to be an influence in the content especially in the categories of teacher pictures and children pictures; and (2) the written content was found to be sexist at a statistically significant level with the exception of pronoun usage. It was concluded that today's elementary physical education literature contains many sexist elements within its content, both in written content and illustrations.

ACKNOWLEDGMENT

The writer wishes to express her appreciation to two women who have continued to give support. . . and to care. . . .

her mother
and
Celeste Ulrich

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CHAPTER ONE

INTRODUCTION

Currently the issue of sexism in society is embroiled in emotional controversy. Just as racism moved to the boiling point in the sixties, sexism in the seventies is seething in the human caldron. The effects of reform legislation directed toward equality of opportunity and individual consciousness raising are being experienced by both men and women.

Although all societal institutions have been criticized for engaging in sexist practices, much of the blame for sex stereotyping has been placed on the educational system. From the elementary level through the highest echelons of graduate programs, education has been berated for not only breeding the development of sexist attitudes but for the perpetuation of sexism in practice.

Feminist groups have worked diligently to alter some of the educational practices which they believe result in differential education for male and female students. One of the areas for correction is focused on the educational materials used in teaching and learning, specifically the reading books and textbooks used daily in the schools. Numerous investigations analyzing the materials read by elementary children have concluded that indeed an advantaged image of males as related to female image is being presented.

Sex stereotyping is not only found in educational literature but also pervades many written publications, due in great part to the language itself and its structural biases. Sutton (1973) pointed out:

Bias in language has achieved a strange and undesirable feat. A majority of the population, women, are seldom referred to properly in terms of their rights as individuals, when they are referred to at all. (p. 12)

Despite the fact that there has been much attention paid to the media used by children, only recently has there begun to be a critical examination of the prospective teacher's materials for elements of sexism. The importance of literature read by future elementary teachers would appear to be a crucial variable in the elimination of sexism in the schools. Since sex stereotypes begin their formation early in a child's life (Howe, 1971) elementary teachers perhaps bear the greatest responsibility for the eradication of sexism. As the Educational Products Information Exchange Report (1973) stated:

The issue of sex stereotyping in instructional materials must be of prime concern to all educators--though for most obvious reasons, elementary educators are in a position to make a more lasting impression on the minds of human beings whose self-image is not yet stereotyped. (p. 2)

Although there have been research studies on sexism in some areas of higher education literature, there has been little attention given to the materials used in physical education professional preparation programs. The elementary physical education literature was selected to be analyzed for this study because of the perceived inconsistency in education's attempt at "uni-sexing" the children for teaching and yet continuing to expose teachers to the same traditional teacher preparation literature. The efforts for the elimination of sexism in the schools would be served best by locating the spots where sexism exists and by eliminating those spots. This research attempts to look at a specific aspect of physical education and to analyze through close examination whether the prospective teacher is being conditioned to be sexist through teacher education textbooks.

Statement of the Problem

The problem was to determine, through content analysis, whether the authors of current elementary physical education literature are sexist in their presentation. The researcher attempted to test the following hypotheses:

1. No sexism will be found in a selected sample of current elementary physical education literature.
2. The sex of the authors will not influence the amount of sexist content presented in the textbooks.

Definition of Terms

Content Analysis: "research technique for the objective, systematic and quantitative description of the manifest content of communication" (Berelson, 1952, p. 18)

Elementary Physical Education Literature: literature in the area of movement, dance, gymnastics and methods which was published from 1973 through 1978. Literature dealing with adapted physical education and primarily with research or motor development of children was omitted.

Sexist Content: illustrations or words which either omit females or reinforce females' expected cultural sex-role stereotypes. For this study a category that does not evenly distribute reference to males and females will be considered to be sexist.

Sexism:

all those attitudes and actions which relegate women to a secondary and inferior status in society. Textbooks are sexist if they omit the actions and achievements of women, if they demean women by using patronizing language, or if they show women only in stereotyped roles with less than the full range of human interests, traits and capabilities. (Scott, Foresman Guidelines, 1974, p. 1)

Sex Stereotype: "assignment of psychological characteristics and behavioral patterns socially defined as appropriate for one sex or the other" (Vander Zanden, 1972, p. 23)

Assumptions

The following assumptions were made in this study:

1. The categories selected were valid indices of sexism.
2. Content analysis was an appropriate research instrument for this type of study.
3. Sexism in the printed word and picture was a manifest reflection of sexism in society.

Assumptions of content analysis were also considered:

1. Content analysis assumes that inferences about relationship between intent and content or between content and effect can validly be made, or the actual relationships established.
2. Content analysis assumes that the study of the manifest content is meaningful. . . . In other words, the assumption is that there is a common universe of discourse among the relevant parties, so that the manifest content can be taken as a valid unit of study.
3. Content analysis assumes that the quantitative description of communication content is meaningful. This assumption implies that the frequency of occurrence of various characteristics of the content is in itself an important factor in the communication process under specific conditions. (Berelson, 1952, p. 18)

Limitations

The study was subject to the following limitations:

1. The books selected for the sample were limited to those in elementary physical education which were published since 1973.
2. Since there was just one coder involved in the study and since there was a degree of tediousness involved, the chance for human error presented a limitation.

3. In the effort to devise categories that were reliable and objective, some degree of validity may have been sacrificed.
4. Since the English language involves the potential for ambiguity and since there was just one coder involved, there was a chance that her interpretation of some statements may have been biased and thus provided a limitation.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

Sexism in Language

One of the critical concerns of feminists and of all people who are attempting to eliminate sexist influences from society and its institutions is the English language itself. The struggle to alter a language system is not an easy undertaking as Sapir has written:

Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language, and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the "real world" is to a large extent unconsciously built up on the language habits of the group. . . . We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation (Spier, 1941, p. 75)

Because the correct use of the English language involves masculine words to the nearly total exclusion of female-related words, women have been lost somewhere between the pages of almost all available written materials. Jespersen (1923) in his book, The Growth and Structure of the English Language, stated:

English is the most positively and expressly masculine of all the languages I know. It is the language of a grown-up man, with very little childish or feminine about it. (p. 1)

There are three specific areas within our language which have served as exclusionary for women: (1) pronominal use of the masculine, (2) use of generic man and derivatives to represent all people, and (3) use of sex-linked language.

English grammar rules have required the use of the masculine pronoun when the antecedent was singular and the sex was unknown. This practice in our writing and in the materials that we read has served effectively to render the female of the species as invisible. As Sutton (1973) pointed out:

The irrational and undesirable idea that male terms stand for the whole population is harmful, and the practice should be eliminated.
(p. 3)

Graham (1973) found that the overall ratio in schoolbooks of he and him to she and her was almost four to one. Even in home economics materials (materials traditionally associated with the female's assumed role), he predominated by nearly two to one.

Alternative suggestions have narrowed to four options. Many recommendations (Graham, 1973; Lakoff, 1973; Burr, Dunn, & Farquhar 1974; Tiedt, 1973; American Psychological Association, 1976) involved the use of a feminine balancer with the masculine pronoun. This usage is seen more often in the literature in recent years as he/she, her or his, and so forth.

Others prefer the avoidance of a single, hypothetical individual representing a whole group or class and suggest the substitution of the plural form (Graham, 1973; American Psychological Association, 1976). The other optional choices include the initiation of a neuter neologism such as ter, tey, tem, to represent both sexes in the singular form (American Psychological Association, 1976). Still others suggest that more time be spent on one's writing in order to eliminate the pronoun use at all.

As would be expected, there is much resistance to change in the language. Sutton (1973) explained why the intellectuals and educated are leading the resistance:

It is, of course, embarrassing, particularly to trained and intelligent people, to have sexual fairness in language pointed out to them. They feel, rightly, a conscious or unconscious sense of betrayal by the conventions they have been encouraged to follow and which they had never stopped to question. The reaction is often defensive. (p. 10)

Interestingly, even one feminist linguist held some reservations about the fight for pronominal neutralization. Lakoff's (1973) reserve was based on the belief that the pronoun use is less important in terms of needed change than some of the other areas of sexist language and that the other areas may prove more fruitful with regard to success.

Other critics argued that awkwardness results when attempts to alter the language occur. Authors and publishers used this defense often when requested to change. In an editorial nudge from a recent Personnel and Guidance Journal (1974), this defense was chided:

We believe that an occasional awkwardness of expression is preferable to the second-class status that is accorded women by the use of the generic masculine pronoun. (p. 448)

Indeed, Lacy (1975) disputed that awkwardness need even be a result of non-sexist writing:

The avoidance of sexist bias does not require tampering with hallowed terms or using stilted or artificial forms. A decent sense of English Style wed to genuine regard for the dignity and equality of both sexes will produce good writing without either sexist bias or artificial distortions. (p. 57)

A second area of emphasis in "de-sexing" the language is the use of the words, man and mankind, in a generic sense. This usage to represent everyone has been challenged thoroughly. As Burr, Dunn, and Farquhar (1972) explained, it is of little use after the fact to explain to a child

that men "really means" both men and women. "Even an adult is unlikely to picture a group of amicable females when reading about men of good will" (p. 6).

Schneider and Hacker's (1973) now classic study vividly pointed out the fact that for most students the term man is not generically interpreted. It is rather very literally interpreted. Bem and Bem (1974), McLure (1973), Howe (1973b) and Simpson (1978) supported this contention, and lamented that females are caught in a "double-standard". Females are not referred to in written print and yet they know that they are not male.

It appears that it has been difficult for the female children to relate personally to what they have been reading. Milton (1959), in fact, found that elementary girls did perform better on mathematics problems when the content was altered to have females as the subjects of the story problems. Christoplos and Borden (1978) also studied the effect of changing the story problem content and whether this might affect female and male achievement in mathematics. Since elementary girls traditionally have not done as well in math, it was interesting to find that girls did better on female-oriented questions while the boys did less well on the female-oriented questions. This finding generated further speculation that males may find it more difficult to think in terms of female since they have been consistently protected from having to make this mental shift. Also the possibility was shown that "attention", which inevitably affects achievement, is commanded more effectively by material oriented to the same sex. Some suggestions for alternative terminology include one, humanity, persons, citizens, human beings, inhabitants, people, women and men. (Burr, Dunn, and Farquhar, 1972; Graham, 1973; American Psychological Association, 1976).

The number of sex-linked words one encounters in the English language is extensive, and even though the elimination of these words has not been stressed as heavily in feminist writings, it is a serious issue. Both Edelsky (1976) and Lakoff (1975) reported that within our language system, society communicates in a sex-differentiated way when it describes females and with regard to the language it considers as female.

Lakoff (1973), although admitting the possibility of being a victim of her own linguistic socialization, continued to question:

I feel that the emphasis upon this point, to the exclusion of most other linguistic points, by writers within the women's movement, is misguided. While this lexical and grammatical neutralization is related to the fact that men have been the writers and the doers, I don't think it by itself specifies a particular and demeaning role for women as the special uses of mistress and professional, to give a few examples, do. (p. 44-45)

If Lakoff were to read some of the elementary materials however, she might be sensitized to change her stance. Howe (1973a) related the following discouraging situation:

An elementary school teacher does NOT respond as her third-grade class laughs when their reader quotes boys answering a curious girl named "Smart Annabelle." "We are willing to share our knowledge with mankind," the boys say to Annabelle, "but you are a girl." If a third-grade reader can use the chauvinism of the English language to put down a girl, we may expect women teachers to discuss the English language as a carrier of male bias (p. 101).

When Schneider and Hacker (1974) did their study on the word man, they communicated their concerns to various publishing companies. Some of the responses demonstrated that there were varying degrees of sensitivity and seriousness:

Man is a short word. . . . It is used primarily because of its shortness. . . . It is convenient because of its brevity. . . . Efficient. . . . Imagined dramatic impact. . . . Has a meretricious suggestion of dignity about it for many people. . . . God and man sounds grander than God and People. . . . Did you know that man

embraces woman. . . . Distinctions between male and female, for instance, are necessary for clarity of expression. . . . I do not believe a change in the use of language will cause significant improvement in attitudes. . . . Change will have to be achieved within the academic community itself, not imposed by commercial publishing houses.

Sexism in Textbooks

As one of the primary educational materials used in today's schools, textbooks have received a great deal of attention by those working to eliminate sexual bias. A report from the Pennsylvania State Commission analyzing sexism within its state public school system stated the four major textbook problems as under-representation of women, representation in limited stereotyped roles, reinforcement of culturally-conditioned sexist characteristics, and a meager appreciation of women's contributions to history, literature, science and other areas of American life. Macloed and Silverman (1973) after a study of social studies textbooks reinforced this female "invisibility":

One of the ways in which a textbook conveys a message to its reader is by what it omits. When something is left out--a topic, a fact, an individual, a group--the implication is that it doesn't warrant inclusion in the book's subject matter (p. 8).

Various researchers have looked at textbooks and at sex stereotyping. The books that the children themselves read have undergone the most extensive analyses, with promising results in terms of new alternatives and increasing publishing company sensitivity. However, since this study does not concern itself directly with the literature read by children but rather with the college-level textbooks that teachers-to-be read, this literature review will not document the studies within children's literature.

Publishing companies have undergone attack for their failure to improve the sexist writing of their contributing authors. Most publishing

houses now have printed nonsexist guidelines for their potential authors to utilize in manuscript preparation and for use as a public policy statement. Among several of the publishing houses' statements were the following:

Women and men should be treated with the same respect, dignity, and seriousness. Neither should be trivialized or stereotyped, either in text or in illustrations. Women should not be described by physical attributes or professional position. Instead both sexes should be dealt with in the same terms. References to man's or woman's appearance, charm, or intuition should be avoided when irrelevant. (McGraw-Hill Book Company, Inc., 1974)

Because educational materials influence the development of attitudes students carry into adult life, Holt, Rinehart and Winston consider it important that the values and societal roles suggested in instructional materials be positive ones, and that they be as free as possible from bias, stereotypes, and career-role restriction. . . . Children absorb more subliminally than authors and editors may realize. It is therefore necessary that we develop sensitivity to bias in educational materials. Both to correct the inequities that exist today, and to prepare children for the world they will enter when they finish their education. (Holt, Rinehart, and Winston, 1975)

Modern textbooks rarely offend groups of people by direct statements. More often, the social judgment is implied, making it all the more damaging for its subtlety. . . as the guidelines assert, in their treatment of the sexes, one of the most insidious ways in which the thoughtlessly prepared educational materials can do their damage is by implying what is and what is not "permissible" behavior. It is the policy of Macmillan Publishing Company to publish educational materials that give children an unbiased view of the full range of human potential. (Macmillan, 1975)

These publishers are some of the primary producers of public school textbooks, and although one might assume that the above statements demonstrating the publisher's willingness to change would prove successful, there is evidence to be skeptical about actual progress. Britton and Lumpkin (1977) studied forty-eight public school textbook series from 1958 through 1976. Only minimal changes were discerned: major female roles increased to sixteen percent from fourteen percent and major ethnic-minority female roles changed from two percent to four percent. Britton

and Lumpkin (1977) warn that merely putting forth guidelines does not necessarily remove the problem: "Publishers seem more inclined to publish the guidelines than take measurable, objective actions to enforce them" (p. 45).

Trecker (1975) after much research on sexist textbooks, stated:

Frankly I don't expect this to happen without a struggle. I don't expect that public school systems will take the initiative here. There is too much at stake in a society as patriarchal as this one. And schools, after all, tend to follow society, not lead it.
(p. 94)

Professional groups and organizations have also attempted to de-sex their publications. The American Council on Education's (1974) statement on "Sex Bias in Language for Educational Publications" urged the adoption of individual editorial policies by educational groups:

Professional journals of education could enhance significantly the self-image of women and girls by adopting editorial policies that explicitly acknowledge the influence of language on self-identity and by correcting their own practice of using language that reflects sex bias(p. 2).

As a consequence of this urging and because most professional groups are being sensitized by their female members as well as by society at large, many professional publications have issued guideline statements to their contributors. The staid National Council of Teachers of English (1976) demonstrated its strong support:

Every teacher knows that what we read, both on the printed line and between the lines, affects what and how we think. It is especially important then that all publications--periodicals, newsletters, booklists, announcements, programs--treat women fairly. We are not asking publications to become propaganda organs for women's rights; we are only asking them not to be, consciously or unconsciously, advocates for current negative conditions and attitudes(p. 1).

In the physical education profession, Gallahue (1975) mandated a change for potential contributors:

Attitudes are articulated and given meaning through language. Authors writing for this publication are therefore strongly encouraged to use language that does not rely on the masculine gender to describe both sexes and which minimizes sex stereotyping in role identification. Some may scoff at this editorial and dismiss it as just so much "hog wash". If one accepts however the probable connection between attitudes and language patterns, and if one wishes to effect change in society's attitudes toward women, it seems only logical to use language that accords women their due status. . . (p. 2).

A most critical group in terms of female career aspirations, the American Academy of Arts and Science, has recommended careful scrutiny by all its writers:

The use of non-sexist language is particularly important in publications on science and scientific careers. The scientist is often referred to as "he" or "him", but almost never as "she" or "her". AAAS communications are read by a wide variety of people, young and old, who could benefit from reading scientific literature which either eliminates references to sex or makes it clear that both sexes are included in general statements about science and scientific careers. (p. 2)

If teachers and administrators recognize the sexism of textbooks, one is led to query why these biased books are selected. Komoski (1974) answered this by responding that "schools use inadequate materials because they must use something" (p. 335). He asserted further that textbooks are being inadequately developed and that field-testing and verification processes are being ignored by most commercial publishers for the sake of continuous production. In a recent article on how to select a good textbook, Schneider (1977) offered several criteria. Whether the books might promote sexism was not mentioned at all. Perhaps it has been "given" that all textbooks are sexist.

Of course, as with most radical ideas, there has been criticism. Kingston and Lovelace(1977-78) cited one negative reaction to the feminist attack on sexist literature. Gersoni-Stavn(1974), herself an author, objected that feminist criticism rests on the assumption that society

is sexist, that books maintain sexist values, that such books are propaganda, which must be countered by "sensitive, concerned and able critics." She continued that feminist critics must not quote out of context, must not sacrifice aesthetic standards in books, must not theorize abstractly to delay constructive changes in books, must not read too much significance into animal fantasies, must not disparage individual authors, and must not advocate total elimination of housewives, mothers, and "dainty, little girls" (p. 153). Interestingly Gersoni-Stavn admitted to the tremendous amount of sexism found in today's literature: "If one seriously wanted to remove all sexist books from libraries, most of the shelves would be depleted." (p. 153).

College level textbooks, which are the focus of this research, have been reviewed in several academic areas, although this is still an area needing more research. The results have been fairly consistent; a sexual bias exists in the textbooks.

Ehrlich (1971) analyzed six "marriage and the family" textbooks used by colleges and universities, and she concluded that these books are primarily collections of folklore and social stereotyping rather than fact. She stated that her findings supported a quotation found in one of her sample texts: "Whichever way the society goes, there will be scientific justification for the trend somewhere in the sciences of human behavior." (Udry, p. 53).

Two general business textbooks were reviewed by McLean, Klever, and McLean (1978). They found significant bias against women and further discovered very little improvement in the content from 1971 to 1976. Scully and Bart(1973) reviewed twenty-seven gynecology books published from 1943 to 1972. These were the books being used to prepare the medical

profession, and it was found that they were written from a male perspective, including some information which could not be substantiated by fact.

Gray (1977) analyzed ten recently-published college psychology textbooks, and the results indicated a definitely biased image of psychology was being presented. Several problem areas included citing female authors less frequently than their number and eminence would suggest, using language and illustrations of males, and attempting to generalize research to the whole population when only male subjects were used. Previously the American Psychological Association Task Force on Issues of Sexual Bias in Graduate Education (1976) had looked at thirteen widely-used graduate level psychology texts. This group found sexism in the form of omission rather than misrepresentation and bias. Women were less frequent contributors and women were absent as research subjects. The most serious concern however was the use of masculine language to represent females and males. Soon after this study the APA published its nonsexist guidelines (1976).

History textbooks have been the target of several investigators. Gregg (1972) looked at the content of seven college history textbooks and reported important women's history missing from some or all of the books. She expressed the concern that negative self-concepts provided females in grade school texts are reinforced throughout the college years in college texts. Trecker (1971b) reviewed secondary history textbooks. She discovered women shown only as eccentrics, with regard to fashion or "woman on pedestal" concepts. The most significant historical events involving women were omitted. Arlow and Froschl (1975) analyzed United States history books and reported similar findings. Thum (1975) studied current

educational history books in terms of their treatment of women. Her results pointed out that there was tremendous bias and that there was little change from pre-World War II publications to the current textbooks. Basically, the history textbooks demonstrated what Rosen (1971) decried:

Sexism in historical writing is much like sexism in daily life. For the most part, women are made invisible. When discussed at all, women are treated with the same set of narrowly defined attitudes that oppress women throughout their lives. (p. 541)

A content analysis of sociology texts published from 1966 to 1971 looked at only three criteria. Results showed that fifty percent had no index reference to women, that eighty percent did not mention the wage differential between men and women, and that fifty percent referred to the American family as egalitarian.

Foreign language textbooks were the focus of research by Stern (1976). Twenty-five books from the elementary through college level were analyzed. Even the college texts which were considered non-sexist by the publisher and even those books written by women were seen to perpetuate the traditional sex-role stereotype.

Arlow and Froschl (1975) and Wilk (1973) reviewed literature books. Wilk's fifteen literature anthologies included 450 stories. The paucity of normal females were not depicted as emotionally independent or self-sufficient with Arlow and Froschl's findings supporting this conclusion.

Sexism in the Schools

As one of the primary socializing agents in our society, the schools have been a frequent target of feminists. Whether public schools have a responsibility to initiate cultural change as feminists would advocate or whether schools are a trusted agent to sustain the status quo is a

controversial question. It is a chicken-or-egg debate which can continue forever, but it does not relieve society of the current sexist educational environment which is disadvantaging female children. Sadker and Sadker (1972) called this influence the "hidden curriculum" and this is supported by Levy (1972) when she wrote: "School children do not need to be taught the differential status of men and women--they learn it simply by attending school" (p. 27).

Research has shown that there is a strong positive relationship between how favorably children believed their teachers viewed them and how favorably the children viewed themselves (Sears & Feldman, 1966; Davidson & Lang, 1960). Thus the effect of teacher behavior can have great impact with regard to sexism elimination.

Indeed teachers and their increased sensitivity are seen by most concerned writers to be the pivotal influence in combatting sexism (Bernstein, 1972; Burton, 1974; Levy, 1972; Farquhar, Dunn and Burr, 1972; Tibbetts, 1976; Jacobs & Eaton, 1972; Pennsylvania Report on Sexism in Education, 1972). As products of their own stereotyped educational preparation, teachers on the whole have not sensitized themselves to how they affect students in sex-differentiated ways. Tibbetts (1976) summarized:

Teachers, themselves products of a sexist culture, bring with them biases about what boys and girls should be and consciously or unconsciously, pass these on to their students. (p. 28).

Consistently the research has reinforced the notion that teacher behavior is a major determination in the consequent student behavior. Motta and Vane (1976) studied primary children and evaluated teachers' perceptions. Their results indicated that teachers perceived girls as more dependent, as more creative, as more achievement-oriented, and as less aggressive than boys even when in fact they were not.

Levitin and Chananie (1972) discovered that teachers liked dependent girls better than boys, which was supported by several other researchers who claim that elementary schools "feminize" young boys. Sexton (1967), Tibbetts (1976), Davis (1967) and Serbin and associates (1973) also observed teacher-children interaction and claimed that teachers anticipated more problems with the boys and thus were more attentive to them. Findings by others (Meyer and Thompson, 1956; and Hummel-Rossi, 1976; Sadker, 1973; Biber, Miller and Dyer, (1971); Alpert affirmed this result. Baumrind (1972) decried the sex-differentiated expectations found in today's schools. Boys have the expectation of instrumental competence and independence while girls are helped to develop social responsibility and expressive competence.

Fagot (1975) believed that teacher experience was the important variable. Her research reported inexperienced teachers rating children's behavior in a sex-stereotyped way more often than experienced teachers, and that all teachers responded equally to boys and girls. Thus, the college-level preparation of teachers and college textbooks that these teachers-to-be utilize appear to be a legitimate area in which improvement is mandated.

What else do children experience in the school environment that creates sexist thinking? They observe males as principals or as teachers who will become principals and observe females as "just" teachers. In other words, children reinforce in their own thinking that men are the bosses of women and are superior. Fishel and Pottker (1973) and Pallante and Hilton (1977) both reported the discouraging statistics on the status of women in public school administration. Less than fifteen

percent of the nation's public school administrators are female despite the fact that women across the nation hold forty percent of the master's degrees and twenty-two percent of all doctorates.

It seems to be a vicious circle since fewer women aspire to higher levels in education. Howe (1973a) attributed women's lowered aspiration level to an original lower career concept formulated during schooling, to a lack of encouragement for moving upward, and to lessened opportunities to advance. She charged that male teachers in elementary school do not have to prove themselves but are assured of the best classrooms and materials and are looked to first for administrative talent. The female role model in a "head" position is not present in the majority of public schools today.

If one is led to suspect that the above male dominant-female dependent relationship does not "take" on female children, Tanner's (1977) study suggests otherwise. When fifth-grade girls and boys were asked to rate stories written by male and female authors, the girls gave absolutely no negative responses to those written by a male author and seventy-five percent of their responses were positive, higher than any of the other three groups. One is reminded of the original Goldberg study of women's prejudice against women with this finding, although it is not so much women's prejudice against women but rather in favor of men.

How do the elementary children begin to think of themselves? Do they feel trapped into a stereotyped role in order to please the teacher and get ahead in the "system" of school? Brown's (1957) IT Scale for Children was developed to measure masculinity-femininity characteristics. Although the differences with the kindergarten children were slight, there was significant change in the female children by the fifth-grade level, moving from a

masculine orientation (instrumental) toward the feminine end of the scale. When Hartup and Zook (1960) repeated Brown's study with three and four year olds, they found that boys strongly preferred the stereotyped male role and girls preferred the female role.

Iglitzin (1972) reported that sixty-six percent of her sample of fifth-grade girls saw themselves as kinder, better behaved, more serious, better in math, and thought they "figured things out" better than boys. These same girls saw boys as better in science and as fighting more than they would.

Much of Hartley's writing (1959 and 1960) has looked at the pressures placed on children, especially male children, to meet a stereotyped image. Her concern was that this simplistic view of maleness has little regard for emotion and feelings, which are also very important.

Obviously the problems of perpetuating sex-role stereotypes in elementary schools often are magnified in physical education classes, after-school activities, and athletic programs. At a time of fast-moving cultural and legal (Title IX) changes, the physical education professionals and materials have not kept pace. Gander (1974) in reporting about the Wisconsin public school situation, found that most systems still separate by sex from the fourth through the sixth grades, that some activities are only offered to the boys, and that one guide even included the following gross stereotype:

. . . at one time or other in his development almost every boy becomes absorbed with football. The boys love the game and want to advance right away to "tackle" football. (p. 19)

After a thorough review, her conclusion about the general state of affairs was that:

It is easy for young girls to see that our culture still believes that athletic development is more important for boys and that we prize such development in boys more highly. (p. 26)

Both the Ann Arbor "Let Them Aspire" project (1971) and the report from the Pennsylvania Commission (1972) stressed the coed nature and equal offerings which physical education and athletics should be providing in the public schools. One group (Citizens' Advisory Council on the Status of Women, 1972) placed blame at a primary place: "Principals and teachers sometimes discourage an interest in participation in sports by girls" (p. 3).

Farquhar, Dunn and Burr (1972) also stressed the potential damage that irresponsible and insensitive teacher behavior can cause:

Teachers. . . should recognize that calling a girl a "tomboy" delivers the implicit message that a "normal" girl is not supposed to enjoy strenuous physical activity. They should come to understand that tomboy--along with ladylike, feminine, and masculine, and other similar words--teaches children that traits considered admirable in one sex may be regarded as intolerable in the other sex. (p. 8)

A further illustration of teacher's insensitivity is cited by Ulrich (1973), "Let's have three strong boys to move this equipment" (p. 113).

Again it can be another chicken-or-egg controversy about whether limiting offerings by sex creates the attitudes or whether children prefer sex-stereotyped activities. Thomas (1964) questioned 175 fifth-graders about their least favorite physical education activity and found the results in line with expectation. Eighty-two percent of the girls disliked running activities while seventy-six percent of the boys hated rhythmic activities.

Montemayer (1974) labeled certain games as male, female and neutral. When children rated the attractiveness of the games, the sex-appropriate and neutral games received high ratings and the inappropriate labels suffered low acceptance. No doubt the attractiveness rating was affected by the fact that the children performed best in the games labeled "sex-appropriate".

Orloske (1960) also researched boys and girls from grades one through six in terms of physical activities and games preference. The findings indicated that the boys preferred football and baseball while the girls selected social dancing, jump rope and original games as their most popular activities.

When one considers the amount of sexist influence encountered by children coming through today's public school system, it is indeed amazing that only a few stereotypical individuals emerge. The combination of sexist language found in sexist textbooks used by insensitive, sexist teachers who operate within the sex-biased world of education would serve to stifle most including females. It does, however, effect tremendous damage for many young females experiencing school. Pogrebin (1973) summarized:

It is also to be remembered that while single examples of sexism can appear relatively insignificant by themselves, herein lies their perniciousness. It is the cumulative exposure of negative stories, books, poems, and primers that wrecks damage in budding spirits. (p. 114)

Content Analysis

Kerlinger (1965) defined content analysis as a method of analysis but more than that, a method of observation. He stated, ". . . we are observing and measuring variables" in a systematic, objective, and quantitative manner for the purpose of measuring variables. Berelson (1952) emphasized that content analysis describes the manifest content of communication and can only describe what is manifest. As Stone et al. (1970) explained:

. . . content analysis does not study behavior itself; rather it focuses on artifacts produced by behavior; that is, recorded speech and writing. Much as the archaeologist infers the life of a culture from a pattern of remnants, so the content analyst infers the orientation and concerns of a speaker, subculture or culture from the record of what is said. (p. 114)

As stated by Holsti (1969) content analysis is appropriate for three classes of research problems: (1) when data accessibility is a problem and

the investigator's data are limited to documentary evidence; (2) when, given certain theoretical components of the data themselves, the subject's own language is crucial to the investigation; and (3) when there are technical advantages because the volume of material to be examined exceeds the investigator's ability to undertake the research by himself.

There are various ways to use content analysis as Holsti (1969) explained: to describe characteristics of communication, to describe trends in communication content, to relate characteristics of sources to messages they produce, to audit communication content against standards, to analyze techniques or persuasion, to analyze style, to relate known attributes of audience to messages produced for them, and to describe patterns of communication.

Leites and Pool (1942) reported the functions of content analysis in another manner. They listed the purposes as the following: (1) to confirm what is already believed and disconfirm what is thought invalid; (2) to correct the "optical illusions" of specialists; (3) to settle disagreements among specialists; (4) to formulate and test hypotheses.

Berelson (1952) provided six characteristics of content analysis which can serve as guidelines: (1) applies only to social science generalization; (2) applies primarily to the determination of effects of communication; (3) applies only to syntactic and semantic dimensions of language; (4) must be objective; (5) must be systematic; and (6) must be quantitative. These criteria must be considered as well as the assumptions of content analysis offered by Berelson (1952):

1. Content analysis assumes that inferences about relationships between intent and content or between content and effect can be validly made, or the actual relationships established.

2. Content analysis assumes that the study of the manifest content is meaningful. . . . In other words, the assumption is that there is a common universe of discourse among the relevant parties so that the manifest content can be taken as a valid unit of study.

3. Content analysis assumes that the quantitative descriptions of communication content is meaningful. This assumption implies that the frequency of occurrence of various characteristics of the content is in itself an important factor in the communication process under specific conditions. (p. 18)

To be sure, there are advantages and disadvantages in using content analysis as a research tool, as Stone et al. (1970) indicated. Some of the advantages are that it is static; can be copied and shared with other investigators; can be analyzed and re-analyzed until the researcher is satisfied; can be re-used later with another hypothesis; is readily available; and because it extends through history, it is an excellent means for studying long-term changes of attitudes, concerns, and styles. Content analysis, however, is far from a perfect research instrument. Shortcomings include the following: the fragments under investigation may be trivial and insignificant data about the situation they are supposed to represent, and the truly significant materials may never be available to the researcher. There seems to be a difference of opinion regarding how much a content analysis actually tells the researcher and what should be done about inferences. Berelson (1952) wrote:

. . . content analysis is ordinarily limited to manifest content of the communication and is not normally done directly in terms of the latent intentions which the content may express nor the latent responses which it may elicit. (p. 16)

He clarified further:

Strictly speaking, content analysis proceeds in terms of what-is-said and not in terms of why-the-content-is-like-that (e.g. 'motives') or how-the-people-react (e.g. 'appeals' or 'responses'). (p. 16)

Blake and Haroldson (1975), Carney (1972), and Holsti (1969) however all favor a change from solely involving "manifest content" to a method allowing more inference to be drawn by the researcher.

Stone et al.(1970) too believed however that making inferences is part-and-parcel of the researcher's task:

We feel that the researcher has an obligation both to himself (sic) and to his (sic) public to explicate clearly the inferences he (sic) is making. Many content analysts, often preoccupied with measurement, have felt that they should stay at the level of fact and let the reader draw the conclusions. (p. 110)

CHAPTER THREE

PROCEDURES

Introduction

The procedures will be discussed with regard to the following factors: (1) sampling, (2) category formulation, (3) pilot study, and (4) statistical analysis.

Sampling

Sellitz et al. (1959) stated that there are three stages involved in the sampling process for content analysis: (1) determining the types of sources to be used, (2) determining the period of time to be covered, and (3) determining the aspects of communication to be studied. The arbitrary decisions were made that the sample to be studied would be elementary physical education literature and that sexism in the literature would be the focus of the investigation.

With regard to the time-period decision, several alternatives were considered:

1. A study of a sample of early books in elementary physical education (e.g. 1900-1930) and a sample of current publications.
2. A study of various authors' first editions and their current editions.
3. A study of elementary physical education literature in use at selected professional preparation programs in the United States.

The final sample determination included all available elementary physical education literature published from 1973 through early 1978. This sample included books in movement, dance, and methods as well as publications of the American Alliance for Health, Physical Education and Recreation relevant to these areas. Literature dealing primarily with adapted physical education, research in elementary physical education, and motor development/motor learning was omitted from the sample.

The rationale for this time limitation was two-fold: 1. Since the passage of Title IX of the Educational Amendment Act occurred in 1972, the authors from 1973 to the present have had the opportunity to sensitize themselves and their writing to the elimination of printed and pictured sexism in their publications. 2. Because this sample represents the most current literature, the colleges and universities are more likely to be using these publications in their physical education professional preparation programs.

The formulation of the complete list of publications which would meet the criteria was compiled in the following ways:

1. The writer checked the latest bulletins sent by the major publishing houses.
2. The writer checked the card catalog at the University of North Carolina-Greensboro Jackson Library.
3. The writer met with Dr. Kate Barrett and Dr. Marie Riley of the University of North Carolina-Greensboro physical education faculty for additional suggestions.
4. The writer surveyed professional journals for publisher's advertisements on new books.

5. The writer solicited suggestions from additional elementary physical education specialists from throughout the country (see letter in Appendix A). These consultants were the following:

Dr. Lolas Halverson, University of Wisconsin

Dr. George Graham, University of Georgia

Dr. Mary Lampe, University of Minnesota and Chair of AAHPER
Elementary Physical Education Council

Dr. Betty Logsdon, Bowling Green University

Dr. Victor Dauer, Washington State University

Dr. Arthur Miller, Boston University

Dr. Glenn Kirchner, Simon Fraser University

Dr. Evelyn Schurr, SUNY-Brockport

Dr. Joy Greenlee, University of Wisconsin-LaCrosse

Mr. Glenn Norris, University of North Carolina-Greensboro

Ms. Karen Hogarth, University of New Hampshire

The list of books on the final list which was analyzed for this study is not an absolutely complete list of every textbook published within the stated time frame. However, it represents those books the researcher was able to obtain. The list of the sample is the following:

AAHPER, Children's Dance, 1973

Arnheim and Pestolesi, Developing Motor Behavior in Children: A Balanced Approach to Elementary Physical Education, 1973

Block, Me and I'm Great: Physical Education for Children Three Through Eight, 1977

Bryant and Oliver, Complete Physical Education Guide, 1975

Burton, The New Physical Education for Elementary School Children, 1977

Corbin, Becoming Physically Educated in the Elementary School, 2nd ed., 1976

- Dauer, Essential Movement Experiences, 1975
- Dauer & Pangrazi, Dynamic Physical Education for Elementary School, 5th ed., 1975.
- Fait, Physical Education for the Elementary School Child, 3rd ed., 1977.
- Gerhardt, Moving and Knowing, 1973
- Holbrook, Movement Activities in Gymnastics, 1973
- Humphrey, Child Learning Through Elementary Physical Education, 2nd ed., 1974
- Joyce, First Steps in Teaching Creative Dance, 1973
- Kirchner, Physical Education for Elementary School Children, 3rd ed., 1974
- Kirchner et al. Introduction to Movement Education, 2nd ed., 1978
- Logdson et al. Physical Education for Children: A Focus on the Teaching Process, 1977
- Kruger & Kruger, Movement Education in Physical Education: A Guide to Teaching and Planning, 1977
- Miller et al. Physical Education: Teaching Human Movement in the Elementary Schools, 1975
- Morris, How to Change the Games Children Play, 1976
- North, Movement Education: A Guide for the Primary and Middle School Teacher, 1973
- Schurr, Movement Experiences for Children: A Humanistic Approach to Elementary School Physical Education, 2nd ed., 1975
- Vannier et al. Teaching Physical Education in Elementary Schools, 1973
- Winters, Creative Rhythmic Movement for Children of Elementary School Age, 1975.

Category Formulation

Both Berelson (1952) and Holsti (1969) stated that content analysis as an effective research instrument stands or falls by its categories.

Berelson (1952) said:

. . . since the categories contain the substance of the investigation, a content analysis can be no better than its system of categories. (p. 147)

Therefore, the attention paid to category formulation was considered crucial for this study.

Kerlinger (1965) outlined five criteria for good categories: reflect the purpose of the research, be exhaustive, be mutually exclusive, be independent, and be derived from a single classification principle. The writer kept these criteria in mind throughout the formulation period.

Berelson (1952) suggested working closely with the material to be analyzed in order to begin category definitions. Thus, the writer read carefully several books in the sample in order to begin the process of appropriate category origination. The books by Schurr, (1975), Arnheim and Pestolesi (1973), and Miller, Cheffers and Whitcomb (1975) were the ones used.

One of the primary considerations during this initial procedure was to develop categories which were as objective and unbiased as possible.

Berelson (1952) commented:

Content analysis should employ the categories most meaningful for the particular problem at hand; and relatively specific and concrete categories are the most meaningful. (p. 148)

During the reading of the representative texts, the writer noted any types of comments subjectively evaluated by her as sexist and began to organize these into conceptual areas. The writer also reviewed studies dealing with textbook analysis for sexism in order to gain other ideas. However, due to the somewhat specialized nature of elementary physical education content, some of these categories were not applicable.

After an initial selection and refinement of categories, the writer analyzed a portion of Miller, Cheffers and Whitcomb (1975) utilizing the categories identified. Several categories proved cumbersome and awkward, and revisions were made. Holsti (1969) stated that this is not unusual:

In the absence of standard schemes of classification the analyst is usually faced with the task of constructing appropriate categories by trial and error method. (p. 104).

Several more attempts at clarification and efficient application by the researcher preceded the formal pilot study. When it was believed that the categories were definitive and objective and that the directions were clearly stated, the writer carried out a pilot study to check reliability and the clarity of both the categories and directions. The final coding categories and directions can be located in Appendix B.

Pilot Study

Holsti (1969) recommended strongly the pretesting of categories prior to actual coding: ". . . even the most knowledgeable investigator may want to test his (sic) definitions on a small sample of data before coding actually begins" (p. 95). After the categories were believed appropriate to the content and purpose of this study, the pilot study was arranged to test them. Six persons were asked to participate in this pilot study with the following criteria employed for selection of the raters:

1. Both sexes were represented.
2. The range of life-style orientation seemed to range from feminist-liberal to conservative-traditional.
3. Not all raters were physical educators in order to test a possible professional bias.

4. The age range was between twenty-three and forty-four years.
 5. Each rater had the minimum of a bachelor's degree.
 6. The raters were interested and had the necessary time and intelligence to participate in a thorough and conscientious manner.
- It was vital that this last criterion be shared with the raters since the analysis itself was tedious and yet required preciseness.

The persons who participated in the pilot study were Joel Muhlstein (physical education doctoral student), Ellen Margolis (physical education master's student), Buff Wang (physical education doctoral student), Tom Priester (physical education doctoral student), Patty Wall (junior high school English teacher in Guilford County Schools) and Ed Cardille (Burlington Industries executive).

Three of the books from the sample list were selected to be analyzed for the pilot study: Physical Education for Elementary School Children, Third Edition, by Glenn Kirchner; Movement Experience for Children: A Humanistic Approach to Elementary School Physical Education, Second Edition, by Evelyn Schurr; and Dynamic Physical Education for Elementary School, Fifth Edition, by Victor P. Dauer and Robert Pangrazi.

Only sample pages were analyzed. Other methods had been used by textbook researchers. The American Psychological Association (1976) had sampled every tenth page starting with page ten. Gershuny (1975) flipped a coin as to which of each two pages to analyze. For this study, the researcher selected the first two pages of each chapter in the book for analysis and approximately fifteen to twenty pictures in each book. The writer attempted to select pictures which seemed more difficult to categorize since part of the pilot study was to clarify the categories themselves.

Two raters were assigned to each of the books, while the writer analyzed all three books for comparison. In addition to a sex differentiation in each rating pair, the writer also tried to pair opposites in lifestyle orientation. Again this was designed to test any biases which may be present in the categories.

When the results of the pilot study were received, two steps were checked. First, the reliability was studied by comparing the writer's analysis with that of each rater. Two reliability formulae were considered. Zimet's (1972) reliability formula was selected for this computation since it had been used previously in content analysis research with literature:

$$\% \text{ agreement} = \frac{\text{Total number of responses} - \text{Number of disagreements}}{\text{Total number of responses}}$$

Holsti (1969) presented a reliability formula which also could have been used:

$$p.i. = \frac{2M}{N1 + N2}$$

p.i. = reliability index
 M = total of correct responses
 N1 = responses of rater A
 N2 = responses of rater B

The results of the pilot study were very encouraging since high confidence can be assumed if a 90% agreement rating is reached (Zimet, 1972). In only two instances did a picture rating fall below that level. One of the contributing factors in both these cases was a limited number of total pictures analyzed. Only fourteen pictures were analyzed and despite the fact that there were but two disagreements, the arithmetical limitations caused the rating to be below the 90% level. Since the writer agreed with the other rater above the required level in each situation, this was accepted. The results of the pilot study are found in Appendix C.

A second outcome of the pilot study was the receipt of participant comments relative to the directions, rating sheet, and general procedures. These comments, questions, and suggestions were compiled and evaluated, as to how the entire procedure could be improved. As a result of these written suggestions and discussion with several of the participants, the following changes were effected before the main study was undertaken:

1. The recording sheets were divided into sections more distinctly to ease the recorder's efforts.
2. The section, Examples, was deleted entirely since the sentences with boy and girl seemed to cover this same territory.
3. Pictures had a nonstereotyped category added to the stereotyped and neutral categories.
4. A neutral category was added to the generic section. It was suggested, and with merit, that the use of words such as humanity, people, human beings, and other nongender oriented words, was an attempt by the author to avoid the use of man or mankind and therefore represented a nonsexist effort.

Main Study Procedures

With the revised rating scale and revised directions prepared, the writer began the tedious process of analyzing the literature. The tally sheets are found in Appendix B. The writer worked no more than three hours at one sitting in order to eliminate the chance of a fatigue factor rendering the results unreliable.

There was a break of several years between the first book analyzed and the final book analyzed. The researcher was concerned about the reliability problem because of this time break, and thus she double-checked

herself on the Schurr textbook. Before she began the second group of books, she analyzed twenty pages of Shurr and then compared this analysis to her original analysis of Shurr. The tallies proved to be reliable and therefore the analysis continued.

Besides tallying within the categories, the writer recorded specific statements from each textbook which were deemed particularly sex-stereotyped or anti-sex stereotyped. Since the ultimate intent of the researcher is to contact authors and publishers of these textbooks and to attempt to remedy the degree of sexism found in these books, she believed that specific examples would be a necessary complement to the content analysis results. Some of these statements are included in Appendix F for illustrative purposes.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

The content analysis was carried out by a careful tallying by the writer of the categories formulated for the investigation. Because all results were in the form of nominal data or frequencies, the Chi Square statistical procedure was selected for the statistical analysis.

Garrett (1962) noted that the following criteria must be met if Chi Square as an instrument is appropriate:

1. It is to be used with nominal data or frequencies.
2. The observed and expected frequencies must equal the same total.
3. The categories must be independent and not overlap.

It was possible to use Chi Square with confidence since all of these criteria were met with the data collected. The .01 level of significance was used as the level of acceptable confidence.

Two hypotheses were tested in this study: (1) no sexism will be found in this sample of current elementary physical education literature; and (2) the sex of the authors will not affect the amount of sexist content presented in the textbooks. In addition to the Chi Square contingency tables cell percentage and column percentage were also calculated in order to provide a better overall picture of the data.

Pronouns

Several different analyses were made with the pronoun data, and six tables are presented in this section. The original analysis procedure was to look at three categories of pronouns: male, female and plural. However,

so few female pronouns were used that the analysis considered singular and plural pronoun comparisons as well as male and plural pronoun comparisons. Each of these will be analyzed and discussed separately.

As was obvious observing the raw data, significantly more plural pronouns were used than singular pronouns (Table 1). This would indicate the absence of sexist writing since the pronouns in this sample were used primarily as referents to children. The usage of the plural form represented a positive effort to neutralize the reader's thinking about children rather than about children as "males." Statistically the null hypothesis that no sexist content would be found was rejected at the .001 level but such a statistic is quite misleading in this situation. Because the number of singular feminine pronouns was so small (169 of 18,649 pronouns), the results were skewed. English grammar rules suggest that the male pronoun be used to represent one person, and consequently the small number of tallies in this category pointed to a significance level which may not be truly representative.

Table 1
Comparison of All Pronouns--Female, Male and Plural

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Female	169	6216	6047	36566209	5882.59
Male	8545	6216	2329	5424241	872.63
Plural	9935	6216	3719	13830961	$\frac{2225.06}{8980.28}$

$$\chi^2 = 8980.28$$

Level of Significance + .001

Since the use of the singular pronoun was assumed to represent sexist writing, the total number of singular pronouns used was compared to the total number of plural pronouns used (Table 2). The significance was still shown at .01. It can be observed that the raw data numbers indicate a fairly equal usage by the sampled authors however.

Table 2
Comparison of All Pronouns--Singular and Plural

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Singular	8714	9234.5	610.0	372710.25	39.97
Plural	9935	9324.5	610.5	372710.25	$\frac{39.97}{79.94}$

$$\chi^2 = 79.94$$

Level of Significance = .01

Table 3 still illustrates a significance when the female pronouns were eliminated totally from consideration. The male and plural pronouns were observed with a significance level of .001 found. In other words, the tallies may not have occurred evenly but the direction of the irregular distribution was in favor of the plural pronouns. This would point to an assumption of nonsexist pronoun usage in this sample and actually very little difference from when female pronouns were considered also.

Table 4 displays the contingency table for the pronoun use when every pronoun was considered by all author categories. The results indicated a rejection at the .001 level of the null hypothesis that the sex of the authors was unrelated to pronoun selection. Thus, a relationship was found between the sex of the author and the selection of pronouns in this sample of textbooks.

Table 3
Comparison of Male and Plural Pronouns

	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Male	8545	9240	695	483025	52.28
Plural	9935	9240	695	483025	$\frac{52.28}{104.56}$

$X^2 = 104.56$
Level of Significance = .001

Table 4
Comparison of All Authors and All Pronouns

	Female	Male	Female-Male	Σ
Female	50 (72.30)	62 (62.63)	57 (34.07)	169
Cell %	0%	0%	0%	
Column %	1%	1%	2%	
Male	2913 (3655.53)	4180 (3166.63)	1452 (1722.84)	8545
Cell %	16%	22%	8%	
Column %	37%	60%	39%	
Plural	5015 (4250.17)	2669 (3681.74)	2251 (2003.09)	9935
Cell %	27%	14%	12%	
Column %	63%	39%	60%	
	7978	6911	3760	18649

$X^2 = 986.90$
Level of Significance = .001

Since the pronouns analyzed included those describing children or people in general and not those describing a teacher or a specific person, the results indicated that male authors more often "think" and "write" in terms of the masculine he, him, and his. Sixty percent of the male authors' total number of pronouns were the masculine form while the female authors and female-male authors did not use masculine pronouns more than 39% of the total. Perhaps the latter author categories did not use the male form as often since it is not possible for them to "think" male as much of the time. If it is, as Sapir has written (1941), that "language and our thought grooves are inextricably interrelated, are in a sense one and the same" (p. 78), then the more common male pronoun usage by the male authors becomes more startling.

Table 5 looks at singular pronoun use only. It was obvious, at first glance, that the male pronoun was used almost all of the time by all authors when a singular pronoun was required. The differences were ludicrous. Only 2% of all singular pronouns used in the entire sample were of the feminine gender which represented almost total exclusion. There did not appear to be a difference by sex of the authors since all author categories used the male form at least 96% of the time.

The few times the feminine form pronouns were used in the individual books they were in relation to tumbling, rope jumping, or rhythms. This result may not be surprising however, since as previously mentioned, English grammar rules do not encourage the use of the feminine form and indeed even consider the female usage as incorrect. Since tumbling, rope jumping, and rhythms were all stereotyped as "girl" activities, this finding might reinforce the fact that the use of he and she is intentional and not just the result of grammar dictates.

Table 5
Comparison of All Authors and Male-Female Pronouns

Pronouns	Female	Male	Female-Male	Σ
Female	50 (57)	62 (82)	57 (29)	169
Cell %	1%	1%	1%	
Column %	2%	1%	4%	
Male	2913 (2905)	4180 (4187)	1452 (1452)	8545
Cell %	33%	48%	17%	
Column %	98%	99%	96%	
	2963	4242	1509	8714

$$\chi^2 = 32.80$$

Level of Significance = .01

Table 6 places all singular pronouns in one category and compares these to the plural pronouns. Such a comparison demonstrated quite vividly that the male authors used male singular pronouns a great deal of the time (62%), much more than the other two author categories. It was encouraging though for those who deplore sexist writing to note that more plural pronouns than singular ones were used, even if the percentage was but 53% of the total.

Nine of the 12 female authors used the plural form more often than the masculine form, while only one male author, Morris, did so. It could be that Morris may have been sensitized to not stereotyping children because of his "movement" orientation. His textbook is not a sports handbook as are some of the other textbooks and it does not separate elementary physical education into sports, rhythms, fitness, and so forth. The "sports" approach is a traditional one, as is stereotyping certain activities as appropriate for boys and others for girls. Since Morris' writings did not reflect this

traditionalism, it is more likely that he would not make a male-female distinction in his pronoun reference. However, it could be that his publishing company encouraged this nonsexist usage. Only conjecture as to reasons for this finding can be made.

Table 6
Comparison of All Authors and Singular-Plural Pronouns

Pronouns	Female	Male	Female-Male	Σ
Singular	2963 (3747)	4242 (3229)	1509 (1757)	8714
Cell %	16%	23%	8%	
Column %	37%	62%	40%	
Plural	5015 (4272)	2669 (3676)	2251 (1987)	9935
Cell %	27%	14%	12%	
Column %	63%	39%	60%	
	7978	6911	3760	18649

$$\chi^2 = 957.01$$

Level of Significance = .001

Overall the various pronoun analyses yielded the following results:

1. The analyzed content was not seen as sexist with regard to pronoun usage since the plural pronouns outnumbered the singular pronouns.

The first hypothesis was found tenable.

2. The male authors tended to use the singular masculine pronoun form almost twice as often as the plural pronoun form, while the female authors and female-male authors reversed this usage. Thus, a relationship was found between the sex of the authors and the selection of the pronouns in the content. The second hypothesis was found untenable at an acceptable level of confidence.

Generic

The data for the generic category are found in Tables 7 and 8 with the feminine term category eliminated due to no frequency. Both of the null hypotheses were found untenable since the usage in the generic man category overwhelmed the neutral term areas, and since there was shown to be a relationship between the authors' sex and the use of generic man in terms in the sample content.

Table 7

Comparison of Generic Terms--Masculine and Neutral

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Male	249	144	105	11025	76.56
Neutral	39	144	105	11025	76.56
					<u>153.13</u>

$$\chi^2 = 153.13$$

Level of Significance = .001

Table 8

Comparison of Male and Neutral Terms and All Authors

Neutral Terms	Female	Male	Female-Male	Σ
Male	103 (98.56)	82 (90.78)	64 (59.66)	249
Cell %	38%	28%	22%	
Column %	90%	78%	93%	
Neutral	11 (15.44)	23 (14.22)	5 (9.34)	39
Cell %	4%	8%	2%	
Column %	10%	22%	7%	
	144	105	69	288

$$\chi^2 = 11.79$$

Level of Significance = .01

One interesting finding was that the male authors utilized neutral substitute words much more than the female authors or female-male authors. Twenty-two percent of the male total and 8% of the overall total were credited to the male authors, more than double the other author categories. This writer has no explanation for this occurrence.

This biased generic usage would appear to be a reflection of our society and how the thinking and consequently the vocabulary selected by the authors has been narrowed by a sexist enculturation process. At any rate, few authors presented neutral alternative terminology for the man and mankind words, a fact which further demonstrates the need for more sensitivity by authors and by publishing companies.

Stereotyped Sentences

Tables 9 and 10 illustrate the data for this category. Both of the null hypotheses were found untenable at the .01 level of confidence. While this relationship did not reach as high a level of statistical significance as the other analyzed categories, it still demonstrated the presence of sex stereotyping and a relationship between the sex of the author and the use of stereotyped sentences.

Table 9
Comparison of Stereotyped and Nonstereotyped Sentences

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Stereotyped	398	339	59	3481	10.27
Nonstereotyped	280	339	59	3481	$\frac{10.27}{20.54}$

$\chi^2 = 20.54$
Level of Significance = .01

Table 10
Comparison of Stereotyped and Nonstereotyped
Sentences and all Authors

Sentences	Female	Male	Female-Male	Σ
Stereotyped	106 (124.45)	205 (183.74)	87 (89.81)	398
Cell %	16%	30%	13%	
Column %	50%	65%	57%	
Nonstereotyped	106 (87.55)	108 (129.26)	66 (63.19)	280
Cell %	16%	16%	10%	
Column %	50%	35%	43%	
	212	313	153	678

$$\chi^2 = 10.58$$

Level of Significance = .01

The only statements which were analyzed in this study were those with the words boy or girl. The results showed that male authors differentiate by sex more often in their written content. A full 30% of the evaluated statements found in all of the sample were stereotyped ones by male authors; twice as many as by either female authors or by joint female-male authors. It may be that it has been more difficult to sensitize male authors to the damage these stereotyped statements create for female children because they themselves have never experienced the limitations the statements can create. Some of the analyzed statements can be located in Appendix F.

Teacher Description

The data for this category of teacher description are found in Tables 11, 12, and 13. The first hypothesis was found tenable; it

revealed that the teacher description was not sexist. There was shown to be a relationship between the sex of the author and the pronominal description of the teacher, however.

Table 11
Comparison of All Authors and Teacher Description

	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Female	536	487	49	2401	4.93
Male	475	487	12	144	.02
Plural	449	487	38	1444	.08
					<u>5.03</u>

$\chi^2 = 5.03$
Level of Significance = .01

Table 12
Comparison of Teacher Description Pronouns--All Authors

	Female	Male	Female-Male	Σ
Female	356 (270.57)	96 (143.54)	84 (121.89)	536
Cell %	24%	7%	6%	
Column %	48%	25%	25%	
Male	238 (239.78)	177 (127.21)	60 (108.01)	475
Cell %	16%	12%	4%	
Column %	32%	45%	18%	
Plural	143 (226.65)	118 (120.25)	188 (102.10)	449
Cell %	10%	8%	13%	
Column %	19%	30%	57%	
	737	391	332	1460

$\chi^2 = 198.52$
Level of Significance = .001

Table 13

Comparison of Male and Female Teacher Pronouns--All Authors

Pronouns	Female	Male	Female-Male	Σ
Female	356 (315)	96 (145)	84 (76)	536
Cell %	32%	10%	9%	
Column %	60%	35%	58%	
Male	238 (280)	177 (128)	60 (67)	475
Cell %	24%	18%	6%	
Column %	40%	65%	42%	
	594	273	144	1011

$$\chi^2 = 48.53$$

Level of Significance = .001

One important result was that each category of author described teachers as being like themselves. The authors favored their own kind, so to speak, approximately 50% of the time (Female=48%, Male=45%, Female-Male=57%). This finding was consistent with the authors' selection of pronouns in general. They used pronouns like themselves, with the exception of the feminine form of pronoun. When only singular pronouns were considered (Table 13) all of the authors selected their own sex the majority of the time.

Of all of the pronouns used, 37% described the teacher of elementary physical education as being female while 33% of the pronouns were male. Since it is not one's writing "habit" to refer to a single referent with the feminine pronouns, one must assume that the authors made a conscious choice when they did this. Possibly the fact that many elementary physical education teachers have been female may have reinforced a stereotype to which the authors adhered.

Teacher Pictures

The data for this category are found in Tables 14, 15, 16, and 17. The overwhelming number of females pictured (Tables 14 and 15) demonstrated a sexist content and a reinforcement of the sex-role stereotype. The first hypothesis thus was found untenable.

Table 14
Comparison of All Teacher Pictures

	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Female	157	82	75	5625	68.60
Male	85	82	3	9	.11
Female-Male	4	82	78	6084	<u>74.20</u> <u>142.91</u>

$\chi^2 = 142.91$
Level of Significance = .001

Table 15
Comparison of Male and Female Teacher Pictures

	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Female	157	121	36	1296	10.71
Male	85	121	36	1296	<u>10.71</u> <u>21.42</u>

$\chi^2 = 21.42$
Level of Significance = .001

Table 16

Comparison of All Teacher Pictures and All Authors**

	Female	Male	Female-Male	Σ
Female	53 (39.57)	50 (65.74)	54 (51.70)	157
Cell %	22%	20%	22%	
Column %	85%	49%	67%	
Male	9 (21.42)	52 (35.59)	24 (27.99)	85
Cell %	6%	21%	10%	
Column %	15%	50%	29%	
Female-Male	0 (1.01)	1 (1.67)	3 (1.32)	4
Cell %	0%	0%	1%	
Column %	0%	1%	4%	
	62	103	81	246

$$\chi^2 = 27.19$$

Level of Significance = .001

** The small frequency in the plural category was of concern since the general rule of thumb for Chi Square is a minimum of five for the expected frequency in at least eighty percent of the cells. However, Roscoe (1976) reassured that: "If the departures are extreme, an average expected frequency of six is needed to ensure a good approximation at the .05 level while ten is needed at the .01 level (p. 262). Since the data's expected frequencies averaged far higher than ten, the results can be confidently accepted.

Table 17

Comparison of Male and Female Teacher Pictures--All Authors

	Female	Male	Female-Male	Σ
Female	54 (40)	50 (66)	54 (51)	157
Cell %	22%	21%	22%	
Column %	85%	49%	69%	
Male	9 (22)	52 (36)	24 (27)	85
Cell %	4%	21%	10%	
Column %	15%	51%	31%	
	62	102	78	242

$$\chi^2 = 23.41$$

Level of Significance = .001

The second hypothesis was also found untenable with statistical significance at the .001 level. There was revealed a relationship between the sex of the author(s) and the sex of the teacher pictured. The female authors featured female teacher pictures almost 6 times as often as the male teacher pictures. Female teachers were illustrated 53 times with a male teacher only shown 9 times. To picture a male teacher only 9 times in 12 female-authored textbooks surely does not indicate that many female authors perceive men teaching at the elementary level.

The female-male authors favored female teacher pictures more than twice as often as their male counterparts' pictures. Essentially the male authors used the teacher pictures without sex differentiation. The male authors' use of male teacher pictures more than doubled either of the other author categories' use of male pictures though. Male authors used 52 pictures of male teachers while the female-male and female categories included 24 and 9, respectively.

Overall the category was seen as a critical one since it really influences the physical education major student reading the textbook. A male undergraduate physical education major who might be considering the elementary level as a career but who only sees female teachers pictured in his textbooks certainly will have a positive role model reinforcement for his career decision.

Children Pictures

Tables 18 and 19 illustrate the data for analyzing whether sexist pictures were utilized within this sample. The null hypothesis as to whether sexism was present was found untenable at the .001 level of confidence, thus indicating that indeed sexism was found.

Table 18
Comparison of All Pictures of Children

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Female Stereotyped	502	448	54	2916	6.51
Female Antistereotyped	107	448	341	116281	259.56
Female Neutral	302	448	146	21316	47.58
Male Stereotyped	457	448	9	81	.18
Male Antistereotyped	256	448	192	36864	82.29
Male Neutral	697	448	249	62001	138.40
Female-Male	814	448	366	133956	$\frac{299.01}{833.53}$

$$\chi^2 = 833.53$$

Level of Significance = .001

Table 18 looked at all categories of children pictures while Table 19 merged the data into three picture categories. Statistically the results did not differ and the only other important fact was the much greater visibility of boys in the total number of pictures. Forty-five percent of all pictures sampled were of boys with another 26% of boys with girls. This would appear to present a somewhat biased view of "children" in physical activity.

Tables 20, 21, 22, 23, and 24 illustrate the data comparing the sex of the authors with picture usage. In 2 of the 3 author categories the most frequently-used picture featured a child or children of the same sex as the author. Fifty-eight percent of the men's pictures showed a male child, and 39% of the female-male writers' pictures featured both a female

and male child. The female authors were the only author group which did not picture their own sex the majority of the time. This author category selected female children for 36% of their pictures and chose male children 37% of the time. For all intents and purposes however, this balance can be considered quite even. This finding would lend further support to the contention that people tend to think in terms of themselves and their own sex.

Table 19

Comparison of Female, Male, and Female-Male Children Pictures

	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Female	911	1045	134	17956	17.18
Male	1410	1045	365	133225	127.49
Female-Male	814	1045	231	53361	$\frac{51.06}{195.73}$

$$\chi^2 = 195.73$$

Level of Significance = .001

Although each table looked at the data in a slightly different way, in no case did the statistical significance vary. Table 20 compared all 7 picture categories with all 3 author groups. Table 21 reduced the picture categories to male, female, and female-male. Table 22 removed the female-male picture category to look at single-sex pictures only, while Table 23 compared only 2 author categories and 6 picture categories.

Table 20
Comparison of All Children Pictures and All Authors

	Female	Male	Female-Male	Σ
Female Stereo	160 (130.66)	167 (224.82)	175 (146.52)	502
Cell %	5%	5%	6%	
Column %	20%	12%	19%	
Female Anti	18 (27.85)	67 (47.92)	22 (31.23)	107
Cell %	1%	2%	1%	
Column %	2%	5%	2%	
Female Neutral	118 (78.61)	125 (135.35)	59 (88.14)	302
Cell %	4%	4%	2%	
Column %	14%	9%	6%	
Male Stereo	76 (118.95)	304 (204.67)	77 (133.38)	457
Cell %	2%	10%	2%	
Column %	9%	22%	8%	
Male Anti	84 (66.63)	83 (114.65)	89 (74.72)	256
Cell %	3%	3%	3%	
Column %	10%	6%	10%	
Male Neutral	141 (181.42)	424 (312.15)	132 (203.43)	697
Cell %	4%	14%	4%	
Column %	17%	30%	14%	
Female-Male	219 (211.87)	234 (364.55)	361 (237.58)	814
Cell %	7%	7%	12%	
Column %	27%	17%	39%	
	816	1404	915	3135

$$\chi^2 = 359.81$$

Level of Significance = .001

Table 21

Comparison of All Authors and Female, Male, Female-Male Pictures

Pictures	Female	Male	Female-Male	Σ
Female	296 (232)	359 (408)	256 (264)	911
Cell %	9%	17%	8%	
Column %	36%	26%	28%	
Male	301 (367)	811 (635)	298 (409)	1410
Cell %	14%	26%	10%	
Column %	37%	58%	33%	
Female-Male	291 (212)	234 (366)	361 (236)	814
Cell %	7%	7%	12%	
Column %	27%	17%	39%	
	816	1404	915	3135

$$\chi^2 = 251.61$$

Level of Significance = .001 .

An interesting datum was that female authors stereotyped female children almost twice as often as male authors or female-male authors. The fact that all authors used a majority of stereotyped pictures when showing a female child appeared to be a significant finding in terms of sexist content. Since the antistereotyped female pictures were rare, this practice continued to reinforce female sex stereotyping for the reader. Instead of making an attempt to neutralize misconceptions of what "little girls are supposed to do," these written materials are conversely supporting tradition.

The male authors actually included the most female antistereotyped pictures (5%) but only showed boys in antistereotyped activities 6% of the total. Many have accused women of being more prejudiced against women, and perhaps this could be indicated by this finding. The fact that the female authors' books more often focused on movement and dance may have

Table 22
Comparison of All Authors and Male and Female Pictures

	Female	Male	Female-Male	Σ
Female Stereo	160 (129)	167 (253)	175 (120)	502
Cell %	7%	7%	8%	
Column %	26%	14%	32%	
Female Anti	18 (28)	67 (54)	22 (26)	107
Cell %	1%	2%	1%	
Column %	3%	6%	4%	
Female Neutral	118 (78)	125 (151)	59 (72)	302
Cell %	5%	5%	3%	
Column %	20%	11%	11%	
Male Stereo	76 (117)	304 (229)	77 (109)	457
Cell %	3%	13%	3%	
Column %	13%	26%	14%	
Male Anti	84 (66)	83 (128)	89 (61)	256
Cell %	4%	4%	4%	
Column %	14%	7%	16%	
Male Neutral	141 (179)	424 (349)	132 (166)	697
Cell %	6%	18%	6%	
Column %	24%	36%	24%	
	597	1170	554	2321

$$\chi^2 = 201.62$$

Level of Significance = .001

Table 23

Comparison of Male and Female Authors and Male and Female Pictures

	Female	Male	Σ
Female Stereo	160 (110)	167 (217)	327
Cell %	9%	9%	
Column %	26%	14%	
Female Anti	18 (29)	67 (56)	85
Cell %	1%	4%	
Column %	3%	6%	
Female Neutral	118 (83)	125 (160)	243
Cell %	7%	7%	
Column %	20%	11%	
Male Stereo	76 (129)	304 (251)	380
Cell %	4%	17%	
Column %	13%	26%	
Male Anti	84 (57)	83 (110)	167
Cell %	5%	5%	
Column %	14%	7%	
Male Neutral	141 (192)	424 (373)	565
Cell %	8%	24%	
Column %	24%	36%	
	597	1170	1767

$$\chi^2 = 94.25$$

Level of Significance = .001

accounted for some of this difference since dance was considered "stereotyped" for the purposes of this analysis. However, the fact remained that a full 10% of the women authors' pictures throughout all of their books were female children performing stereotyped activities. This constituted more than any other picture category and would certainly support the contention that women authors of elementary physical education literature are indeed not helping alter the sex-role stereotype. Another possible cause for the male authors' seeming neutrality could be that they have been charged with male chauvinistic thinking previously and thus have become more sensitized and protective against further charges. The men authors may have consciously balanced their picture selection to avoid some of the possible repercussions. The women authors may not have experienced complaints previously since many would assume that women would think about that sex balance automatically.

Table 24

Comparison of Male and Female Stereotyped Pictures--All Authors

	Female	Male	Female-Male	Σ
Female Stereotyped	160	167	175	502
Total Female Pictures	296	359	256	
% of Total	54%	47%	68%	
Male Stereotyped	76	304	77	457
Total Male Pictures	271	811	298	
% of Total	28%	37%	26%	

In summary, there was sexist content discerned in this sample of elementary physical education textbooks with the exception of two categories used for this content analysis. The pronoun usage to describe children and the pronoun usage to describe teachers were not found to be sexist at a statistically significant level; however, all other categories analyzed were found to be sexist.

The sex of the authors did appear to be an influence within the textbook content. Authors appeared to use same-sex pictures of children and of teachers more heavily. The use of the generic male terminology and sex-stereotyped sentences also support this relationship.

Thus, utilizing the definition of sexist content, the assumptions underlying this study, and the findings of this study, the results show that today's elementary physical education literature has many sexist elements.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

This research, a content analysis of twenty-three current elementary physical education textbooks, analyzed the sexism present in the form of both content and illustrations. This research attempted to answer the following questions which were placed in the form of hypotheses:

1) No sexism will be found in this sample of current elementary physical education literature.

2) The sex of the authors will not affect the amount of sexist content presented in the textbooks.

Each of the hypotheses will be dealt with separately with the results presented by analyzed category.

Hypothesis One: No sexism will be found in this sample of current elementary physical education literature.

Pronouns: It was found that there was no discerned sexism in pronoun use. Plural pronouns outnumbered singular pronouns, with the assumption being made that the use of the plural form was a deliberate attempt by the author to avoid sexist language.

Generic: It was found that there was a significant amount of sexism as indicated by the high use of the masculine generic terminology.

Sex-stereotyped Sentences: The high incidence of sex-stereotyped sentences was statistically significant, and this area was determined to represent sexist language. The hypothesis was rejected at the .01 level of confidence.

Teacher Description: There was significant difference between the description of the teacher's sex, and sexism was present in this category.

Teacher Pictures: The pictures of the teachers overwhelmingly favored female teachers, and this was statistically significant at the .001 level. The fact that male teachers were pictured much less than female teachers presented a sex-role stereotyped view of the elementary physical education teacher.

Children Pictures: The illustrations of children were not distributed evenly by sex. The results which were statistically significant at the .001 level indicated that male children were depicted more often than female children. Sexism was defined as present in this category.

Hypothesis Two: The sex of the authors will not affect the amount of sexist content presented in the textbooks.

Pronouns: This hypothesis was rejected at the .001 level of significance. The male authors used the masculine pronoun significantly more than the female or female-male authors.

Generic: A relationship was shown between the sex of the authors and the use of the generic man terminology in the content of this textbook sample. All categories of authors used the male generic terms more than a neutral substitution, and the hypothesis was rejected at the .01 level of significance.

Sex-stereotyped Sentences: The male authors used the most sex-stereotyped sentences in their content. The hypothesis was rejected at the .01 level.

Teacher Description: Most often each category of author described teachers as being like themselves. That is, female authors described teachers as female and male authors described teachers as male. The hypothesis was rejected at the .001 level of significance.

Teacher Pictures: The female authors pictured female teachers almost 6 times as often as male teachers. The female-male authors also pictured female teachers much more often (2 times as often) as male teachers. Only male authors used male teacher pictures to any extent at all, illustrating male teachers twice as often as either of the other author categories. The hypothesis was rejected at the .001 level of significance.

Children Pictures: As with the teacher description category the authors illustrated children of the same sex much more often than those of the other sex. None of the authors contributed greatly to the eradication of the sex stereotype for either sex. The hypothesis was rejected at the .001 level of confidence.

In summary, there was sexist content found in this sample of elementary physical education textbooks with the exception of one of the analysis categories. The pronoun usage to describe children was not found to be sexist at a statistically significant level; however, all of the other categories analyzed in this study were found to be sexist.

The sex of the authors did appear to be an influence within the textbook content. Authors used same-sex pictures of children and of teachers more heavily, while the use of the generic male terminology and sex-stereotyped sentence usage also support this contention.

Thus, utilizing the definition of sexist content operative for this research, the assumptions underlying this study, and the results of

this study, it was concluded that today's elementary physical education literature contains many sexist elements within its content, both in the form of written content and illustrations.

Recommendations for Further Study

The following recommendations for further research are indicated:

1. A comparison of current editions of elementary physical education textbooks with the first editions of the same authors. This study would utilize comparable content analysis categories and procedures as the one just concluded.

2. A comparison and content analysis of other textbooks within the health, physical education, recreation and dance field (Example: physiology of exercise textbooks).

3. A comparison of various short time periods of recent years to analyze any changes which may have occurred in the textbooks (Example: 1975-1979).

4. A content analysis of various professional journals with the emphasis being on sexist content and illustrations. The category formulation would, of necessity, have to be altered from what was utilized for this study, although much of it could be retained.

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A P P E N D I X A
Letter - Formulation of Sample

5412G Friendly Manor Drive
Greensboro, North Carolina 27410

April 5, 1975

Dr. Victor P. Dauer
Physical Education Department
Washington State University
Pullman, WA 99163

Dear Dr. Dauer:

Currently I am preparing a dissertation analyzing contemporary elementary physical education literature for sexist content. Because of your nationally-recognized expertise in elementary physical education, I would like to ask your assistance in reviewing my sample of books (enclosure) and adding any literature I may have omitted.

I am including movement, dance, and methods literature published from 1973 through June of 1975. Books dealing with adapted physical education or primarily with motor development and motor learning research are to be omitted.

I realize that you are very busy, but I would appreciate your time if at all possible. Enclosed is a self-addressed stamped envelope. Thank you.

Sincerely,

Kathleen Hildreth
Graduate Student at the University
of North Carolina-Greensboro

Encs.

A P P E N D I X B
Coding Categories and Directions
Tally Sheets

TALLY SHEET I

BOOK: _____ DATE: _____

CATEGORIES	TALLIES
AUTHOR	
A ♀	
B ♂	
C ♀-♀	
D ♂-♂	
E ♀-♂	
F Assoc-Org	
ACKNOWLEDGMENTS	
A ♀	
B ♂	
C Unknown	
REFERENCES	
A ♀	
B ♂	
C ♀-♂	
D Assoc-Org	
E Unknown	

COMMENTS:

TALLY SHEET II

Tally Sheet

BOOK: _____

PAGE →	TOTALS
PRONOUNS	
A. ♀	
B. ♂	
C. Plural	
GENERIC	
A. ♀	
B. ♂	
C. Neutral	
SENTENCES	
A. Stereotyped	
B. Non-stereotyped	
C. Neutral	
TEACHER DESCRIPTION	
A. ♀	
B. ♂	
C. Plural	
TEACHER PICTURES	
A. ♀	
B. ♂	
C. ♀-♂	
CHILDREN PICTURES	
A. ♀-stereotype	
B. ♀-anti-stereotype	
C. ♀-neutral	
D. ♂-stereotype	
E. ♂-anti-stereotype	
F. ♂-neutral	
G. ♀-♂	
H. Sex unknown	

CODING CATEGORIES AND DIRECTIONS

1. AUTHOR

- A. Female--single author
- B. Male--Single author
- C. Female--multiple authors
- D. Male--multiple authors
- E. Both male and female author
- F. Association of organization

2. ACKNOWLEDGEMENTS OF AUTHOR

- A. Female
- B. Male
- C. Unknown

Directions:

1. Check the preface, dedication page, and/or acknowledgements' page and tally the sex of each of the people to whom credit is given.
2. The unknown category is to be tallied if only initials are used or if the name is an ambiguous one (ex. Frances) for which sex cannot be identified positively. Even if the initialed name is a well-known familiar person known to the researcher, it should be tallied as unknown.

3. BIBLIOGRAPHICAL REFERENCES

- A. Female or multiple female
- B. Male or multiple male
- C. Male and female
- D. Organization or association
- E. Unknown

Directions:

1. Tally these by checking the bibliographies in the book. These may be located at the end of each chapter, at the bottom of the pages, or at the end of the book. Try to check the organization method used first in each publication. Do not repeat tallies of the same reference unless used in different chapters.
2. Tally each reference included in the publication.
3. Female or multiple female could include from one to several authors, all of whom are female. Male and female may include one author of each sex, or any number in combination. It is only necessary that at least one author be of each sex to tally it in this category. Also if one author is named and the others have initials only, tally it as multiple authors in the named person's sex category.

4. Unknown means that only initials are used, and thus it is impossible to determine the sex. Even if the author is well-known and can be identified readily, unknown should be indicated.

4. PRONOUNS

- A. Female (she, her, hers, herself)
- B. Male (he, his, him, himself)
- C. Plural (they, them, their, themselves)

Directions:

1. Tally each of these only once per sentence.
2. Only tally when the referent is a child, student, or adult in general terms. Do not count if the referent is a specific person (ex. Sally) or an inanimate object.
3. Do not tally when the referent is a teacher since these pronouns will be tallied in another category.
4. Omit from analysis the sentences which contain the words boy or girl since these will be evaluated in another way.

5. GENERIC MAN

- A. Female (Womankind, woman, etc.)
- B. Male (Man, mankind, etc.)
- C. Neutral (Humanity, citizens, human beings, people, etc.)

Directions:

1. Tally each of these only once per sentence.

6. STEREOTYPED SENTENCE

- A. Sex stereotyped
- B. Sex non-stereotyped
- C. Neutral

Directions:

1. If the word boy(s) and/or girl(s) occurs in a sentence, it is to be analyzed and placed into one of the above categories. Any pronouns in the sentence are NOT to be tallied.
2. Examples of these categories are the following:
Sex-stereotyped: "Since boys don't like rhythmic activities, teachers will need to be more creative."
Non-stereotyped: "Girls and boys both enjoy vigorous physical activity."
Neutral: "The school may be the site of other after-school activities such as boy scout meetings. . . ."

7. TEACHER DESCRIPTION

- A. Female (she, her, hers, herself)
- B. Male (he, his, him, himself)
- C. Plural (they, them, their, themselves)

Directions:

1. Any sentence in which the teacher is the referent should be analyzed. Any pronouns should be tallied only once per sentence.
2. These pronouns should NOT be tallied under the pronoun category.
3. If a specific teacher (ex. Mr. Smith) is the referent, the pronouns should not be tallied.

8. TEACHER PICTURES

- A. Female
- B. Male
- C. Female and Male

Directions:

1. Any picture which includes a teacher is to be analyzed.
2. If the picture shows two teachers, one of each sex, then tally it in the female and male category.

9. CHILDREN PICTURES

- A. Female stereotyped
- B. Female anti-stereotyped
- C. Female neutral
- D. Male stereotyped
- E. Male anti-stereotyped
- F. Male neutral
- G. Both male and female
- H. Sex unknown

Directions:

1. The pictures which do not show people should be omitted from the analysis. (Ex. court markings, equipment, educational models or paradigms)
2. Line drawings of children should be included as well as actual photographs.
3. The pictures should be analyzed by asking two questions:
 - A. Upon which sex does the picture focus?
 - B. Is the activity being performed stereotypical of the participant's sex?
4. The classification for sex-stereotyped activities was formed by reviewing older state physical education guides which invariably separated activities on a sex basis and by the writer's subjective judgment. The following activities are to be considered sex stereotyped for this study:

FEMALE

1. Rope jumping
2. Balance activities
3. Dance (other than square dance)
4. Flexibility exercises
5. Graceful movement
6. Creativity in movement

MALE

1. Rope climbing
2. Strength exercises
3. Football and baseball
4. Track & Field, wrestling, cross country running
5. Combatives

5. If the activities shown do not fall into one of these categories, tally it in the appropriate sex's neutral category.
6. Occasionally in a picture (and especially in line drawings) it may be impossible to ascertain the sex of the participant. If this is the case, tally it under sex unknown.
7. If both a boy and a girl are the focus of the picture, tally it under both female and male category.

A P P E N D I X C
Pilot Study Reliability .

PILOT STUDY RELIABILITY *

KIRCHNER Textbook	MUHLSTEIN	WANG
Acknowledgements	100%	100%
References	98.5%	100%
Content	92.9%	94.4%
Pictures	87.5%	100%
SCHURR Textbook	WALL	CARDILLE
Acknowledgements	100%	100%
References	99.3%	100%
Content	96.3%	91.5%
Pictures	92.8%	85.7%
MILLER Textbook	PRIESTER	MARGOLIS
Acknowledgements	100%	100%
References	96.1%	96.1%
Content	96.3%	95.5%
Pictures	95.8%	100%

* Reliability calculations were computed comparing the writer with each rater.

A P P E N D I X D

Publishing Company Contact and Response

REQUESTS FOR AUTHOR GUIDELINES AND ANY NON-SEXIST WRITING GUIDELINES
SENT TO THE FOLLOWING ON JUNE 20, 1978

Houghton-Mifflin Company
1 Beacon Street
Boston, MA 02107
617-725-5000

J.B. Lippincott Company
E. Washington Square
Philadelphia, PA 19105
215-574-4200

McGraw-Hill Book Company
1221 Avenue of the Americas
NY, NY 10020

Mayfield Publishing Company
285 Hamilton Avenue
Palo Alto, CA 94301
415-326-1640

Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Columbus, OH 43216
614-258-8441

National Council of Teachers
of English
1111 Kenyon Road
Urbana, IL 61801

Random House, Inc.
201 E. 50 Street
NY, NY 10022
212-751-2600

Harcourt Brace & Jovanovich
757 Third Avenue
NY, NY 10017
212-888-4444

Scott Foresman
1900 E. Lake Avenue
Glenview, IL 60025
312-727-3000

Harper & Row Publishing Co.
10 E. 53 Street
NY, NY 10022
212-593-7000

McMillan Publishers
866 Third Avenue
NY, NY 10022
212-935-2000

W.B. Saunders Publishing Co.
W. Washington Square
Philadelphia, PA 19105
215-574-7400

Burgess Publishing Company
7108 Ohms Lane
Minneapolis, MN 55435
612-831-1344

William C. Brown Publishers
2460 Kerper Blvd.
Dubuque, IA 52001
319-588-1451

Lea and Febiger
600 Washington Square
Philadelphia, PA 19106
215-922-1330

Prentice-Hall, Inc.
Englewood Cliffs, NJ 07632
201-592-2000

Addison-Wesley Publishing Co.
Reading, MA 01867
617-944-3700

AAHPER
1201 Sixteenth St. NW
Washington, DC 20036
202-833-5555

American Personnel & Guidance
Association
1607 New Hampshire Ave. NW
Washington, DC 20009
202-483-4633

American Mathematical Society
Box 6248
Providence, R.I. 02940
401-272-9500

Appleton-Century-Crofts
292 Madison Avenue
NY, NY 10017
212-532-1700

PUBLISHING COMPANIES WHICH RESPONDED WITH NON-SEXIST GUIDELINES FOR PROSPECTIVE AUTHORS:

Addison-Wesley Harper and Row	A Guide for Authors (insert of reprint) Guidelines on Equal Treatment of the Sexes in Textbooks
Random House Macmillan	Guidelines for Multiethnic/Nonsexist Survey Guidelines for Creating Positive Sexual and Racial Images in Educational Materials
McGraw-Hill	Guidelines for Equal Treatment of the Sexes in McGraw-Hill Book Company Publications
William C. Brown Scott Foresman	Guidelines for Equal Treatment of the Sexes Guidelines for Improving the Image of Women in Textbooks
AAHPER	Reference to APA Publication Manual in <u>Research Quarterly</u> prospective author sheet; <u>Journal</u> prospective author material included no information on non-sexist writing
American Psychological Association National Council of Teachers of English	Sent <u>The Personnel and Guidance Journal</u> of Feb. 1978 which included a reprint of their guidelines Guidelines for Nonsexist Use of Language in NCTE Publication

PUBLISHING COMPANIES WHOSE MATERIALS TO PROSPECTIVE AUTHORS DO NOT INCLUDE OR DISCUSS NON-SEXIST WRITING--DID RESPOND TO REQUEST FOR MATERIALS:

Houghton-Mifflin Prentice Hall Lea and Febiger Mayfield Publishing Company	W.B. Saunders Company J.B. Lippincott Company Publishers Harcourt Brace Jovanovich - Only send manual to prospective authors (letter)
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PUBLISHING COMPANIES WHICH DID NOT RESPOND TO THE REQUEST:

Charles E. Merrill Publishing Co.
Burgess Publishing Co.
American Mathematical Society
Appleton-Century Crofts

A P P E N D I X E
TOTAL TALLIES OF ALL AUTHORS

SUMMARY OF ACKNOWLEDGMENTS AND REFERENCES
BY AUTHOR CATEGORY

Acknowledgments

	<u>Female</u>	<u>Male</u>	<u>Female-Male</u>	<u>Total</u>
Female	89 (58%)	28 (37%)	20 (69%)	137
Male	41 (27%)	38 (50%)	8 (28%)	87
Unknown	23 (15%)	10 (13%)	1 (3%)	34
	153	76	29	258

References

Female	708 (34%)	155 (11%)	173 (16%)	1036
Male	631 (30%)	239 (17%)	282 (26%)	1152
Female-Male	117 (6%)	57 (4%)	44 (4%)	218
Organization	130 (6%)	173 (12%)	135 (12%)	438
Unknown	498 (23%)	791 (56%)	459 (42%)	1748
	2084	1415	1093	4592

(%) = % of total in respective category.

TOTAL TALLIES OF ALL AUTHORS (continued)

	Schurr	Kirchner	Arnheim	Pangrazi	Bryant	North	Joyce	Holbrook	AAHPER	Vannier	Winters	Corbin	Morris	Logsdon	Kruger	Burton	Kirchner	Fait	Block	Humphrey	Murray	Gerhardt	Miller	TOTALS
CHILDREN PICTURES																								
F-stereotype	3	103	23	22	2	6	10	3	17	16	59	6	0	9	60	22	92	12	7	1	19	3	7	502
F-antistereo	7	23	15	17	0	0	0	0	0	8	0	10	0	0	5	8	6	2	2	0	0	1	3	107
F-neutral	8	26	24	48	0	1	0	7	0	24	15	6	0	9	13	52	18	18	6	3	1	19	4	302
M-stereotype	13	163	54	56	0	0	0	3	1	16	0	22	1	13	28	38	16	7	6	1	0	2	17	457
M-antistereo	3	48	14	12	0	10	14	1	27	7	5	6	0	5	30	1	47	2	7	1	11	0	5	256
M-neutral	3	200	58	120	0	3	0	6	1	35	1	17	1	10	24	53	43	13	30	15	1	33	30	697
Female-male	11	90	38	59	5	5	38	3	13	82	3	1	13	4	33	37	207	31	33	2	38	29	39	814
Sex unknown	5	8	14	8	1	1	2	0	4	6	4	15	1	3	18	19	26	5	3	2	7	0	9	161

TOTAL TALLIES OF ALL FEMALE AUTHORS

	Schurr	North	Joyce	Holbrook	Winters	Burton	Block	Murray	Gerhardt	Bryant	Logsdon	Assoc.	TOTALS
PRONOUNS													
Female	8	9	6	2	0	0	1	0	0	12	2	10	50
Male	745	114	81	11	196	7	293	187	365	412	407	95	2913
Plural	529	244	298	182	292	1052	265	376	114	501	869	293	5015
GENERIC													
Female	0	0	0	0	0	0	0	0	0	0	0	0	0
Male	13	16	1	0	0	0	1	6	46	1	13	6	103
Neutral	4	1	0	0	0	0	0	1	1	0	3	1	11
SENTENCES													
Stereotyped	57	1	0	0	5	10	0	8	0	7	4	14	106
Non-stereotyped	44	2	1	0	1	4	0	24	0	4	1	25	106
Neutral	7	0	1	0	0	0	0	1	0	1	9	16	35
TEACHER DESCRIPTION													
Female	0	1	10	2	154	2	32	85	61	0	0	9	356
Male	143	29	0	1	0	0	1	0	1	0	61	2	238
Plural	12	13	1	4	0	11	3	14	3	2	51	29	143
TEACHER PICTURES													
Female	3	0	0	0	2	3	29	1	14	0	0	1	53
Male	1	0	0	0	0	2	0	0	0	0	3	3	9
Plural	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILDREN PICTURES													
F-stereotyped	3	6	10	3	59	22	7	19	3	2	9	17	150
F-antistereotyped	7	0	0	0	0	8	2	0	1	0	0	0	18
F-neutral	8	1	0	7	15	52	6	1	19	0	9	0	118
M-stereotyped	13	0	0	3	0	38	6	0	2	0	13	1	76
M-antistereotyped	3	10	14	1	5	1	7	11	0	0	5	27	84
Male-neutral	3	3	0	6	1	53	30	1	33	0	10	1	141
Female-male	11	5	38	3	3	37	33	38	29	5	4	13	219
Sex unknown	5	1	2	0	4	19	3	7	0	1	3	4	49

TOTAL TALLIES OF ALL MALE AUTHORS

	Kirchner	Corbin	Morris	Fait	Humphrey	Arnheim	Pangrazi	TOTALS
PRONOUNS								
Female	15	0	5	0	0	8	34	62
Male	543	100	29	960	420	715	1413	4180
Plural	338	97	131	794	193	395	721	2669
GENERIC								
Female	0	0	0	0	0	0	0	0
Male	6	27	1	20	8	16	4	82
Neutral	6	2	1	3	5	6	0	23
SENTENCES								
Stereotyped	49	17	0	64	41	3	31	205
Non-stereotyped	30	9	0	8	8	12	41	108
Neutral	1	25	0	57	28	0	9	120
TEACHER DESCRIPTION								
Female	89	0	0	1	4	0	2	96
Male	8	9	3	42	4	53	58	177
Plural	42	9	9	5	35	7	11	118
TEACHER PICTURES								
Female	19	0	0	2	0	24	5	50
Male	13	1	1	8	0	20	9	52
Female-Male	0	0	0	0	0	0	1	1
CHILDREN PICTURES								
Female-stereotype	103	6	0	12	1	23	22	167
Female-antistereotype	23	10	0	2	0	15	17	67
Female-neutral	26	6	0	18	3	24	48	125
Male-stereotype	163	22	1	7	1	54	56	304
Male-antistereotype	48	6	0	2	1	14	12	83
Male-neutral	200	17	1	13	15	58	120	424
Male-female	90	1	13	31	2	38	59	234
Sex unknown	8	15	1	5	2	14	8	53

TOTAL TALLIES OF MALE-FEMALE AUTHORS

	Vannier	Kruger	Kirchner	Miller	TOTALS
PRONOUNS					
Female	35	0	10	11	57
Male	950	72	43	387	1452
Plural	677	529	716	329	2251
GENERIC					
Female	0	0	0	0	0
Male	22	4	0	38	64
Neutral	4	0	0	1	5
SENTENCES					
Stereotyped	38	16	1	12	87
Non-stereotyped	29	4	2	31	66
Neutral	24	8	2	449	483
TEACHER DESCRIPTION					
Female	77	1	0	6	84
Male	34	3	0	23	60
Plural	59	65	16	48	188
TEACHER PICTURES					
Female	13	23	16	2	54
Male	5	11	3	5	24
Female-Male	0	1	0	2	3
CHILDREN PICTURES					
Female-stereotype	16	60	92	7	175
Female-antistereotype	8	5	6	3	22
Female-neutral	24	13	18	4	59
Male-stereotype	16	28	16	17	77
Male-antistereotype	7	30	47	5	89
Male-neutral	35	24	43	30	132
Female-male	82	33	207	39	361
Sex unknown	6	18	26	9	59

TOTAL TALLIES OF MULTIPLE FEMALE AUTHORS

	Bryant	Logsdon	TOTALS
PRONOUNS			
Female	12	2	14
Male	412	407	819
Plural	501	869	1370
GENERIC			
Female	0	0	0
Male	1	13	14
Neutral	0	3	3
SENTENCES			
Stereotyped	7	4	11
Non-stereotyped	4	1	5
Neutral	1	9	10
TEACHER DESCRIPTION			
Female	0	0	0
Male	0	61	61
Plural	2	51	53
TEACHER PICTURES			
Female	0	0	0
Male	0	3	3
Female-Male	0	0	0
CHILDREN PICTURES			
Female-stereotype	2	9	11
Female-antistereotype	0	0	0
Female-neutral	0	9	9
Male-stereotype	0	13	13
Male-antistereotyp	0	5	5
Male-neutral	0	10	10
Female-male	5	4	9
Sex unknown	1	3	4

TOTAL TALLIES OF MULTIPLE MALE AUTHORS

	Arnheim	Pangrazi	TOTALS
PRONOUNS			
Female	8	34	42
Male	715	1413	2128
Plural	395	721	1116
GENERIC			
Female	0	0	0
Male	16	4	20
Neutral	6	0	6
SENTENCES			
Stereotyped	3	31	34
Non-stereotyped	12	41	53
Neutral	0	9	9
TEACHER DESCRIPTION			
Female	0	2	2
Male	53	58	111
Plural	7	11	18
TEACHER PICTURES			
Female	24	5	29
Male	20	9	29
Female-male	0	1	1
CHILDREN PICTURES			
Female-stereotype	23	22	45
Female-antistereotype	15	17	32
Female-neutral	24	48	72
Male-stereotype	54	56	110
Male-antistereotype	14	12	26
Male-neutral	58	120	178
Female-male	38	59	97
Sex unknown	14	8	22

TOTAL TALLIES OF SINGLE FEMALE AUTHORS

	Schurr	North	Joyce	Holbrook	Winters	Burton	Block	Murray	Gerhardt	TOTALS
PRONOUNNS										
Female	8	9	6	2	0	0	0	1	0	26
Male	745	114	81	11	196	7	293	187	365	1999
Plural	529	244	298	182	292	1052	265	376	114	3352
GENERIC										
Female	0	0	0	0	0	0	0	0	0	0
Male	13	16	1	0	0	0	1	6	46	73
Neutral	4	1	0	0	0	0	0	1	1	7
SENTENCES										
Stereotyped	57	1	0	0	5	10	0	8	0	81
Non-stereotyped	44	2	1	0	1	4	0	24	0	76
Neutral	7	0	1	0	0	0	0	1	0	9
TEACHER DESCRIPTION										
Female	0	1	10	2	154	2	32	85	61	347
Male	143	29	0	1	0	0	1	0	1	175
Plural	12	13	1	4	0	11	3	14	3	61
TEACHER PICTURES										
Female	3	0	0	0	2	3	29	1	14	42
Male	1	0	0	0	0	2	0	0	0	3
Female-male	0	0	0	0	0	0	0	0	0	0
CHILDREN PICTURES										
Female-stereotype	3	6	10	3	59	22	7	19	3	132
Female-antistereotype	7	0	0	0	0	8	2	0	1	18
Female-neutral	8	1	0	7	15	52	6	1	19	109
Male-stereotype	13	0	0	3	0	38	6	0	2	62
Male-antistereotype	3	10	14	1	5	1	7	11	0	52
Male-neutral	3	3	0	6	1	53	30	1	33	130
Female-male	11	5	38	3	3	37	33	38	29	197
Sex unknown	5	1	2	0	4	19	3	7	0	41

TOTAL TALLIES OF SINGLE MALE AUTHORS

	Kirchner	Corbin	Morris	Fait	Humphrey	TOTALS
PRONOUNS						
Female	15	0	5	0	0	20
Male	543	100	29	960	420	2052
Plural	338	97	131	794	193	1553
GENERIC						
Female	0	0	0	0	0	0
Male	6	27	1	20	8	62
Neutral	6	2	1	3	5	17
SENTENCES						
Stereotyped	49	17	0	64	41	171
Non-stereotyped	30	9	0	8	8	55
Neutral	1	25	0	57	28	111
TEACHER DESCRIPTION						
Female	89	0	0	1	4	94
Male	8	9	3	42	4	66
Plural	42	9	9	5	35	100
TEACHER PICTURES						
Female	19	0	0	2	0	21
Male	13	1	1	8	0	23
Female-male	0	0	0	0	0	0
CHILDREN PICTURES						
Female-stereotype	103	6	0	12	1	122
Female-antistereotype	23	10	0	2	0	35
Female-neutral	26	6	0	18	3	53
Male-stereotype	163	22	1	7	1	194
Male-antistereotype	48	6	0	2	1	57
Male-neutral	200	17	1	13	15	246
Female-male	90	1	13	31	2	137
Sex unknown	8	15	1	5	2	31

TOTAL TALLIES OF ACKNOWLEDGEMENTS AND REFERENCES

	Schurr	Kirchner	Arnheim	Pangrazi	Bryant	North	Joyce	Holbrook	AAHPER	Vannier	Winters	Corbin	Morris	Logsdon	Kruger	Burton	Kirchner	Fait	Block	Humphrey	Murray	Gerhardt	Miller	TOTALS
ACKNOWLEDGEMENTS																								
Female	1	0	12	2	1	6	29	4	2	8	3	4	2	0	0	9	12	8	5	0	20	9	0	137
Male	1	4	7	6	1	2	18	4	0	5	1	5	1	0	0	2	3	15	6	0	5	1	0	87
Unknown	0	0	0	1	0	2	3	0	0	0	1	0	3	8	0	4	1	6	4	0	1	0	0	34
REFERENCES																								
Female	60	9	0	59	3	4	10	4	45	9	38	6	4	0	119	88	0	44	35	33	318	103	45	1036
Male	70	23	0	74	2	12	3	2	31	25	24	2	15	0	118	83	0	72	45	53	238	121	139	1152
Female-male Association	13	12	0	11	0	0	1	2	6	10	11	0	0	0	23	23	0	20	13	14	31	17	11	218
Unknown	45	48	16	58	0	0	0	4	15	91	0	21	0	8	21	11	0	26	5	4	35	7	23	438
	12	183	241	21	0	6	1	28	7	359	5	304	8	247	63	17	0	21	29	13	100	46	37	1748

A P P E N D I X F

Sexist Statements Found in Sample of Textbooks

Miller, et al

- 80 In the upper grades (5 and 6) the importance of separate physical education programs for boys and girls with a qualified man teaching the boys and a qualified woman teaching the girls can be realized.
- 224 This type of stunt (combatives) is particularly suitable for boys, but many of the less strenuous ones can be used for girls as well.

Gerhardt

- 7 Man structures the world while the world structures man.

Humphrey

- 16 It may be said of the child that he IS his body.
- 107 Generally speaking, it is best to have boys participate with boys and girls with girls in most of the highly organized games. That is, in all of the highly organized games discussed here all participation should be on a sex segregation basis.
- 212 Our culture has tended to identify rope jumping as an activity exclusively for girls, particularly in the early age years of the child. Nevertheless, preschool experience in rope skipping is limited almost entirely to little girls. Thus, upon entering school, girls appear to be ahead of boys in this activity. However, it has been our observation that with skillful teaching boys will tend to improve much more rapidly than girls at rope jumping.
- 313 Girls are more aware of interpersonal relationships than boys.
- 314 Boys are more active and rough in games than girls.
- 315 Boys may be concerned if they feel they are underdeveloped.
- 315 Girls are more interested in social appearance than are boys.

Murray

- 6 The literature of dance has expanded and its unique and historic contribution to man's aesthetic nature is being examined in scholarly volumes.

Murray (continued)

- 144 Boys particularly need to be helped to shorten their steps.
- 261 Boys especially enjoy opposing a partner in movement which suggests conflict.
- 346 Boys should never be asked to approach a girl in class, make a bow and offer an arm to her. It is enough to ask them to walk, stand, or sit by the girl of their choice or to take her hand and draw her into the circle without making any more formal overtures.
- 381 . . . tambourines may be used with girls.
- 407 If boys are to like dance, it is essential that competition between them and girls be avoided.
- 408 Pointing out identical movement elements in dance and sports often helps to stimulate the interest of the boys in the group.

Arnheim and Pestolesi

- 135 However, from birth and throughout life, boys are substantially stronger than girls.

Bryant and Oliver

- 212 There will be more opportunity for skill development and increased pleasure in playing if there are two games--one for the boys, another for the girls. Of course, highly-skilled girls may join the team of their choice.
- 212 At times, let the boys have a game while the girls play some other activity.

Vannier, et al

- 15 Boys tend to like rugged games in which they can show their strength, while girls tend to favor rhythmical activities and team games.
- 107 . . . and mothers who sew. . . .
- 75 It is also customary in larger public schools to separate the sexes from the fourth grade level on through high school for instructional purposes, and for the girls to be taught by a woman and the boys by a man.
- 209 Boys especially respond well to exercises, for most are motivated by a desire to play on an athletic team.

Vannier, et al (continued)

- 621 For safety reasons, boys and girls should be separated for most competitive sports after ten years of age, for boys tend to surpass girls in strength, flexibility, endurance, and speed.

Pangrazi and Dauer

- 14 Peer status and relationships, particularly for boys, are better for those possessing suitable levels of physical fitness.
- 36 Since most fathers are employed, parental help is almost entirely made up of mothers.
- 44 However, all schools should consider separating boys and girls in some activities beginning in either the fourth or fifth grade.
- 172 The tieup of a basketball skill with rhythm tends to make the rhythmic program more attractive to boys.
- 175-6 The acceptance (creative dramatics) by intermediate boys has been marginal at best.
- 179 In some cases, girls can dance with girls but it is better to not have intermediate boys dancing with each other.
- 338 The more rugged, struggling types of combatives are more attractive to boys than to girls.

AAHPER--Children's Dance

- 41 . . . secretary brought her sewing machine. . . .
- 49 . . . the energy of the boys helps to take the girls beyond themselves. Too it is interesting for the boys to see the greater flexibility in the girls' bodies and to try to emulate the flow that comes from such flexibility.
- 49 . . . the boys crowd to the front of the room, take more leadership than the girls in creative exploration, and invent with the most provocative movement phrases.

Schurr

- 22 Because boys are stronger and more intensely interested in activity than girls are, it is important that the teacher not use an organization that permits boys to dominate game play and exclude girls.

Schurr (continued)

- 50 As boys particularly may not be interested in this phase of dance, unless they have a real tangible need to learn, it is foolish to force social dance on groups before they can use their skills in a social situation.
- 131 Any teacher will recognize the differences between boys and girls in skill, strength, and interest in activities starting as early as fourth grade and increasing in the fifth and sixth grades.
- 131 Boys frequently dominate play; consequently girls' skill and interest become retarded when they remain together for all activities in the upper grades.
- 132 Girls can learn a great deal from highly skilled boys if the teacher encourages teamwork or assistance, rather than permitting domination or ridicule of the girls by the boys.
- 214 Because social status for boys at fourth grade becomes quite dependent upon motor skill achievement it is extremely important that the boys with a low fitness level be identified and helped.
- 300 If there is no occasion or place where social dancing is appropriate outside of class, many boys are not interested in learning these skills before they reach high school.
- 458 Very soft softballs should be used in the intermediate grades and with girls.

Kirchner

- 23 . . . girls become concerned with their own personal femininity. Activities such as general body mechanics and social dance are now more important than vigorous and rough team sports. There may be early signs of tomboyishness; however after the beginning of puberty this gives way to the previous trend.
- 25 Girls and boys should be separated in team games to allow both sexes to develop according to their own level of skill and interest.
- 26 Boys tend toward more rough team sports, increased concern for physique and skill, and a dominant interest in competition. Girls begin to show concern for personal appearance, activities involving graceful and creative movements, and a general distaste for rough and vigorous sports.
- 139 Providing there are adequate facilities, boys from both classes are taught by the male teacher and the girls by the female teacher.

Kirchner (continued)

- 139 This is especially desirable for the fall and spring seasons where preferences in activities differ and where skill levels in sports such as soccer, volleyball, and softball are decidedly higher in boys.

Kruger and Kruger

- 444 The beginning dance teacher may also not realize the importance of making sure that the needs of boys are met and not just those of girls who usually like dance from the start.
- 423 Games for boys are an early need, while girls are content to continue with various kinds of gymnastics experiences.

Winters

- 117 It is the boys in the class who will be able to move the highest, widest, fastest and strongest.
- 118 In order to motivate the boys who are mechanically or scientifically inclined, relate each movement to the physical laws of movement.
- 232 Also several boys in the class who are interested in mechanics and physics may think of methods and ways of effecting an awareness of some of the basic principles of motor learning to the rest of the class.

NON-SEXIST STATEMENTS FOUND IN SAMPLE OF TEXTBOOKS

Corbin

- 13 Given equal opportunity, girls will no doubt show performance comparable to that of boys when performance data are presented in the future.

Burton

- 53 Boys are expected to take part in activities that elicit aggression, fearlessness, hardiness, roughness, and self-assertion, while girls are expected to display sensitivity, affection, compassion, kindness, fastidiousness, and demureness. It is socially acceptable for boys' play to be rambunctious, unrestrained, and daring, while girls are traditionally expected to be more quiet, meticulous, and dainty. Boys often display negative attitudes toward activities they consider "for girls". However, when children's play is observed objectively, individual differences appear to belie stereotypes. Some girls like to participate in team sports and track-and-field events, and some boys enjoy jumping rope and dancing.

Schurr

- 39 In the upper grades, boys and girls have been separated for classes, but this practice should be discontinued to allow for the realization of the potential of girls.

Murray

- 5 The human race has danced for pleasure and purpose from time immemorial.

Miller, et al.

- 348 Boys and girls in the fourth, fifth and sixth grades enjoy each other's company when participating in such vigorous activity as square dancing and when no problems are offered to the awkward or shy boys or girls.
- 318 Boys' choice has been the accepted method in our society, but today, girls' choice is equally viable.