The issue of negative bias against men in the female-dominated field of early childhood education is explored in three field studies focusing on the opinions of university students in education about male and female early childhood teachers and about selected teaching behaviors of men and women in this specialty. The first study investigated rapport between teachers and young children, comparing the rapport attributed to male teachers with that attributed to female teachers. A modified form of the Minnesota Teacher Attitude Inventory (MTAI) was administered to 105 undergraduates enrolled in an educational psychology course at the University of Manitoba. The second study, involving further modification of the MTAI and 35 additional undergraduates, focused on opinions about male teachers only. Taken together, the first two studies suggested that future teachers attribute less rapport with children to male teachers of young children than to female teachers and that this effect is especially noticeable when respondents compare male and female teachers. A third study compared the teaching skill attributed to male and female teachers of young children in three different classroom situations. Results suggested that while male teachers are not expected to establish rapport as well as female teachers, this bias does not extend to evaluations of specific behaviors. (RH)
Are there occupations where men, more than women, are the victims of negative biases? The studies reported here investigated this question in one particular female-dominated field, early childhood education. A variety of professionally oriented literature has reported difficulties for male child care workers (Seifert, 1973) and male teachers of nursery schools (Hopkins, 1977), even though the trend in this field of work may be toward greater acceptance of men (Robinson, 1981)--at least among those who publish articles in professional journals. Men in this field have reported awkward social relationships with colleagues, and some sex differences in styles of teaching; but not lack of confidence in their basic sensitivity to young children. These reports are based largely on personal testimony, but they are consistent with field studies both in early childhood education (Fagot, 1981; Lee and Wolinsky, 1973), and in other occupations where one sex overwhelmingly dominates the other in numbers (Fiddell, 1970; Rosen and Jardee, 1974a, 1974b).

Although studies of occupational suitability have produced somewhat inconsistent results, Ward (1981) has pointed out that a pattern may nevertheless exist: major field studies have demonstrated a pro-male (or anti-female) bias, but role-playing studies have shown a variety of other, sometimes conflicting influences. The difference exists, presumably, because field studies show the combined effects of personal beliefs and social circumstances, rather than the effects of merely personal (and not necessarily consistent) sex-role beliefs and attitudes. If so, then studies of stereotyping of occupational suitability or competence must be made in their occupational context—at least as much as is
practically possible.

So far, however, the two major field studies on this problem have assessed only male-dominated occupations: university teaching (Fiddell, 1970) and business management (Rosen and Jardee, 1974). In the first of these, males were judged superior to females in suitability and competence for hiring; and in the second, they were judged more suitable for promotion and in-service training, but less suitable for a leave-of-absence for personal reasons. Both studies were designed to compare imaginary "individu als" who differed systematically in level of competence and sex. Taken together, the two studies suggest that rather traditional stereotypes about men and women exist in these two occupations. Both the professional testimony cited earlier and research (for example, Deaux and Taynor, 1973), however, suggest that such pro-male bias may not exist throughout the working world, but only in occupations whose circumstances already favor men.

The present series of studies was designed to test this possibility, and at the same time to take partially into account Ward's hypothesis that field studies should be used as much as possible to assess sex-related biases. All three studies reported here used university students in education--future school teachers--to offer opinions about male and female teachers in early childhood education, and about selected teaching behaviors of men and women in this specialty. Presumably, therefore, these respondents did not suffer from the "incompetence bias" found in some studies (e.g. Ward, 1981), which apparently prevents devaluation of any individual member of an occupation, male or female. Although university education students probably did not feel as competent to judge teachers as would experienced teachers or school administrators, they probably did feel more competent than, say, members of the general public, university students in general, or even members of many other occupations.
One of the present studies (#3), in addition, was constructed to convince respondents that their opinions were needed to determine a national teaching award. In this way, it resembled Fiddell's field study of bias in university teaching, which used deception in order to make the consequences of respondents' judgements seem more real.

Study #1

This study investigated rapport between teachers and young children—the extent of positive harmonious relationships between them. In particular, it compared the rapport attributed to male teachers of young children, with that made to female teachers. It addressed two questions. First, do individuals believe that, in general, male and female teachers of young children can establish about equally relationships with kindergarten and Grade 1 children? Or do they, in line with societal stereotypes, expect that male teachers establish poorer rapport than do female teachers?

Subjects

Subjects consisted of 105 undergraduate education students enrolled in a required, introductory course in educational psychology at the University of Manitoba. Most were in their second or third year of a four-year Bachelor of Education teacher-training program. Of the total group, 81 were female and 24 were male. Fifty-two stated an intention to teach elementary grades (kindergarten through sixth), and 53, an intention to teach secondary grades (seventh through twelfth). These numbers are roughly proportional to the numbers in the current teaching profession in Manitoba.

Method

The subjects responded to a modified form of the Minnesota Teacher Attitude Inventory (Cook, et al., 1951), an inventory of opinion statements
about relationships between teacher and students (for example:

The original form of the M.T.A.I. contained 150 such statements, and respondents rated each one according to how well the statement reflected their own opinion about teacher-student relationships. In this form, according to an assortment of studies, the M.T.A.I. proved reasonably reliable (split half \( r = .9 \)) and valid as a measure of rapport—harmonious, positive feelings between teacher and students (Buros, 1953).

The present study modified the M.T.A.I. in two ways. First, instead of asking respondents to give their own opinions about each statement, it asked them to respond as they believed a "typical male (or female) teacher of kindergarten or Grade 1" would respond. Second, this study divided the M.T.A.I. into two equal parts. For questions 1-75, respondents answered as they believed a typical male teacher would; and for questions 76-150, as they believed a typical female teacher would. Previous validation studies suggested that the M.T.A.I. was homogeneous enough to allow this sort of division (Buros, 1978).

Results

The first and second halves of the questionnaire were scored separately. Each respondent thus had two "rapport scores," one attributed to a typical female teacher, and the second one attributed to a typical male teacher. The pairs of scores were then analyzed using a two-way ANOVA with one repeated measure. In this case the "between groups" factors were the sex and teaching level of the respondents (elementary vs. secondary), and the "within groups" factor was the rapport attribution. The results are summarized in Table 1. The sex of respondent and the rapport score factors both showed significant effects (\( p = .02 \)), but not the level of teaching factor. In general, female respondents attributed more positive rapport to teachers, whatever their sex;
Table 1

Rapport Scores Attributed To Male And Female Teachers of Young Children

<table>
<thead>
<tr>
<th>Sex of Respondent:</th>
<th>Sex of &quot;typical teacher&quot;:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Female</td>
<td>+10.5</td>
</tr>
<tr>
<td>Male</td>
<td>-3.4</td>
</tr>
<tr>
<td>Means:</td>
<td>+7.3</td>
</tr>
</tbody>
</table>

Note: Higher, more positive score indicates greater rapport attributed.
and respondents of either sex attributed more positive rapport to a "typical female teacher of kindergarten or Grade 1", than to a typical male teacher. The most positive attributions tended to be made by females about a female teacher, and the most negative ones by males about a male teacher.

Study #2

Although the first study suggests prejudice among future teachers against men entering early childhood education, the study itself may have created expressions of prejudice by its format. In particular, by asking students to make attributions to both sexes in the same testing situation, it implicitly highlighted sex role differences. Without actually being asked, respondents may have obliged the experiment by emphasizing sex role stereotypes. The second study tested this possibility.

Subjects

This study used 35 additional undergraduates in education; 24 were enrolled in a required educational psychology course, and 11 were enrolled in a required education curriculum course. None of these students had participated in the first study. Five of them were male, and 30 were female; and 27 stated an intention to teach the elementary grades, and 8 stated an intention to teach secondary grades.

Method

Once again, respondents rated items on a modified M.T.A.I. questionnaire. This study, however, made only one of the two modifications made previously. As before, respondents rated items as they believed a "typical" teacher of kindergarten or Grade 1 would rate them. All 150 items in this study, however, referred to a typical male teacher; none inquired about a typical female teacher. Explicit reference to maleness helped to insure that respondents gave opinions.
about that sex in a context somewhat less prone to contrast set than in Study #1. Leaving out all reference to gender in Study #2 would also have accomplished this goal, but at the expense of making the sex role bias of the ratings less clear. Since the "typical" teacher of kindergarten or Grade 1 is in fact female, some respondents might have answered a non-genderized questionnaire as if it referred to that sex alone. But not all could be assumed to do so.

Results

To allow comparisons with the results of Study #1, rapport scores were again calculated separately for questions 1-75 and 76-150. The two rapport scores correlated .85 (Pearson r), and did not differ significantly (t-test). The mean rapport score attributed to male teachers, however, was significantly more positive in Study #2 than in Study #1 (3.8 vs. -7.3), using a t-test. On the other hand, the rapport attributed to a male teacher in Study #2 was also significantly less positive than rapport attributed to females in Study #1 (3.8 vs. 7.3). In general, then, attributions of male rapport made in the present, no-contrast study fell intermediate between the attributions of males and females in Study #1.

Study #3

Taken together, the first two studies suggest that future teachers attribute less rapport to male teachers of young children than to female teachers, and that this effect is especially noticeable when respondents compare male and female teachers. Neither study, however, shows that this general bias affects evaluations of specific teaching behaviors of males and females. Would the same teaching incident be rated differently if it occurred to a male teacher than if it occurred to a female one? This question is essentially Goldberg’s paradigm (1968) applied to teaching behavior. It is
the basis for Study #3, which compares the teaching skill attributed to male and female teachers of young children in three different classroom situations.

Subjects

Subjects for this study consisted of 106 undergraduate education students in 3 sections of a required educational psychology course. Most had also participated in Study #1 or #2, though not in both. The ratings in Study #3 were collected about four to six weeks later than the M.T.A.I. ratings of the earlier studies. Seventy-eight of the respondents consisted of females; and 26 of males. Sixty-eight of them stated an intention to teach elementary grades; and 37 to teach secondary grades.

Method

Students in each class were asked to rate the overall teaching quality shown in each of three classroom incidents. Each incident described the behavior of one particular, but fictitious teacher of kindergarten who was supposedly applying for an (imaginary) national teaching award. For any one respondent, two out of the three incidents allegedly happened to a female applicant for the award, and the remaining one to a male applicant for the teaching award. Each incident was identical on all questionnaires, except that on one third of the sample it was presented as happening to a male teacher. On the remaining two thirds, it was presented as happening to a female teacher. Male and female versions of each incident differed only in the name of the teacher attached to it, and in the pronouns related to the name. Table 2 presents the incidents used as stimuli.

Results

Mean ratings for each of the three incidents are shown in Table 3. According to t-tests, each incident was rated significantly differently from
Table 2
Critical Incidents Used To Rate Competence
Attributed To Male And Female Teachers

Incident

#1: Darlene/Donald Livingstone
A tense, shy child started off the day by not letting any other children watch the pet hamster with her. The child consistently refused any help that the teacher—Darlene Livingstone (or Donald Livingstone)—offered. Finally Darlene/Donald carried the hamster and cage into another room, saying to the shy child, "The hamster will be all yours in here. No one will disturb you." To the others, Darlene/Donald said, "We'll let her look now, and have our turns later." This seemed to satisfy everyone.

#2: Barbara/Robert Fuller
The children were all making paper chains. One five-year-old looked at the paper and paste, observed how the other children were using the materials, and then boomed out in a loud voice: "Teacherrrrr, I caaaaan't doooooo it!" Barbara Fuller (or Robert Fuller) replied, "Yes you can. Just try, Ronnie." Then she/he sat down by the child and helped him to do it.

#3: Carol/Clark Hamilton
A child was playing in the indoor sandbox while the rest of the children were having a discussion. He was pounding on a tin can, making a lot of noise. Carol Hamilton (or Clark Hamilton) said, "Come sit over here with us. You are making too much noise." Carol/Clark waited until the child actually stopped, and then shifted her/his attention back to the main group. The child remained quiet, though he never did return to the group.
Table 3

Mean Ratings of Competence on Critical Incidents

<table>
<thead>
<tr>
<th>Incident</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;award applicant&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>#2</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>#3</td>
<td>2.9</td>
<td>2.6</td>
</tr>
</tbody>
</table>

(Note: 5 = "excellent"; 4 = "good"; 3 = "middling"; 2 = "fair"; 1 = "poor").
each other incident (p < .05 to p < .001). The lowest rated incident, #3, may have been ranked low because it described some somewhat dictatorial behavior by the teacher. The highest ranked incident, #2, may have been preferred because it described encouragement by the teacher.

In any case, the ratings of the male and female "award applicants" were not significantly different for any incident (t-tests). To test further for sex differences in attributed competence, the ratings of each incident were analyzed by a three-way ANOVA, using as factors the sex of the respondent, the intended teaching level of respondent, and the sex of the imaginary aware applicant. Consistent with the t-tests, no significant main effects were found; and significant interactions occurred only for incident #3: the sex of respondent by sex of "award applicant," and the teaching level of respondent by sex of "award applicant." Both of these confirmed trends already found in Study #1. Female respondents to incident #3 tended to rate teachers (or in this case, one of their behaviors) higher than did male respondents. In addition, elementary education respondents tended to rate teachers (or their behavior) higher than did secondary education respondents. The first of these trends reached significance in Study #1, and the second one approached it, but did not reach it.

Discussion

Taken together, these three studies suggest that men who teach young children may in fact experience some general prejudice against them: they are not expected to establish rapport with their students as well as female teachers are. This bias, however, does not extend to evaluations of specific behaviors—at least when those behaviors supposedly belong to teachers of award-winning calibre. Thus far, then, the evidence suggests that men are more likely to be judged unsuitable for early childhood education, rather than incompetent once they have entered it.
The distinction between suitability and competence may partially explain why so few men have entered this female-dominated work. Perhaps it is not that men leave early, childhood education after having tried it and failed, but that they are not allowed or encouraged in the first place. The hypothesis is supported further, if indirectly, by the sex difference in ratings found in Studies #1 and #3. The gender most negative in their evaluations—males—was also the gender currently most likely to become school administrators, and most likely therefore to assume a "gatekeeping" role within early childhood education. Persons in such a role may judge applicants' general suitability more often than they assess the competence of specific teaching behaviors. If so, then male teachers of young children may be hurt more by bias against their suitability, than they are helped by fairness about their competence. These possibilities can and should be tested directly by studying the beliefs and attitudes of actual school administrators, rather than merely those of future teachers and administrators, as was done here. Analogous processes have already been found to prevent some women from entering school administrative posts (Adkison, 1981).

The results of the present studies are also consistent with the "minority as threat" hypothesis suggested by Ward (1979, 1981) and Touhey (1974). They proposed that sex-related biases do not in fact exist throughout the population, but only in those special groups who feel their status threatened by the entry of a minority into the group. In the study by Fiddell, for example, perhaps university professors felt "invaded" by the possibility of large numbers of female professors joining faculties, and they therefore showed anti-female bias about hiring them. Likewise, in Rosen and Jardee's study, perhaps the business managers felt similarly threatened.

Since early childhood education is dominated by women, however, it is they who may feel threatened, and therefore biased against including males in
this field. The rapport scores partially support this hypothesis, since women respondents rated male teachers of young children more poorly than they rated female teachers. Perhaps, therefore, some women intending to teach young children feel that men entering this field will deprive them of whatever occupational status women have been able to have in modern society. Teaching young children has, after all, traditionally been one of the relatively few occupations available to women.

Presumably the gatekeeping and threat hypotheses may both have truth in them. Note, however, that in a female-dominated field like early childhood education, the hypotheses cannot act jointly, as they can in male-dominated fields. In businesses and universities, for example, the gender of the gatekeepers (the supervisors and department heads) is generally the same as the gender of the individuals who feel threatened. In early childhood education, the genders of the gatekeepers (principals, superintendents) is opposite the gender of those feeling threatened. These facts would suggest that anti-female bias would be stronger or more consistently expressed in male occupations than in female ones; but that anti-male bias would nonetheless exist in female occupations. Such a trend should in principle be testable. Investigating it, in fact, might further help to bring clarity to the issue of occupational sex-role biases.
References


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