Shaping the World of the Child: Parents' Socialization Practices

Rena D. Harold
Michigan State University

This paper was presented at the conference on "Creating Caring Communities: Understanding Youth Development" sponsored by the Institute for Children, Youth, and Families, Michigan State University, East Lansing, Michigan, November, 1990. The research contained within was made possible by grants from the National Institute of Mental Health (MH31724) and the National Institute of Child Health and Human Development (HD17296 and HD17553) to Jacquelynne S. Eccles.
ABSTRACT

Research suggests that the opportunities parents make available to a child can play a primary causal role in the child's development and contribute to the child's abilities in those activity domains; and that parents' provision of opportunities and encouragement might lead to the children's perception of the value their parents place on given activities, their own valuing of those activities, and their subsequent decision to pursue them. A case in point involves the development of children's vocational choices. Parents play a formative role by encouraging children to pursue some course or activity options while discouraging or ignoring others by providing certain opportunities for their youngsters and by making their expectations and values known to their children. Data are presented from two studies of children and their parents that explore gender differences in opportunities, expectations, and aspirations that parents have for their sons and daughters. Parental provision of opportunities and encouragement are discussed as it relates to children's perceptions of their own abilities, and as a motivational factor that may underlie children's decisions regarding various activity-related choices across domains.
Shaping the World of the Child:
Parents' Socialization Practices

Among the socialization goals of the family is the development of children's activity and vocational choices. In setting paths and trajectories in motion, parents can play an early formative role by encouraging children to pursue some activity options while discouraging or ignoring other possible choices. Parents may do this, in part, by providing certain opportunities and materials for their youngsters. Hunt (1964) stated that experience is the "programmer" of the human brain. As an example, research (e.g., Bradley, Caldwell, & Rock, 1988) suggests that the opportunity structure, including toys, books, equipment, and exposure to various activities, that is available to a child can play a primary causal role in the child's development and contribute to the child's abilities in those activity domains. Work by Eccles and her colleagues (e.g., Eccles (Parsons), 1984; Eccles (Parsons), Adler, Futterman, Goff, Kaczala, Meece, & Midgley, 1983) would suggest that parents' provision of opportunities and encouragement might lead to the children's perception of the value their parents place on given activities, their own valuing of those activities, and their subsequent decision to pursue them. A case in point is the influence parents have on their children's vocational aspirations by making their expectations and values known to their children.

Why do children pick some activities and not others from the wide array of choices available to them? There are obviously many partial answers to this question. This paper will focus on one important influence in shaping the child's world, the socialization practices of the parents, specifically as they relate to the opportunities that parents provide for their children, and will present data from two studies that illustrate this issue.
It seems important to begin by placing the role of the parent as a socializer in a broader framework. Over the past several years, Eccles and her colleagues have developed a theoretical model for studying the motivational factors that underlie individuals' decisions regarding various activity and achievement-related choices (Eccles (Parsons), 1984; Eccles (Parsons) et al., 1983). Although most of the work validating this model has focused on school achievement patterns, the model has been extended to a wide variety of activity choices (Eccles & Harold, in press), and can serve as a guide for the exploration of the origins of the social-psychological attitudes most closely related to these choices.

A MODEL OF ACTIVITY CHOICE

The Eccles (Parsons) et al. model, as depicted in Figure 1, is based on expectancy-value models of choice. The model links choice to performance expectations and to the importance, or value, individuals attach to the available options. It also specifies the relation of these constructs to cultural norms, the experiences one has growing up, aptitude, and a set of personal beliefs and attitudes associated with various activities (see Eccles (Parsons) et al., 1983). The model is built on the assumption that it is one's interpretation of reality rather than reality itself (i.e., past successes and failures) that most directly influences activity choices. The influence of reality on achievement-related beliefs, outcomes, and future goals is assumed to be mediated by interpretative systems, the input of primary socializers, one's needs and values, one's self-schema, and one's perception of the available options. Each of these factors is assumed to contribute both to the expectations one holds for future success at the available options and to the subjective value one attaches to these options. Expectations and subjective value, in turn, are assumed to influence the
decision to engage in particular activities, the intensity of effort expended, and one's actual performance level.

In summary, then, the model is based on the assumption that activity choices are made in the context of a variety of choices. Furthermore, these choices, whether made consciously or nonconsciously, are assumed to be guided by one's expectations for success at the various options; by such core personal values as achievement needs, competency needs, personal goals, motivational orientation, and gender-role schemata; by more utilitarian values such as the importance of participating in various activities for one's future goals; and by the potential cost of investing time in one activity rather than another.

**Expectancies as Mediators of Choices**

Expectancies for success have long been recognized by decision and achievement theorists as important mediators of behavioral choice (e.g., Atkinson, 1964; Lewin, 1938). There have been numerous studies demonstrating the importance of performance expectations for a variety of behaviors including academic performance, task persistence, and task choice. Eccles (Parsons) et al. (1983) suggest the following attitudes and beliefs as critical mediators of performance expectancies: (1) self-concept of ability; (2) estimates of task difficulty; (3) interpretations of previous experiences and performances; (4) identification with masculine and feminine gender roles; and (5) the beliefs and behaviors of significant socializers such as parents, peers, and other adults, that is the focus of this paper. The model presented in Figure 2 demonstrates parental influences.
Beliefs and Behaviors of Significant Others

Neither beliefs nor self-perceptions develop in a vacuum. In the case of gender-roles, for example, ample evidence documents the fact that peers, friends, siblings, parents, TV, coaches, and other adults such as school teachers, neighbors, and camp counselors all contribute to the shaping of these beliefs and self-perceptions over time (see Greendorfer, 1983; Huston, 1983; Eccles & Hoffman, 1984; Horn, 1987; Lewko & Ewing, 1980). The Eccles et al. model focuses attention on the role significant others play in shaping children's self-perceptions in two primary ways: (1) as providers of experience, and (2) as interpreters of experience. The people around children help them interpret their experience and, in so doing, influence the inferences children make about their successes and failures in various domains. To the degree that these people let the gender of the child influence their interpretations, they contribute to the emergence of gender differences in children's self-perceptions and expectations (Eccles, Jacobs, & Harold, in press).

Similarly, by providing children with various experiences, the people in children's lives structure the opportunities the children have for forming ideas about their own competencies. To the extent that socializers systematically provide boys and girls with different experiences, girls and boys will have different opportunities to discover their various talents and interests, and, thus, are likely to form different self-perceptions and task values (see Eccles & Hoffman, 1984; Huston, 1983).
VALUES AS MEDIATORS OF CHOICES

Task value is the second major influence on task choice. In the Eccles et al. model task value is assumed to be a quality of the task or activity that contributes to the increasing or declining probability that an individual will select it (Eccles (Parsons) et al., 1983).

Just as socializers affect the development of self-perceptions and expectations, so too they should affect the value that children come to attach to various activities (subjective task value). Socializers can affect children's developing subjective task values by directly communicating the value they attach to various activities. They can also affect value by providing the child with opportunities to engage in various activities in either enjoyable or stressful contexts, and by the interpretations they provide children for the children's experiences, and for their successes and failures. Finally they can affect children's developing subjective task values through their power as role models. Considering the gender role example, then, to the extent that any of these processes described above are gender-differentiated and evidence suggests that many are (see Eccles & Hoffman, 1984, Greendorfer, 1983, and Huston, 1983), they will contribute to gender differences in participation in various activities.

SUMMARY

In sum, what are the influences that lead a person at a particular point in time to having a set of expectations and a set of values associated with a specific activity? As the model depicts, moving backwards from right to left, an individual's goals and general self-schemata, which are socialized and evolve over time, play an important role. In addition, the affective memories that people have are important: good or bad experiences may have occurred when particular activities were engaged in in the past. These affective memories will
be stored both in a person's view of the self and in her/his view of the activity, and thus may affect the likelihood of engaging in similar activities in the present and future.

The next set of beliefs deals with the children's perception of their social system and of the people (i.e., parents, teachers, coaches, peers) who interact with them. These, of course, are directly related to the actual beliefs of these people - beliefs such as their estimates of the children's abilities, their view of the importance of excelling in, and/or participating in various activities, their causal explanations for the children's successes and failures, their beliefs about whether talent in various activity domains is learned or inherited, and their gender-role ideology (e.g. Eccles et al., in press; Greendorfer, 1983; Lever, 1978; Lewko & Ewing, 1980).

Of course, it is known that children have differential aptitudes. These differences, however, are not necessarily a major influence on participation in an activity except at the extreme ends, e.g., who gets to play sports professionally, or who gets a Ph.D. in mathematics. It should have much less impact on the broad range of people who have sufficient ability to engage in an activity and do it with a reasonable degree of mastery. However, the model assumes that even the effect of extreme levels of aptitudinal differences are mediated through intervening variables. One parent may choose to devote a lot of time and energy to helping (or forcing) a child to develop his/her natural aptitude for sport or other activities (Bloom, 1985), while another parent may lack either the resources or the desire to do this and then the child's potential is unlikely to be realized.

**EMPIRICAL FINDINGS**

Two different populations are represented in the studies to be presented in this section. The first study is a four-year longitudinal study that explores the
ontogeny of children's self-perceptions and values during the elementary school years. Study two is a two-year longitudinal study that explores the transition from elementary to junior high school and examines children's ability self-perceptions, values, and activity choices before and after this transition. Both studies consider the socialization effects of parents and teachers, and both employ data gathered from all three sources: the child, the parent, and the teacher.

**Study One**

The data focused upon here from the first study were collected from approximately 500 mothers and 300 fathers and their first, second, and fourth grade children. This number represents over 80 percent of the children asked to participate, and approximately two-thirds of the families. We began with approximately equal size cohorts of kindergartners, first, and third graders, divided almost evenly between boys and girls, and have administered measures to each cohort over the past three years. These students are currently in fourth, fifth, and seventh grades.

Among the questions asked, parents estimated the amount of time they typically spent with their children doing a variety of activities and rated the extent to which they encouraged or discouraged their children to participate in these activities or to take lessons. Additionally, they rated their children's ability in each activity area. Children were asked to rate both their perception of their parents' value of these activities and their own belief about the importance of doing well in the activities. Children also rated their self-concept of ability in each area.

Table 1 presents the results of two-factor (parent gender X child gender) ANOVAs illustrating that, in general, mothers spent significantly more time doing a wider variety of activities with their children than fathers. Some exceptions
are noted: e.g., fathers spent more time doing computer and sports activities with their children. In addition, results also show that both parents spent more time with their sons on sports and computer activities than with their daughters. Similarly, boys were encouraged more than girls to participate in sports, while girls were more strongly encouraged to participate in reading and music than boys. No interaction effects were found.

Insert Table 1 About Here

We then examined the data in relation to the Eccles' (Eccles (Parsons) et al., 1983) expectancy-value model. Would parents' provision of opportunities be related to their children's perceptions of their own ability, of how much their parents valued the activity, the children's own valuing of the activity, and their eventual choice of activity involvement? Regression analyses, in the area of music for example, show that while holding the children's ability level constant, as rated by their parents, there was a relationship between parents encouraging their children to take music lessons and their children's perception of the importance to their parents of playing a musical instrument ($\beta=.25$, $p<.001$), which was related to the children's own view of the importance of playing a musical instrument ($\beta=.52$, $p<.001$).

**Study Two: Method**

The second study focuses on adolescents. Approximately 3000 children in 12 different school districts were studied over four waves of data collection: the fall and spring of the children's sixth grade, and the fall and spring of their seventh grade school year. Children were recruited to participate in their classrooms. Approximately 90 percent of the children asked agreed to
participate and got the necessary parental permission. The data reported here come from approximately 1500 mothers and their seventh grade children.

Again, using the Eccles et al. model of choice, the junior high data was employed to examine a case in point: the development of children's vocational choices. Although there have been some shifts in the types of jobs women now seek, the occupational career paths of women and men continue to differ (Eccles, 1987), and the occupational plans of adolescents correspond to this difference (Gerstein, Lichtman, & Barokas, 1988). The question then arises as to whether parents of boys do or say something systematically different from parents of girls as they influence their children's vocational development. Are there gender differences in the kinds of opportunities and advice provided or in the expectations, aspirations, and ability assessments held by mothers for their sons and daughters, and what is the link to their children's occupational aspirations?

As in the elementary school years study, children completed questionnaires in the schools. Many of their parents participated by completing mailed questionnaires that asked a broad range of questions about their assessments of their children's skills and motivation, as well as questions about their own beliefs and socialization practices. Specific parent measures for this study include provision of opportunities for the child (e.g., provided computers, software, or programs, enrolled in music, art, or dance lessons, bought sports equipment); expectations for the child following high school (e.g., go into the military, get married); advice about future (e.g., education or training needed for different jobs, problems of combining work and family); aspirations (e.g., want child to have a job that will support self and family); assessments of child's academic skills and motivation (e.g., how well is child doing in English?, how successful would child be in career requiring math?); and beliefs about
family/work roles (e.g., it is better if the man is the breadwinner and the woman takes care of the family).

Student measures include their beliefs about similar family/work roles and their occupational aspirations as assessed by the question of what job they would like to have when they are 30 years old and coded using standard U.S. Occupational Classification codes. Each answer was then sex-typed based on the 1980 U.S. Census Bureau's information on occupations by sex (U.S. Department of Commerce, 1982) as a measure of the traditionality of their aspirations. If 70% or more of one gender held a particular job, the job was then coded as being sex-typed for that gender.

Pearson product-moment correlations and analysis of variance techniques were used to analyze the data. Figures 3 and 4 demonstrate that mothers were indeed sex-typed in the opportunities they reported providing for their children: they worked more with boys on the computer (F=20.49, p<.001; means=1.69 for girls, 1.98 for boys), provided more computers, software, and programs for boys (F=13.47, p<.001; means=2.03 for girls, 2.31 for boys), provided more math or science books and games for boys (F=16.44, p<.001; means=2.46 for girls, 2.70 for boys), and more often enrolled boys in computer classes (F=4.01, p<.05; means=1.21 for girls, 1.25 for boys). Similar patterns existed in their provision of sports opportunities while opposite patterns were found in the area of music, art, and dance: mothers provided more lessons for girls in these areas (F=81.99, p<.001; means=2.85 for girls, 2.17 for boys) and bought more of these supplies for girls (F=32.54, p<.001; means=3.02 for girls, 2.64 for boys).

---

Insert Figures 3 & 4 About Here
As for the advice and expectations of mothers, Figure 5 illustrates that mothers were significantly more likely to encourage their sons to consider the military ($E=72.37$, $p<.001$; means=2.34 for girls, 3.02 for boys), to expect their sons to go into the military right after high school ($E=172.19$, $p<.001$; means=1.35 for girls, 1.82 for boys), and to discuss the education or training needed for ($E=10.14$, $p<.01$; means=3.33 for girls, 3.48 for boys), and likely income of different jobs with sons ($E=14.08$, $p<.001$; means=3.03 for girls, 3.24 for boys). Expecting marriage right after high school ($E=13.76$, $p<.001$; means=1.40 for girls, 1.28 for boys) and discussing the problems of combining work and family ($E=5.08$, $p<.05$; means=2.68 for girls, 2.52 for boys), and were more common to daughters. In addition, mothers were more worried that their daughters rather than their sons would not have happy marriages ($E=18.25$, $p<.001$; means=3.78 for girls, 3.48 for boys); and although they wanted both sons and daughters to have a job that could support themselves and a family, they held this aspiration more for boys than for girls ($E=56.19$, $p<.001$; means=6.50 for girls, 6.77 for boys).

Insert Figure 5 About Here

In their assessments of their children's abilities, as shown in Figure 6, girls were seen as doing better ($E=124$, $p<.001$; means=5.55 for girls, 4.87 for boys) and having more natural talent in English ($E=76.09$, $p<.001$; means=5.05 for girls, 4.48 for boys), and mothers thought girls would be better at careers requiring English ($E=90.61$, $p<.001$; means=5.42 for girls, 4.83 for boys) than boys. Mothers felt that girls (mean=5.35) and boys (mean=5.59) were not significantly different in their math ability, but that boys had more natural talent in math ($E=5.29$, $p<.05$; means=4.76 for girls, 4.92 for boys) and would be better
at a career requiring math ($E=6.74$, $p<.01$; means=5.07 for girls, 5.29 for boys) than girls. In addition, it was more important for the mothers that their child do well in math if they had a boy ($E=8.29$, $p<.01$; means=6.36 for girls, 6.47 for boys), and they reported getting more upset if their sons rather than their daughters got a low grade in math ($E=12.97$, $p<.001$; means=5.25 for girls, 5.48 for boys).

Insert Figure 6 About Here

In sum, thus far, there are indeed significant gender differences in the kinds of opportunities and advice provided and in the expectations, aspirations, and ability assessments held by mothers for their sons and daughters. The next step was to explore the link between these findings and the children's occupational aspirations, and see whether similar differences exist within sex. Virtually no boys in this sample aspired to female-typed jobs. The following analyses, then, compare girls who aspire to male-typed jobs with girls who aspire to female-typed jobs. Analyses were run examining some of the areas in which significant sex-of-child effects were found to test if there would also be significant traditionality of occupational aspiration effects. Table 2, for example, illustrates that mothers thought their non-traditional daughters (those who aspired to male-typed occupations) had more natural talent in English, but also in math, than their traditional daughters (those who aspired to female-typed jobs); and mothers got more upset if these daughters got a low mark in math than if traditional girls did not do well in math. Conversely, mothers talked more to their daughters who aspired to female-typed occupations about the importance of looking good than to their daughters who aspired to male-typed jobs. Mothers also saw these traditional girls as being more likely to give up
when faced with difficult problems than their non-traditional peers, and interestingly, traditional girls themselves reported that they counted on their parents to solve problems for them more than non-traditional girls ($F=9.90$, $p<.01$; means=1.97 for traditional girls, 1.80 for non-traditional girls).

____________________

Insert Table 2 About Here

Finally, traditional attitudes in the 7th grade were found to be related to 10th grade career-related values assessed in a follow up study of these adolescents (Barber, Fuligni, Eccles, Colarossi, 1990). In examining the social influences on these values, it is important to consider the relationship between similar values held by mothers and daughters. In fact, several of the mothers' and girls' family/work role values were related. For example, mothers' belief that it was better if the man was the breadwinner and the woman took care of the family was related to their children's identical belief, $r=.17$, $p<.001$. As seen in Table 3, girls aspiring to female-typed occupations were more likely to endorse this belief as well as the belief that babies need mothers around most of the day than their non-traditional peers. Mothers' belief that working mothers can establish just as warm and secure a relationship with their children as non-working mothers was related to their children's beliefs that it is okay for mothers to have full-time careers, $r=.18$, $p<.001$. Non-traditional girls were more likely to endorse this belief, as well as the belief that women are better wives and mothers if they have paid jobs.

____________________

Insert Table 3 About Here
What is seen here is that parents’ socialization practices in the form of provision of opportunities, expectations, and beliefs are a logical and important place to look for one source of children's and adolescents' values, aspirations, ability self-assessments, and choices. Further research is needed to look more closely at these, and other possible sources of children's values and expectations, and at the larger social context in which both the children and their parents are operating such as larger cultural prescriptions to clarify this picture and ensure that children have as many options open to them as possible.
References


Figure 1. Eccles' Model of Achievement/Activity Choice
Figure 2.
Model of Parental Influences

PARENT & FAMILY CHARACTERISTICS
1. Education
2. Family Income
3. Occupation
4. Marital Status
5. Number of Children
6. Employment Status
7. Ethnic Background

PARENTS' GENERAL BELIEFS
1. Sex-Role Stereotypes
2. Locus of Control
3. Efficacy Beliefs
4. General & Specific Values
5. Knowledge of Appropriate Teaching Strategies

PARENT BEHAVIOR
1. Teaching Strategies
2. Career Guidance
3. Encouragement of Participation in Various Activities
4. Provision of Tools
5. Training of Specific Values
6. Causal Attributions for Child's and Own Behavior & Outcomes

CHILD OUTCOMES
1. Beliefs
2. Values
3. Goals
4. Expectations
5. Performance

PARENTS' SPECIFIC BELIEFS
1. Expectations for Child's Achievements
2. Perceptions of Child's Abilities
3. Perceptions of the Values of Various Skills for Child
4. Perceptions of Child's Interest
5. Socialization Goals
Figure 3. Mothers' Provision of Opportunities by Sex of Child

- Go to Sports Events
- Buy Sports Equipment
- Use Computer With Child
- Buy Computer Software
- Computer Lessons
- Buy Math & Science Books

Researchers compared the means of opportunities provided to girls and boys. The graph shows a higher provision for boys in most categories except for computer lessons and math & science books.
Figure 4. Mothers' Provision of Opportunities by Sex of Child

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music, Art, &amp; Dance Lessons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buy Music, Art, &amp; Dance Supplies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go to Plays, Concerts, &amp; Museums</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 5. Mothers' Advice and Expectations by Sex of Child

- Encourage Consideration of Military
- Expect Military After H.S.
- Discuss Education or Training for Jobs
- Discuss Likely Income of Jobs
- Expect Marriage After H.S.
- Discuss Problems Combining Work & Family

Advice and Expectations

Legend:
- Girls
- Boys
Figure 6. Mothers' Assessments of Abilities by Sex of Child

- Girls
- Boys
Figure 7. Girls' Work & Family Values by Traditionality of Their Occupational Aspirations

- **Female-typed**
- **Male-typed**

![Chart showing means for various values related to work and family]

- Values:
  - Man as Breadwinner, Woman as Caretaker
  - Babies Need Mothers Around Most of Day
  - Working Moms Can Establish Good Relationship
  - Women Better Wives & Mothers If Working
Table 1

Mean Ratings of Parental Time Use and Encouragement with Significant F Values by Sex of Parent and Sex of Child

<table>
<thead>
<tr>
<th>Item</th>
<th>Overall Effect</th>
<th>Mo X</th>
<th>Fa X</th>
<th>Parent Main Effect</th>
<th>Girl X</th>
<th>Boy X</th>
<th>Gender Main Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with child on computer</td>
<td>F=5.86**</td>
<td>1.73</td>
<td>1.95</td>
<td>F=7.76**</td>
<td>1.76</td>
<td>1.89</td>
<td>F=4.14*</td>
</tr>
<tr>
<td>Play computer games with child</td>
<td>F=21.89***</td>
<td>1.73</td>
<td>2.13</td>
<td>F=26.71***</td>
<td>1.73</td>
<td>2.04</td>
<td>F=17.79***</td>
</tr>
<tr>
<td>Help child do homework</td>
<td>F=14.42***</td>
<td>3.95</td>
<td>3.38</td>
<td>F=26.71***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read to child</td>
<td>F=20.53***</td>
<td>3.95</td>
<td>3.21</td>
<td>F=40.68***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play sports with child</td>
<td>F=49.50***</td>
<td>2.69</td>
<td>3.54</td>
<td>F=62.38***</td>
<td>2.72</td>
<td>3.37</td>
<td>F=38.07***</td>
</tr>
<tr>
<td>Do art projects with child</td>
<td>F=22.48***</td>
<td>2.55</td>
<td>2.08</td>
<td>F=38.47***</td>
<td>2.46</td>
<td>2.28</td>
<td>F=7.27*</td>
</tr>
<tr>
<td>Play musical instrument with child</td>
<td>F=3.62*</td>
<td>1.57</td>
<td>1.38</td>
<td>F=6.30*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check child's homework</td>
<td>F=18.68***</td>
<td>4.14</td>
<td>3.41</td>
<td>F=37.34***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do active outdoor activities with child</td>
<td>F=17.02***</td>
<td>3.40</td>
<td>3.44</td>
<td>F=26.58***</td>
<td>3.40</td>
<td>3.42</td>
<td>F=8.11**</td>
</tr>
<tr>
<td>Have child read to you</td>
<td>F=28.36***</td>
<td>3.95</td>
<td>3.20</td>
<td>F=52.56***</td>
<td>3.76</td>
<td>3.55</td>
<td>F=4.84*</td>
</tr>
<tr>
<td>Discuss child's experiences at school</td>
<td>F=39.76***</td>
<td>5.84</td>
<td>5.39</td>
<td>F=79.51***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take child to a play</td>
<td>F=5.95**</td>
<td>1.73</td>
<td>1.57</td>
<td>F=11.77***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take child to a classical music concert</td>
<td>F=5.85**</td>
<td>1.28</td>
<td>1.18</td>
<td>F=9.03**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 (cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Overall Effect</th>
<th>Mo $\bar{X}$</th>
<th>Fa $\bar{X}$</th>
<th>Parent Main Effect</th>
<th>Girl $\bar{X}$</th>
<th>Boy $\bar{X}$</th>
<th>Gender Main Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take child to paid sports event</td>
<td>$F=28.73^{***}$</td>
<td>1.73</td>
<td>1.81</td>
<td>$F=4.89^{*}$</td>
<td>1.61</td>
<td>1.91</td>
<td>$F=53.14^{***}$</td>
</tr>
<tr>
<td>Help child prepare for exams</td>
<td>$F=23.60^{***}$</td>
<td>3.69</td>
<td>3.01</td>
<td>$F=46.98^{***}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss current events with child</td>
<td>$F=15.50^{***}$</td>
<td>3.99</td>
<td>3.39</td>
<td>$F=30.74^{***}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage child to build and make things</td>
<td>$F=12.07^{***}$</td>
<td></td>
<td></td>
<td></td>
<td>5.22</td>
<td>5.64</td>
<td>$F=24.05^{***}$</td>
</tr>
<tr>
<td>Encourage child to play competitive sports</td>
<td>$F=38.32^{***}$</td>
<td>4.64</td>
<td>4.90</td>
<td>$F=10.74^{***}$</td>
<td>4.43</td>
<td>5.08</td>
<td>$F=66.43^{***}$</td>
</tr>
<tr>
<td>Encourage child to play noncompetitive sports</td>
<td>$F=14.21^{***}$</td>
<td>5.44</td>
<td>5.14</td>
<td>$F=10.40^{***}$</td>
<td>5.16</td>
<td>5.50</td>
<td>$F=17.74^{***}$</td>
</tr>
<tr>
<td>Encourage child to do math/science related activities</td>
<td>$F=5.73^{**}$</td>
<td></td>
<td></td>
<td></td>
<td>4.78</td>
<td>5.04</td>
<td>$F=11.44^{***}$</td>
</tr>
<tr>
<td>Encourage child to watch sports on TV</td>
<td>$F=12.33^{***}$</td>
<td></td>
<td></td>
<td></td>
<td>3.97</td>
<td>4.29</td>
<td>$F=24.19^{***}$</td>
</tr>
<tr>
<td>Encourage child to read</td>
<td>$F=21.85^{***}$</td>
<td>6.46</td>
<td>6.11</td>
<td>$F=31.93^{***}$</td>
<td>6.41</td>
<td>6.20</td>
<td>$F=12.41^{***}$</td>
</tr>
<tr>
<td>Encourage child to take music lessons</td>
<td>$F=6.96^{***}$</td>
<td></td>
<td></td>
<td></td>
<td>4.75</td>
<td>4.47</td>
<td>$F=10.48^{***}$</td>
</tr>
<tr>
<td>Encourage child to take dance lessons</td>
<td>$F=62.25^{**}$</td>
<td>4.43</td>
<td>4.27</td>
<td>$F=5.03^{*}$</td>
<td>4.77</td>
<td>3.94</td>
<td>$F=120.24^{**}$</td>
</tr>
<tr>
<td>Encourage child to have friends over to the house</td>
<td>$F=14.72^{**}$</td>
<td>5.84</td>
<td>5.46</td>
<td>$F=23.63^{**}$</td>
<td>5.77</td>
<td>5.59</td>
<td>$F=6.15^{*}$</td>
</tr>
</tbody>
</table>

Note. *$p < .05$, **$p < .01$, ***$p < .001$.}
Table 2

Mothers' Mean Ratings with Significant F Values by Girls' Occupational Aspirations

<table>
<thead>
<tr>
<th>Item</th>
<th>Male-typed (non-traditional)</th>
<th>Female-typed (traditional)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Attend sports events</td>
<td>2.71</td>
<td>1.10</td>
<td>2.44</td>
</tr>
<tr>
<td>Buy sports equipment</td>
<td>2.46</td>
<td>1.04</td>
<td>2.22</td>
</tr>
<tr>
<td>Natural talent in sport</td>
<td>4.39</td>
<td>1.60</td>
<td>4.08</td>
</tr>
<tr>
<td>Natural talent in English</td>
<td>5.22</td>
<td>1.32</td>
<td>4.88</td>
</tr>
<tr>
<td>Successful in career requiring English</td>
<td>5.57</td>
<td>1.20</td>
<td>5.26</td>
</tr>
<tr>
<td>Natural talent in math</td>
<td>4.96</td>
<td>1.37</td>
<td>4.58</td>
</tr>
<tr>
<td>Good at math</td>
<td>5.36</td>
<td>1.23</td>
<td>4.92</td>
</tr>
<tr>
<td>Parent upset with low grade in math</td>
<td>5.56</td>
<td>1.34</td>
<td>5.24</td>
</tr>
<tr>
<td>Provide music, art, and dance lessons</td>
<td>2.69</td>
<td>1.22</td>
<td>3.04</td>
</tr>
<tr>
<td>Talk about importance of looking good</td>
<td>3.18</td>
<td>.81</td>
<td>3.36</td>
</tr>
<tr>
<td>Gives up when faced with difficult problems</td>
<td>2.45</td>
<td>.73</td>
<td>2.70</td>
</tr>
</tbody>
</table>

Note. *p<.05. **p<.01. ***p<.001.
Table 3

Girls' Mean Ratings of Work and Family Values with Significant F Values by Girls' Occupational Aspirations

<table>
<thead>
<tr>
<th>Item</th>
<th>Male-typed (non-traditional)</th>
<th>Female-typed (traditional)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>It's better if man is the breadwinner and woman takes care of family</td>
<td>2.19</td>
<td>.86</td>
<td>2.46</td>
</tr>
<tr>
<td>Babies need mothers around most of the day</td>
<td>2.97</td>
<td>.70</td>
<td>3.11</td>
</tr>
<tr>
<td>Working mothers can establish just as warm and secure a relationship with their children as non-working mothers</td>
<td>2.64</td>
<td>.84</td>
<td>2.46</td>
</tr>
<tr>
<td>Women are better wives and mothers if they have paid jobs</td>
<td>2.55</td>
<td>.78</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Note. ^p=.053. *p<.05. **p<.01.