Sex Differences and Parental Influence in Sport Involvement of Children

John H. Lewko
Laurentian University

Martha E. Ewing
University of Illinois at Urbana-Champaign

Children ($N = 370$), ages 9 to 11 years, responded to a fixed-alternative questionnaire which examined the influences of mothers, fathers, sisters, and brothers on the sport involvement of males and females. The following predictions were tested: (a) at similar levels of involvement (high or low), males would be discriminated from females by significant others; (b) value toward sport would discriminate between high- and low-involved males and females; (c) for high levels of involvement, fathers would be the most discriminating variable for both males and females. Within-sex discriminant analyses revealed fathers as predominant socializing agents for high-involved males, while all agents discriminated between high/low females. Between-sex discriminant analyses revealed significant differences only for high-involved males and females. Results were discussed in terms of early parental socialization practices and the support/encouragement necessary to increase sport involvement, particularly for females.

In both the United States and Canada increased attention is being directed to childhood sport programs, and in particular the extent to which females are active participants. Although such concern is warranted, only limited information is available to explain the process by which children become actively involved in sport and the possible biases that may result as a consequence of this process. This study was designed to examine children's socialization into sport and specifically the influence of family members on the sport involvement of males and females.

The sparse literature on sport socialization of children suggests that the family in general, and parents in particular, are instrumental in determining children's sport involvement (Orlick & Botterill, 1975; Snyder & Spreitser, 1976; Watson, 1975; Greendorfer & Lewko, Note 1). Apart from the Greendorfer and Lewko (Note 1) study no effort has been made to examine the role of specific family members and their influence on both males and females. Although the

Requests for reprints and/or copies of the questionnaire and the items used to construct the predictor variables should be sent to John H. Lewko, Director, Child Development Studies, Laurentian University, Sudbury, Ontario, Canada, P3E 2C6.
results of the Greendorfer and Lewko (Note 1) study identify the father as a major socializing agent for both sexes, the findings were only preliminary and a more careful examination of family member influence is necessary. The presence of and variation in such influence should be most readily detected through the analysis of children who perceive themselves to be at different levels of sport involvement. If family member influence varies according to level of involvement, a major facet of the sport socialization process will have been identified.

Parents do tend to respond to males and females in sex stereotypic fashion in the area of play and games (Lamb, 1976; Lewko & Greendorfer, 1978). Males are encouraged to participate in more active pursuits outside the home whereas females are reinforced for engaging in sedentary activities within the confines of the home (Lever, 1976; Saegert & Hart, 1977). Therefore, if the influence of parental socialization variables extend to sport involvement, one should find different socializing variables discriminating between the sexes at the same level of involvement. The available literature also suggests that family members, and parents in particular, perceive and define sport as more appropriate for males (Caplan & Kinsbourne, 1974; Lynn, 1959; Stein, Pohly, & Mueller, 1971; Wiggins, 1973). Such a stereotypic orientation could result in sex differences in children's value toward sport. These differences could be a major factor in determining the extent to which a child would become involved in sports.

Fathers are reported to be more concerned about sex-typing than are mothers (Biller, 1976; Lamb, 1976); thus, one would anticipate them playing a central role in the sport socialization of both sons and daughters. It was therefore predicted that father influence would be most prominent with children who are more highly involved in sport, with the influence being greater for males than females. The implication of this prediction would be a more rigid and consistent pattern of influence in sport socialization of males than females, thereby revealing a major problem in the drive to have females become more involved in sport activities.

In summary, it was predicted that at similar levels of involvement (high or low), males would be discriminated from females by significant-other influences. Second, value toward sport would discriminate between high- and low-involved males and females. Finally, for high levels of involvement, fathers would be the most discriminating variable for both males and females.

**Method**

**Subjects**

Subjects were 370 elementary students from three Midwest public schools. All subjects were in Grades 4 through 6 and were 9 to 11 years of age, with the three ages corresponding to the three grade levels. All children in the respective grades who were in attendance on the day of testing were included in the sample. Questionnaires were administered to subjects in their classrooms with all subjects required to work independently. The students represented diverse geographical backgrounds (i.e., rural, inner city, urban) and were predominately white (80% of males, 75% of females). Of the total sample, 203 were females and 167 were
males. Approximately one third of both the male and female students were represented in each age group. Only a small percentage of the sample (4%) were from single parent homes.

**Questionnaire**

All subjects completed a nine-page, fixed-alternative questionnaire (Green-dorfer & Lewko, 1978); however, only those data pertaining to family member influence were included in this study. To determine the reliability for the Sport Involvement Inventory, the test-retest method was used. Test-retest reliability was determined for a comparable age group from a sample of children who were participants in a Summer Fitness Program at the University of Illinois at Urbana-Champaign. Within this group, 95 children were administered the Sport Involvement Inventory and retested 2 weeks later. The results indicate that test-retest reliability \( r = +.74 \) was above the accepted criterion level which usually is recognized to be between .60 and .70.

The dependent variable, active sport involvement, was measured by three questions: How much do you play sports, games, etc.?; How much do you take part in sports programs at your school?; How much time do you spend watching or reading about sports? Predictor variables were constructed for each family member influence (father, mother, sister, and brother, with six questions per construct), perceived value of participation in sports to self and others (three questions each) and one's perceived capability in sports (two questions). The values of the items comprising each of the variables were scaled from 1 to 5 so that higher scores reflected greater sport involvement, family member influence, values, and perceived capability. Subjects' responses along an ordinal scale were summed to obtain the numerical values for each constructed variable.

Data on socioeconomic status were not available due to institutional concerns for protection of the individual's privacy. School administrators were unanimous in their stipulation that no questions be asked which would indicate the current socioeconomic status of the child's family.

**Results**

In order to conduct meaningful and interpretable analyses of the socializing influences on sport involvement, the dependent variable, active sport involvement, was divided into dichotomous groups (high and low). Because the range of scores on level of involvement was identical for both sexes, the group mean was used for the divisions, thus insuring that comparable groups would be used in the analyses. By combining the two levels of involvement (high and low) with sex of the subject, four groups were obtained (high- and low-involved males, high- and low-involved females). These groups were subjected to discriminant function analyses (Tatsuoka, 1971). For each paired comparison, the following variables were included in Rao's V step-wise solution: other's values toward sport, self-values toward sport, perceived ability, and the relative influence of the father, mother, brother(s), and sister(s).
The first concern was to determine if differences in socialization influence existed within each sex. Through discriminant analysis high-involved males were found to be significantly different from low-involved males, $\chi^2(7) = 40.56, p < .001$ (see Table 1A). The most discriminating predictor variables were values toward sport (both self and others) and father's influence. Influence from other family members was comparable for all boys. As can be seen from the means in Table 2, boys who are highly involved in sport value these activities more than low-involved boys. In addition to these cognitive variables, boys who are highly involved in sport receive more influence from their fathers. This finding supported the original prediction. Regardless of their level of involvement, boys perceived their sport ability to be high (approximately 8 on a 10-point scale). Although the objective ability level of the subjects was not determined, the high perception of ability by all males would contribute toward discounting this variable as a major influence in sport involvement for this age group. Kukla (1978) has proposed that level of perceived ability is a major factor in choice of achievement activities, of which sport may be considered a part. An alternative explanation might be that the low-involved males were being self-enhancing in attributing greater ability to themselves than they actually possess, with the strength of the male-appropriate stereotype of sport contributing to this bias.

A significant difference was also obtained between high- and low-involved girls, $\chi^2(7) = 94.18, p < .001$ (see Table 1B). In this analysis, all the predictor variables discriminated girls who were highly involved from those who were not. This means that girls who do become actively involved in sport receive more influence from each member of the family (mother, father, brother, sister), value sport more, and perceive themselves to be more capable of sport participation than girls who are not so actively involved.

In comparing the differences between the males and females, it is apparent that socialization influences for the boys are more circumscribed than for the girls. These findings are consistent with the interpretation of sport as more male-appropriate and less female-appropriate, and with the evidence of sex-stereotypic responses by parents in the area of play and games (Lamb, 1976; Greendorfer & Lewko, Note 1). In order for young females to become highly involved in sport, many sources of influence may have to be present to overcome their past experiences which have tended to socialize them in a stereotypic fashion.

A more definitive test of sex differences in sport socialization was provided by discriminant function analyses between males and females at the same levels of involvement; that is, were low-involved boys influenced differently than low-involved girls and were high-involved girls influenced differently than high-involved boys? No significant differences were found in influencing agents between low-involved boys and girls, $\chi^2(7) = 13.35, p > .05$ (see Table 1C). The lack of discriminating variables suggests that both sexes were being similarly influenced regarding their involvement in sport.

The discriminant function analysis for high-involved males and females was significantly different $\chi^2(7) = 58.33, p < .001$ (see Table 1D). The most discrim-
Table 1—Summary of Discriminant Analyses

A. High Male vs. Low Male*
\[ V = -0.59317 \text{ (self-value)} - 0.47502 \text{ (others' values)} - 0.3710 \text{ (father's influence)} + 0.30375 \text{ (sister's influence)} - 0.13820 \text{ (mother's influence)} - 0.06818 \text{ (perceived ability)} + 0.03582 \text{ (brother's influence)} \]
Eigenvalue = 0.28548  
Cannonical Correlation = 0.47125  
Wilks Lambda = 0.77792

B. High Female vs. Low Female*
\[ V = -0.45564 \text{ (mother's influence)} - 0.25209 \text{ (perceived ability)} - 0.23921 \text{ (father's influence)} - 0.18953 \text{ (sister's influence)} - 0.14793 \text{ (brother's influence)} + 0.054278 \text{ (self-value)} - 0.04532 \text{ (others' values)} \]
Eigenvalue = 0.61100  
Cannonical Correlation = 0.61585  
Wilks Lambda = 0.62073

C. Low Males vs. Low Females
\[ V = +0.57835 \text{ (mother's influence)} + 0.56546 \text{ (others' values)} - 0.54435 \text{ (perceived ability)} - 0.42406 \text{ (self-value)} - 0.31806 \text{ (father's influence)} + 0.07988 \text{ (brother's influence)} - 0.07563 \text{ (sister's influence)} \]
Eigenvalue = 0.08346  
Cannonical Correlation = 0.27754  
Wilks Lambda = 0.92297

D. High Males vs. High Females*
\[ V = -1.03708 \text{ (mother's influence)} - 0.57113 \text{ (sister's influence)} + 0.46494 \text{ (father's influence)} + 0.35582 \text{ (perceived ability)} - 0.30806 \text{ (brother's influence)} - 0.19655 \text{ (self-value)} + 0.09752 \text{ (others' values)} \]
Eigenvalue = 0.35390  
Cannonical Correlation = 0.51127  
Wilks Lambda = 0.73861

*p < .001.

Table 2—Means and Standard Deviations for Sex × Involvement Groups

<table>
<thead>
<tr>
<th></th>
<th>Low males</th>
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<th>High males</th>
<th></th>
<th>Low females</th>
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<th>High females</th>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
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<td>M</td>
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<td>M</td>
<td>SD</td>
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<tr>
<td>Others' values</td>
<td>15.34</td>
<td>4.79</td>
<td>18.81</td>
<td>4.50</td>
<td>16.74</td>
<td>5.23</td>
<td>20.65</td>
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<td>13.33</td>
<td>1.80</td>
<td>10.79</td>
<td>2.48</td>
<td>13.50</td>
<td>1.56</td>
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<tr>
<td>Perceived ability</td>
<td>7.32</td>
<td>1.70</td>
<td>8.13</td>
<td>1.57</td>
<td>6.72</td>
<td>1.56</td>
<td>7.94</td>
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<tr>
<td>Father influence</td>
<td>15.13</td>
<td>4.63</td>
<td>18.46</td>
<td>4.34</td>
<td>14.92</td>
<td>3.53</td>
<td>18.53</td>
<td>4.06</td>
</tr>
<tr>
<td>Sister influence</td>
<td>11.32</td>
<td>5.18</td>
<td>11.21</td>
<td>5.29</td>
<td>11.89</td>
<td>5.22</td>
<td>14.60</td>
<td>6.77</td>
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</table>
inating variables were mother's, sister's, and father's influence. For these predic-
tor variables, mothers and sisters provided more influence to the girls than to the
boys (see Table 2). Both father's and sister's influence revealed a slightly
higher mean for the girls. It would appear that high-involved girls are receiving
more encouragement to participate than are the boys. However, because boys
begin to be socialized into sport-oriented activities much earlier than girls
(Fagot, 1978; Tasch, 1952; 1955) and this persists over time (Lever, 1976; Saegert
& Hart, 1977), it is reasonable for them not to perceive the influence as unusually
high. On the other hand, because girls are not so directly socialized into sport
activities, encouragement from any significant individual would be given greater
weight. Although girls may not actually be receiving more encouragement than
boys, even similar amounts of encouragement would seem greater in magnitude
for them. These same results might also suggest that if girls are to become highly
involved in sports, family encouragement should be greater than that being given
to boys.

The remaining predictor variables in this analysis (values toward sport,
perceived ability, and brother's influence) suggest that other persons value sport
more for boys than for girls which is consistent with the notion of stereotyping
sport as male-appropriate, and that girls value sports slightly more for them-
selves than do boys. This latter result, although opposite in direction to the
original prediction of males holding higher values toward sport, may also be very
logical. In order for girls to be actively involved in sports, their value orientation
would have to be high because they would be entering what has been a male-orien-
ted achievement setting and in a sense violating a social expectation. Males,
on the other hand, would be engaging in activities that are deemed appropriate
and expected of them and would not encounter such resistance. The high
perceived value of sports for girls could be a reflection of the family influence for
them to participate, perceived family expectation, or a reflection of the current
acceptance of women's sport involvement. The absence of sex differences in
values toward sport for the low-involved children reported previously mirrors
the fact that no significant other was providing the support and encouragement
necessary for involvement.

In order to become highly involved in sport it is clear that both males and
females require support and encouragement, from parents in particular, with the
need for such influence being more pronounced for females. The differences in
early socialization patterns where boys receive more "sport"-oriented experi-
ences provide a natural sequence for sport to become a basic part of their
behavior (Lever, 1976; 1978). In contrast, for girls to become active participants,
they must deviate from current activity patterns of females which are less sport
oriented. Therefore, modifications of both the early parental interactions and the
stereotype of sport as more androgynous may contribute to a greater involve-
ment of females in sport.
Reference Note


References


Manuscript submitted: 7/24/79
Revision received: 1/2/80