

Activity Choices in Middle Childhood: The Roles of Gender, Self-Beliefs, and Parents' Influence

Janis E. Jacobs
Margaret K. Vernon
Pennsylvania State University

Jacquelynne Eccles
University of Michigan

Many parents enroll their children in organized activities or encourage participation in individual activities because they believe that such involvement is good for them or builds confidence. In addition, parents may select specific activities based on their perceptions of what is appropriate for girls or boys. For example, they are more likely to enroll their daughters in art or ballet and to enroll their sons in Little League. Beyond anecdotal evidence shared between parents, does participation in organized activities have an impact on children's attitudes or self-beliefs? Do the kinds of activities or the amount of participation matter? Finally, how is participation in gender-differentiated activities related to later attitudes and beliefs?

Recent research has documented the positive benefits of involvement in extracurricular activities for adolescents, linking activity involvement to positive social, emotional, and academic outcomes (e.g., Eccles & Barber, 1999; Mahoney & Cairns, 1997), and to later positive social outcomes such as more prestigious occupations, civic engagement, voting, and volunteering in one's community (e.g., Youniss, McLellan, Su, & Yates,

1999). In addition, adolescents who are involved with extracurricular activities are less likely to become involved in problem behaviors (e.g., Eccles & Barber, 1999; Mahoney, 2001). Although the literature relating activity involvement with positive outcomes has primarily focused on the period of adolescence, a few studies suggest that individuals who are involved with extracurricular activities in middle childhood also have more positive psychosocial and academic outcomes (e.g., McHale, Crouter, & Tucker, 2001; Posner & Vandell, 1999).

If, as suggested by previous research, involvement in extracurricular activities is related to positive developmental outcomes, it is important to understand why children choose to become involved and stay involved in particular types of activities. If we are to encourage children to become involved in activities at young ages, it is also critical to understand the correlates of activity choice and sustained involvement. For example, we know that children prefer activities that are congruent with their gender (McHale, Crouter, & Tucker, 1999); however, very little is known about the role gender may play in the kinds, types, or breadth of activities children choose during middle childhood. In addition, although theoretical links between self-perceptions and activity choices have been made (e.g., Eccles et al., 1983), we have much to learn about the ways in which early extracurricular involvement may impact the development of self-perceptions, activity interest, or long-term engagement in activities during middle childhood.

The goal of this chapter is to begin to explore these issues, both conceptually and empirically. We begin by briefly reviewing the links between positive outcomes and extracurricular activities during both adolescence and middle childhood, and then turn to some of the factors that may be related to early activity choice, including self-concept, task values, and long-term involvement in specific activities. We also explore some of the ways in which extracurricular activities during this age period may vary by gender, including type of activity, number of activities, time spent on various activities, and dispersion of involvement. Finally, we provide some empirical evidence related to gender differences in extracurricular activities and relations to later outcomes.

FACTORS RELATED TO ACTIVITY CHOICES IN MIDDLE CHILDHOOD

Although extracurricular involvement has been associated with various outcomes, very little is known about the types and amounts of activities in which children are involved during middle childhood, and how children develop preferences for various kinds of activities. Involvement in extracurricular activities develops within the contexts of children's lives, thus, we believe that it is important to consider the motivational factors that

lead children to choose one set of activities over another. For example, children are unlikely to remain involved in activities that they do not value or those in which they feel incompetent or unsupported. In addition, they are apt to become involved in activities that match their gender-typed beliefs about what a boy or a girl should do rather than those that do not. By the same token, involvement in extra-curricular activities is likely to help shape values and self-competence over time, and these beliefs, in turn, may reinforce the desire to continue participating. We expect a variety of factors to be related to activity involvement in middle childhood, including task values, self-perceptions, gender, and parental support. Each of these factors is now reviewed briefly.

Task Values

According to some of the modern expectancy-value theories (e.g., Eccles et al., 1983; Feather, 1988; Wigfield & Eccles, 1992), an individual's values for particular goals and tasks can help explain *why* a child chooses one activity over another. Two types of values that are likely to play a role in extracurricular activity choices are attainment value and intrinsic value. We define *attainment value* as the personal importance of doing well on the task, and link it to the relevance of engaging in a task for confirming or disconfirming salient aspects of one's self-beliefs (see Eccles, 1987). *Intrinsic value* is the enjoyment the individual gets from performing the activity, or the interest the individual has in the subject. We have found that values are closely linked to how children and adolescents choose to spend their time. For example, even after controlling for prior performance levels, task values predict involvement in sport activities, as well as course plans and enrollment decisions in mathematics, physics, and English (Eccles & Harold, 1991; Eccles & Wigfield, 1995). Others also have found that interest or intrinsic value is highly related to involvement in sports (Garton & Pratt, 1987); that fun or enjoyment is the most often reported reason for continued involvement in sports (Wankel & Berger, 1990); and that adolescents choose leisure activities that they consider intrinsically motivating and challenging (Larson, 2000).

In addition, values for leisure activities may change, as children get older. For example, in a longitudinal study of changes in children's values, we found declines across the elementary school years for valuing of music and sports (Wigfield et al., 1997). Wigfield and Eccles (1992) suggested that during the early elementary school grades, the subjective value of a task may be primarily characterized by children's interests in the task, thus, young children's choices of different activities may stem from their interests in those activities. At young ages, interests may shift fairly rapidly, so that children may try many different activities for a short time before de-

ciding which activities they enjoy the most. During the early and middle elementary school grades, children's sense of the usefulness of different activities, especially for future goals, may not be very clear, and so this component may only be understood later. If such a shift in values for the same activity occurs, it would be tantamount to engaging in a task due to the intrinsic value of the task (interest) in childhood, but staying engaged over time due to utility values (perceived usefulness).

Self-Perceptions of Competence

A second part of our model is perceptions of competence or self-concept. This is the part of the self-system that is typically thought of as "earned" based on competence and interests, and the competence component is often labeled *self-competence* or *self-esteem*. According to numerous theories (e.g., attribution theory, self-efficacy theory, self-worth theory) children are more motivated to select increasingly challenging tasks when they believe that they have the ability to accomplish a particular task (e.g., Bandura, 1994). Thus, the child who feels competent at playing the clarinet in middle childhood is likely to be motivated to continue to play music and to push on to greater heights (e.g., trying out for a competitive music ensemble or trying more difficult passages of music).

We have found that self-competence beliefs are related to achievement in a variety of domains, even after controlling for previous achievement or ability (e.g., Eccles, 1987; Eccles, Adler, & Meece, 1984; Eccles, Wigfield, Harold, & Blumenfeld, 1993). In addition, Harter (1998) has suggested that self-esteem and motivation are enhanced when one values those activities at which one is competent. This suggests that the relations between individuals' subjective task values and competence perceptions will be important for understanding how children choose to allot their leisure time among different activities. According to Harter (1998), the ability to form congruent hierarchies of task values and competence beliefs should lead to higher self-esteem and continuing motivation, whereas incongruent hierarchies of beliefs will lead to negative self-esteem and lowered motivation. For example, individuals may cope with being incompetent in baseball by lowering the value they attach to it and by enhancing the value they attach to another sport or another activity domain. Several studies have provided support for the close links between self-concept and values (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Harter, 1990). This work suggests that children's values for various leisure activities are likely to change as they refine their perceptions of self-competence, increasing the value they attach to some activities while decreasing the value they attach to others. These attitudinal changes, of course, are related to the fact

that their actual competence is likely to be increasing if they spend more time on the specific activities that are valued.

Gender

Our previous research has revealed gender-typed differences for attitudes about sports, social activities, English, and music (e.g., Eccles et al., 1993; Jacobs et al., 2002) across a variety of age groups. In addition, children prefer activities that are congruent with their gender and also participate in gender-typed activities more often than in gender atypical activities. Interestingly, during middle childhood, activity preferences are more gender typed than either children's gender role attitudes or their gender-typed personality qualities (McHale et al., 1999). Girls spend more time outside the home in organized activities, taking lessons, doing academic activities, engaging in outdoor play and socializing, whereas boys spend more time outside the home in unorganized activities (McHale et al., 2001; Posner & Vandell, 1999) and in team sports (Eccles & Barber, 1999; Larson & Verma, 1999; McHale et al., 2001).

In addition, the gender of siblings and parents has been implicated in children's activity choices, with male sibling dyads engaged in more male gender-typed activities than any other group (Stoneman, Brody, & MacKinnon, 1986), and children involved in more activities that fathers than mothers endorse (McHale et al., 1999). It appears that one of the main ways in which children express gender identity is by participating in and valuing gender-appropriate activities; however, very little is known about how gender may play a role in the amount, types, or breadth of activities in which children are involved at different ages.

Parental Encouragement

Although children may become interested in some types of activities without any adult input, most activities that are available to children during middle childhood are the result of socialization on the part of parents,¹ teachers, or other adults. This is especially true for organized activities that some researchers suggest are most beneficial (Larson, 2000). Over the years, numerous studies have linked parenting practices to children's achievement motivation (see Eccles, Wigfield, & Schiefele, 1998, for a review); however, few researchers have focused on how parents motivate, encourage, and support their children as they participate in a variety of activities.

¹It is important to note that we use the term *parents* in this review of the literature, although in later sections of the chapter our data examines only mothers' influence, and mothers and fathers may affect patterns of activity involvement in different ways.

We have developed a model of parental influence on achievement motivation in a variety of contexts (Eccles et al., 1983) that includes several ways in which parents influence their children: (a) by the general social-emotional climate they offer and by their general childrearing beliefs; (b) by providing specific experiences for the child (e.g., enrollment in lessons, involvement in church activities); (c) by modeling involvement in valued activities; and (d) by communicating their perceptions of the child's abilities and expectations for performance. The environment, role modeling, and messages that parents provide regarding the value they attach to various activities are expected to influence children's motivation to pursue any particular activity. Over time, children make their own decisions and have their own values for particular activities and integrate these beliefs into their self-systems.

We have tested and found support for each of the four components of parent influence for achievement in a variety of domains, including both in-school and out-of-school activities (e.g., see Jacobs & Eccles, 2000, for a summary). In this chapter, however, we focus only on the ways in which the experiences parents provide for their children are influenced by their perceptions of their children's abilities and interests and parents' valuing of the activity domain (e.g., sports, music, math, science). We know from our previous work that parents' perceptions of their children's abilities, their expectations for their children's success, and their gender stereotypes predict children's self-perceptions of competence and their actual achievement, even after previous indicators of achievement are controlled (e.g., Jacobs, 1991; Jacobs & Eccles, 1992). In this way, parents appear to play the role of "interpreters of reality" for their children (Eccles, Adler, & Kaczala, 1982). Although little work has been done to relate these same factors to children's involvement in activities, in one study, parents were more likely to provide extra sports experiences for their children if they believed that the children were interested in the activity and had sports ability (Fredericks, 1999). We expect parents' beliefs about their children's abilities as well as their own values to be highly related to the opportunities they provide for their children. In addition, parents also may be more likely to provide experiences for their children that fit existing expectations for gender-appropriate activities (e.g., enrolling their daughters in dance lessons and their sons in pee-wee football).

OUR RECENT RESEARCH ON ACTIVITY PARTICIPATION DURING MIDDLE CHILDHOOD

We have briefly reviewed the factors that we believe play a major role in children's activity choices during middle childhood, providing evidence from our previous work for an expectancy-value model of activity choice that includes the importance of individual identity markers (such as gen-

der) and socializers (such as parents). We turn now to an examination of recent data that addresses our hypotheses about the importance of these factors during the middle childhood years. We examined gender differences in Grade 1 through Grade 6 children's leisure participation by types of activities, number of activities, and breadth of activities. In addition, we related activity participation in middle childhood to later value and perceived competence in various activity domains. Finally, we examined the effect of concentration in one activity type in middle childhood and its relation to later value and perceived competence in the same type of activity.

Participants and Design

The analyses reported here used data that were collected as part of the Childhood and Beyond (CAB) study, a longitudinal project employing a cohort-sequential design. Data were collected from three cohorts of children and their parents between 1989 and 1999; beginning when Cohort 1 was in kindergarten, Cohort 2 was in Grade 1, and Cohort 3 was in Grade 3. Data for the analyses reported here were collected from children when they were in early middle childhood (Grade 1, Grade 2, and Grade 4); again when they were in late middle childhood (Grade 3, Grade 4, and Grade 6); and finally, when children were in adolescence (Grade 7, Grade 8, and Grade 10). Children attended 10 public, elementary schools in four middle-class school districts in the suburbs of a large midwestern city. Activity participation, children's activity-related values, and self-concept data used in the analyses reported here were collected via questionnaires answered during school class time by approximately 500 children (50% female). Data about number, type, and frequency of activities, as well as mothers' values about activities were collected from the same children's mothers via mailed questionnaires during this same time period.

GENDER DIFFERENCES AND LONGITUDINAL TRENDS IN ACTIVITY PARTICIPATION

Children's activity participation was assessed by asking mothers to list the specific activities in which their child was involved and to describe how much time and how frequently the child participated. Mothers' reports of children's activity participation were used because we believe that mothers' reports are likely to be more reliable than children's reports during the early elementary school years.

We then assigned each individual activity listed by mothers to one of the following categories: (a) *team sports* (e.g., basketball, soccer); (b) *individual sports* (e.g., tennis, gymnastics, swimming, karate); (c) *academic activities* (e.g., creative writing, homework, math enrichment); (d) *music/drama orga-*

nized activities (e.g., playing a musical instrument, vocal music lessons, or choir, dance, drama); (e) hobbies (e.g., crafts, model making, collections); (f) group activities (e.g., church groups, scouting, day-camp, community programs). Based on these assignments, we computed the total number of activities in which children participated across categories, the number of activities in each category for each child and the total number of categories for each child as a way to compare overall level of activity and variety of activity involvement.

As can be seen in Fig. 11.1, older children participate in activities slightly more than younger children; and this age difference is apparent for both girls and boys. Repeated measures ANCOVAs were conducted that included gender as a between-subjects variable and activity participation at three time points as a within-subjects variable (cohort was also included as a covariate to control for the effects of age at time one). These analyses revealed significant differences by grade, with children involved in significantly more activities as they got older, $F(2, 276) = 2.86, p < .05$; however, the number of hours of activity involvement did not differ significantly with age. Interestingly, no significant differences were found between girls and boys, although the trend was clearly one of girls having slightly higher involvement in extracurricular activities at all ages during this time period. In addition, no significant differences between boys' and girls' total amount of time spent on extracurricular activities was found.

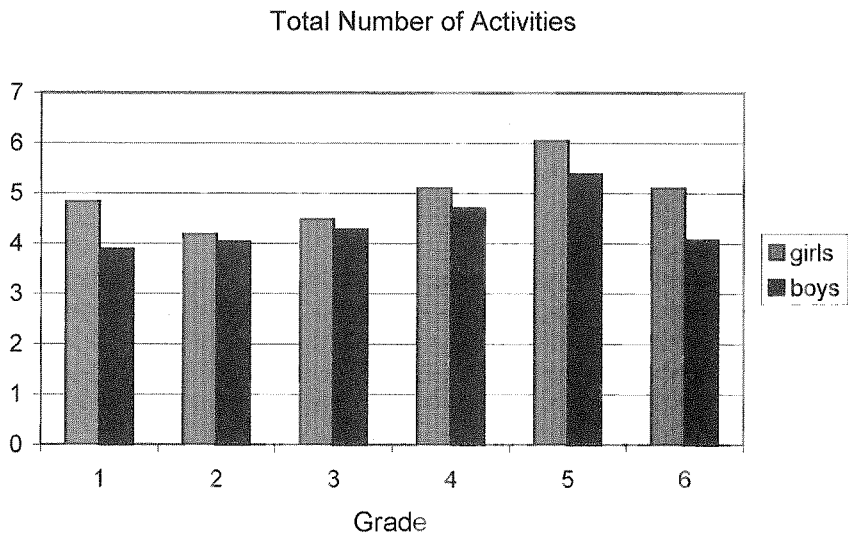


FIG. 11.1. Average total number of activities by gender.

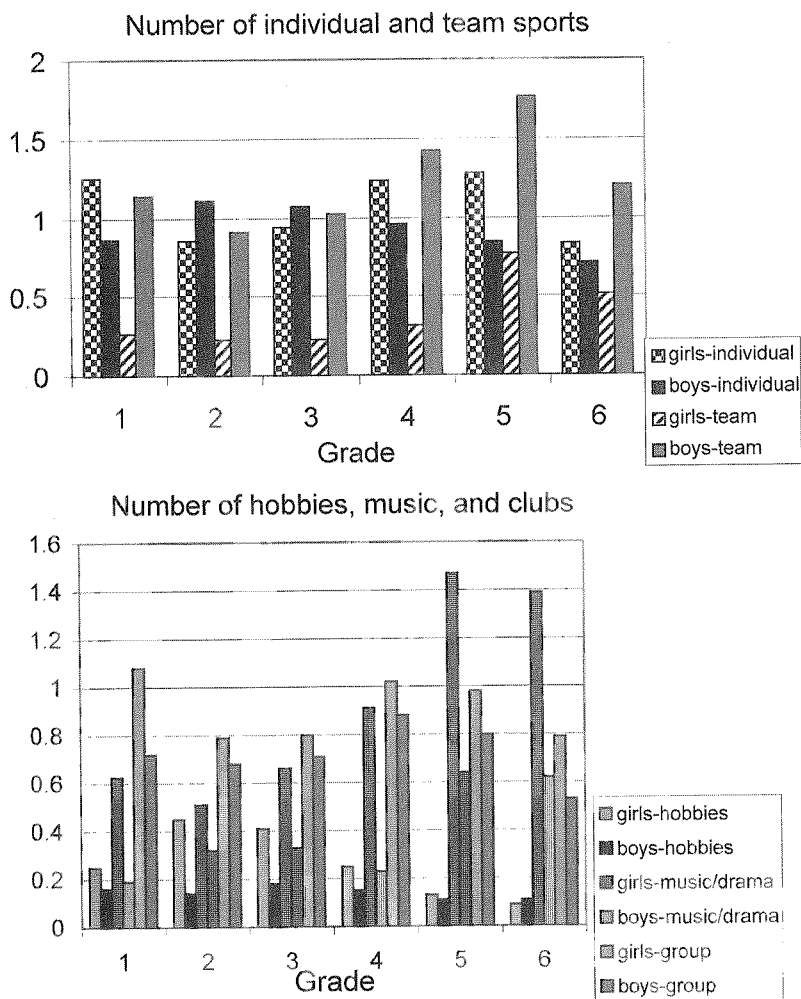


FIG. 11.2. Average number of activities in each category by gender.

A quick glance at Fig. 11.2, however, suggests that although boys and girls may be participating in similar numbers of activities, their involvement in any particular category of activity is *not* similar. As expected, boys participated in significantly more team sports than girls, $F(1, 277) = 112.44, p < .001$. Girls' participation was significantly higher than boys, however, for individual sports, $F(1, 277) = 6.72, p < .01$, hobbies, $F(1, 277) = 6.07, p < .05$, music/drama activities, $F(1, 277) = 66.12, p < .001$, and organized group activities, $F(1, 277) = 5.31, p < .05$.

The fact that girls and boys are participating in almost the same number of activities, but that girls are more involved in almost every category of ac-

tivities suggests that the major gender difference in activity involvement during middle childhood is the dispersion of activities rather than the total number (or total amount of time spent). We investigated this hypothesis by examining several measures of dispersion. We created a *total category* variable, a *homogeneity index*² and three proportion variables: *proportion of activities in team sports* (number of team sports/total number of activities), the *proportion of activities in individual sports* (number of individual sports/total number of activities), and the *proportion of activities in music/drama* (number of music/drama activities/total number of activities).

We next examined each of these variables to assess any gender differences. Not surprisingly, girls were involved in more activity categories than boys, $F(1, 277) = 5.69, p < .05$. When we examined the proportion of activities in team sports, individual sports, and music/drama out of total number of activities, we found that boys were involved in a larger proportion of team sports than girls, $F(1, 277) = 126.66, p < .001$. In addition, girls were involved in a greater proportion of individual sports than boys, $F(1, 277) = 4.93, p < .05$. In addition, girls spent a greater proportion of their total activities in music/drama than boys, $F(1, 277) = 59.30, p < .001$. The proportion of total activities spent in team sports, individual sports, and music/drama is illustrated in Fig. 11.3.

Finally, the homogeneity index allowed us to capture the individual proportions just described in a single index, ranging from .04 to 1.00, with numbers closer to one indicating greater homogeneity. It is interesting to note that children's activity participation became significantly less homogeneous after the first wave, $F(2, 276) = 4.11, p < .05$. In addition, this measure revealed that boys' activity participation was more homogeneous than that of girls, $F(1, 277) = 12.33, p < .001$ (girls' average homogeneity index = .33; boys' average homogeneity index = .40).

These findings indicate that, as has been suggested previously (e.g., McHale et al., 2001), gender differences in activity participation exist in middle childhood. However, the differences are not found in the number of activities in which girls and boys participate, but in the types of activities. Boys are participating primarily in team sports, whereas girls participate in a more diverse array of activities that include team sports, as well as individual sports, music/drama, hobbies, and clubs. In addition, these gender differences in dispersion of activities begin early and continue through middle childhood.

RELATIONS BETWEEN ACTIVITY PARTICIPATION, PERCEIVED COMPETENCE, AND TASK VALUES

Although we can describe the pattern of activity involvement and how it differs by gender, if we are to comprehend why children choose to be in-

²The homogeneity ratio was calculated as follows: [(number of team sports/total number of activities)² + (number of individual sports/total number of activities)² + (number of academic activities/total number of activities)² + (number of hobbies/total number of activities)² + (number of music/drama activities/total number of activities)² + (number of group activities/total number of activities)²].

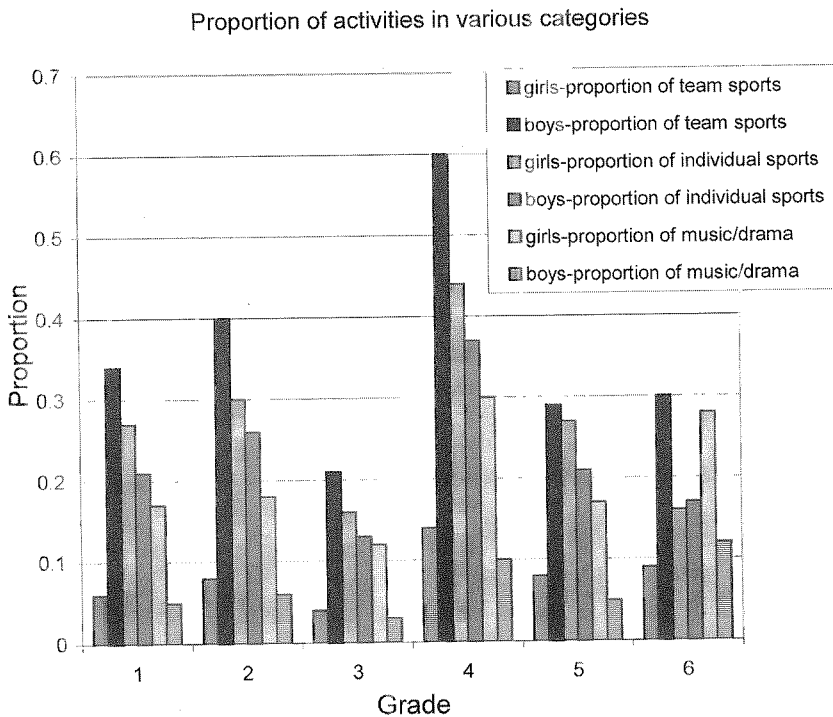


FIG. 11.3. Proportion of total activities spent in team sport, individual sports, and music/drama by gender.

involved in one activity versus another in middle childhood we need to examine some of the correlates of particular activity choices. The research reviewed earlier indicates that activity involvement is valuable for children; therefore, it is important to understand the ways in which their beliefs and those of their parents may be related to such involvement. The Eccles expectancy-value model suggests that perceived competence, task values, and parents' attitudes and behaviors may each contribute to the activity choices that children make. Our earlier empirical work has typically focused on academic choices rather than on extracurricular choices, but we believe that the same relations are likely to be found for activity involvement. In short, children are unlikely to choose to spend time on activities that they do not value or at which they feel incompetent. In addition, time spent on activities in any given domain is likely to lead to higher values and perceptions of competence over time for similar activities.

To test these relations for extracurricular activities during middle childhood, we assessed the impact of activity participation during middle childhood on later (early adolescence) task values and self-perceptions of ability in two domains—sports and the arts. Children's self-perceptions of ability

and task values were assessed when children were in Grade 1, Grade 2, and Grade 4 and again when they were in Grade 3, Grade 4, and Grade 6, using 7-point Likert-type scales. Self-concept of music ability was measured with a 5-item scale ($\alpha = .74 - .94$) containing questions such as "How good are you at playing a musical instrument?" Sports self-concept was assessed with a 5-item scale ($\alpha = .84 - .94$) with items such as "How good at sports are you?" A 3-item scale ($\alpha = .86 - .93$) was used to assess music values (e.g., How important is being good at music to you?). Sports value was assessed with a 4-item scale ($\alpha = .58 - .92$), using similar measures.

We began by looking simply at the relations between earlier domain-specific values and self-perceptions of competence and later activity participation within the same domain (controlling for gender because we already know that participation in these activities varies by gender). Interestingly, we found that sports self-concept and values at Grade 1, Grade 2, and Grade 4 each predicted team sports participation 2 years later (self-competence: $b = .27, p < .001, R^2 = .24$; values: ($b = .15; p < .01, R^2 = .20$), but neither sports values nor self-competence predicted later participation in individual sports. Likewise, music values and self-competence at wave 2 were not significantly related to participation in music activities 2 years later.

We were surprised to find that these results provided only minimal support for our expectation that prior self-concept and values would be related to later participation in a variety of activities. Indeed, these findings suggest that early domain-specific perceptions of competence and values are *not* necessarily related to later activity participation; the relations appear to depend on the specific activities. In the case of team sports, the relationships may be due to the fact that children in this country begin to be involved in team sports at young ages, thus, they may have formulated both self-perceptions and values by early in middle childhood and these are related to continued involvement. These domain-differences may be a result of the availability of particular activities at early ages (e.g., team sports) or knowledge about the activities (e.g., watching older siblings play soccer or baseball).

Activity Self-Perceptions of Competence

We next turned the tables and examined the effects of participation in activities on later domain-specific values and perceptions of competence. Specifically, we examined the relations between activity participation in Grade 3, Grade 4, and Grade 6 on perceived competence in music and sports and value for music and sports in early adolescence (Grade 7, Grade 8, and Grade 10). We used blockwise regressions to do this, entering gender as the first block, and prior (Grade 1, Grade 2, and Grade 4) self-perceptions or values in the specific domain (sports or arts)

in the second block as a control. The number of activities in which the child participated in the particular activity domain was entered in Block 3. For example, if the outcome variable was sports self-concept in adolescence, gender was entered in the first block, sports self-concept in early middle childhood (Grade 1, Grade 2, and Grade 4) was entered in the second block, and participation in sports (team and individual were run separately) in late middle childhood (Grade 3, Grade 4, and Grade 6) was entered in Block 3.

We found that in the areas of team sports and music, individuals who participated in more domain-specific activities in late middle childhood had significantly higher self-perceptions of competence in that domain in early adolescence, even after controlling for gender and prior self-perceptions in the same domain (team sports: $b = .21, p < .001$; music: $b = .24, p < .001$). The same pattern was not found for individual sports. In addition, we found main effects for gender in the expected direction for each domain (team sports: $b = .30, p < .001$; individual sports: $b = .30, p < .001$; music: $b = -.21, p < .001$). Overall, the combination of variables accounted for 26% of the variance in self-perceptions of competence in team sports, 24% in individual sports, and 14% in music. Thus, activity involvement in later middle childhood is related to self-perceptions of ability 4 years later; however, as in our earlier analyses, it appears that the relations between activity involvement and self-perceptions are activity-specific.

Activity Values. The same analysis strategy was used to test the role of gender, prior values, and activity participation in predicting later domain-specific values. We found that individuals who participated in more domain-specific activities had significantly higher values for those particular activities, even after controlling for gender and prior values (team sports: $b = .30, p < .001$; individual sports: $b = .13, p < .05$; music: $b = .22, p < .001$). Once again, main effects for gender in the expected direction were found for all activity values (team sports: $b = .28, p < .001$; individual sports: $b = .28, p < .001$; music: $b = -.17, p < .01$). Overall, the combination of variables was able to account for 22% of the variance in task values for team sports, 16% in individual sports, and 9% in music.

The impact of activity concentration on self-perceptions of ability was tested using the same block-wise regression method. We measured concentration of activities as described earlier (an individual's number of domain-specific activities divided by the total number of activities reported by that individual); thus, ratios closer to 1.0 show greater concentration of activities. We found that those who had higher concentrations of activities in one domain in Wave 4 had higher self-perceptions of their abilities 4 years later (team sports: $b = .22, p < .001, R^2 = .27$; individual sports: $b = .13, p < .05, R^2 = .25$; music: $b = .22, p < .001, R^2 = .12$). Main effects for gender

were also found (team sports: $b = .33, p < .001$; individual sports: $b = .33, p < .001$; music: $b = -.22, p < .001$).

These analyses provide support for two important points that we raised in our earlier review. First, prior values and self-perceptions are related to later sports team participation over a 2-year period in middle childhood; however, the relationship was not found in other activity domains. This suggests that values and self-perceptions in some areas may not be very well developed due to lack of experience with the activity or for other reasons. Second, activity participation during middle childhood (number of activities and concentration) is related to values and self-perceptions 4 years later, even after controlling for prior values and self-perceptions. Indeed, the links between activity participation and self-beliefs span middle childhood into adolescence.

RELATIONS BETWEEN MOTHERS' PERCEPTIONS OF CHILDREN'S COMPETENCE, TASK VALUES, AND CHILDREN'S ACTIVITY PARTICIPATION

Another important component of our previous work and of the Eccles' model is the role of socializers in children's activity choices (see Jacobs & Eccles, 2000, for a longer review). As we suggested earlier, children are more likely to become involved in activities that their parents value (especially at the youngest ages), and they are more likely to stay involved in activities that their parents encourage and support. We provide some evidence for that perspective from mothers of the same middle school children that we have been describing.

Mothers' values were assessed via questionnaire during the same time in which children's data were gathered, by asking, "How important is it to you that (child) does well in sports/music?" Answers were given on a 1 to 7 response scale; 1 (*Not at all important*), 7 (*Very important*). Mothers' perceptions of their children's abilities in each domain were assessed by asking, "How good is your child in sports/music?" Mothers responded on a 1 to 7 response scale: 1 (*Not good at all*), 7 (*Very good*).

We again used blockwise regressions, with gender entered in the first block, children's self-perceptions of ability in a given activity domain in the second block (as a control for prior ability), and mothers' ratings of the importance of the activity domain in the third block (each of these predictors was measured when the children were in Grade 1, Grade 2, and Grade 4). We examined the effects of these predictors on children's activity participation, self-perceptions of ability, and value for that activity in Grade 3, Grade 4, and Grade 6. We found that mothers' beliefs about the importance of participation in domain-specific activities were significantly related to later participation in team sports ($b = .18, p <$

.001, $R^2 = .30$) and in music/drama activities ($b = .19, p < .001, R^2 = .15$), even after controlling for gender and children's prior abilities. As before, main effects for gender were found (team sports: $b = .44, p < .001$; music: $b = -.34, p < .001$).

We conducted a similar set of analyses with the same predictors, but with children's self-perceptions of ability and values for the particular activity domains as dependent variables. We found that mothers' earlier ratings of the importance of the activity domain were significantly related to their children's later self-perceptions of ability in the same domain (sports: $b = .17, p < .001, R^2 = .33$; music: $b = .20, p < .001, R^2 = .13$), even after controlling for prior perceptions of ability. Main effects were again found for gender in sports only ($b = .41, p < .001$). Similarly, we found that mothers' ratings of the importance of domain-specific activities were significantly related to their children's valuing of the same activities 2 years later (sports: $b = .14, p < .010, R^2 = .23$; music: $b = .13, p < .05, R^2 = .08$). Main effects for gender were also found for sports only ($b = .19, p < .001$).

The previous analysis indicated a significant relationship between mothers' and children's values for sports and music, after controlling for a variety of other factors. To directly test the differences between their values, we conducted a repeated-measures ANOVA with mothers' and child's value for sports and music at Wave 2 (Grade 1, Grade 2, and Grade 4) and again 2 years later, including gender as an independent variable and cohort as a covariate. We found that mothers valued sports significantly less than children at both Wave 2, $F(1, 451) = 140.89, p < .001$, and Wave 4, $F(1, 375) = 25.16, p < .001$. Mothers also valued music significantly less than their children at Wave 3, $F(1, 439) = 3.97, p < .05$; however, at Wave 4, mothers valued music significantly more than their children, $F(1, 366) = 31.14, p < .001$. In addition, boys and mothers of boys valued sports significantly more than girls or mothers of girls at both waves and the gender effect was reversed for music at both waves.

In summary, these results suggest a very consistent pattern that is not unlike many of our earlier findings about the importance of parents' beliefs for their children's academic self-perceptions and values (e.g., Jacobs, 1991; Jacobs & Eccles, 1992; Parsons, Adler, & Kaczala, 1982). It is clear that if mothers believe that particular activities are important, their children are more likely to participate in those activities as well as to value the activities themselves. In addition, children whose mothers value particular activities feel more self-competent in those domains (probably as a result of greater participation). Importantly, these relationships were observed over a period of 2 years and across Grade 1 through Grade 6. It also is clear that mothers' and children's values and participation are gender-typed, with higher participation and valuing of the arts for girls and of sports for boys.

CONCLUSIONS

We began this chapter by discussing previous research that has consistently linked activity involvement with positive outcomes for adolescents, and to a lesser extent, for children in middle childhood. Although those findings suggest that extracurricular activities are valuable, more information is needed about different patterns of activity involvement and the psychosocial factors that may be linked to such involvement if we, as parents and professionals, are to create conditions that will maximize the benefits of activity involvement. In order to do this, we need to know much more about what contributes to activity choice and sustains children's involvement over time. Using the Eccles' model, we highlighted four factors that might be expected to contribute to activity choice during this developmental period: gender, self-perceptions of ability at a given activity, activity value or importance, and parental support for the activity. We presented support for each of these potential contributors from our previous research that is largely on academic achievement, and then provided corroborating evidence from our study of children's activity choices in middle childhood and adolescence.

What can we conclude? Not surprisingly, gender differences in activity participation begin early and continue throughout middle childhood. Although girls and boys participate in the same numbers of activities, they participate in different activities and girls try a wider variety of activities. Boys are involved in a large number of activities that fall into the category of *team sports*. Although girls participate in team sports, they are participating in them less frequently than boys, giving girls more time to explore a wide variety of activities, as evidenced by their greater participation in individual sports, arts activities, hobbies, and clubs. We tried to capture this differential dispersion of activity involvement by calculating a homogeneity index; counting the number of categories in which a child was involved, and creating scores for the proportion of activity involvement in each category. No matter how we calculated it, the picture was the same—boys' activity participation was significantly more homogeneous than that of girls. During middle childhood, boys are already limiting the types of activities in which they are involved.

Does this difference in dispersion of activities matter in the long run? Although it is not possible to answer that question completely from the analyses presented here, we found that self-perceptions of competence and values during adolescence are clearly linked to earlier activity participation during middle childhood (number of activities and concentration), even after controlling for prior values and self-perceptions. Our previous work indicates that boys have significantly higher self-perceptions of competence in sports than do girls at all ages (Jacobs et al., 2002), and that, on average, these be-

liefs decline over time for both boys and girls. A potential explanation for this finding is boys' greater concentration of activities in the sports arena.

This point leads to another major conclusion that we can draw from our previous work, as well as the data presented—activity participation is highly related to later self-perceptions of competence and values. This relationship holds across 4 years and across a variety of domains, even after prior domain-specific values and competence are controlled. This highlights the importance of early activity participation for constructing a set of self-beliefs and values that may determine whether or not the child stays engaged in the activity or chooses other similar activities. Early values and self-perceptions did not predict later participation in activities; however, except in the area of team sports. These findings were somewhat of a surprise, because we have typically found relations in that direction. This may have been due to the young ages at which we tested these links; children in the early elementary grades may not yet have enough experience with many activities to have strongly differentiated values and self-perceptions.

The role of parents is also important. Although children may excel in one area or another and prefer one type of activity instead of another, they are not able to become involved in organized activities without some adult's help during middle childhood, and this help is most likely to come from a parent. The fact that more boys end up in team sports and girls in individual sports is related to the opportunities available and the choices made by parents, as much as it is to children's preferences in the early grades. We found that children are more likely to participate in activities, as well as value the activities if mothers believe that those particular activities are important. Children whose mothers value particular activities also feel more self-competent in those domains. Although we did not test the role of fathers in the analyses presented here, our previous studies have shown the influence of fathers' attitudes on children's achievement to be similar to that of mothers (e.g., Eccles, et al., 1983; Jacobs, 1991). It is also important to note that, although parents play a pivotal role in influencing activity choices, children may be influenced by other adults in their lives (e.g., teachers, coaches, or club leaders). In addition, siblings and friends are likely to influence children's decisions to participate in particular activities.

The current results are consistent with the Eccles' model of parent socialization for achievement and with our earlier findings about the importance of parents' beliefs for their children's academic self-perceptions and values (e.g., Jacobs, 1991; Jacobs & Eccles, 1992; Parsons et al., 1982). The ties between parents' values and the choices they make for their children's involvement in extracurricular activities are apt to be even stronger than for academic achievement because extracurricular activities are completely optional. Parents are unlikely to pay for lessons, buy equipment, or encourage their children to participate in activities that they find objectionable or that

do not coincide with their perceptions of what is appropriate for their child's gender, social class, or age. This may explain why few boys are enrolled in dance classes or art lessons, options that many parents may not consider for their sons and that some parents may find inappropriate for males.

Parents are most likely to encourage activities that they value and do what they can to get their children interested in pursuing them. It is important to remember that parents' roles may shift as their children mature, from providing exposure, opportunities, and role modeling in the early phases of activity choice to providing encouragement and guidance for activities that their children choose at later points in development. As children get older, parents may begin to "react" to children's ideas about activity involvement rather than to initiate all aspects of involvement (see Jacobs & Eccles, 2000, for longer description of this process). As we suggested earlier, children may or may not stay involved in the activities that they sample during middle childhood for a variety of reasons. They may lose interest, feel less competent as competition becomes stronger, or decide to spend more time on just one or two activities. We found that the number of activities and types of activities children are participating in declines to some extent during late middle childhood; however, the hours of extra-curricular participation do not. This suggests that children may be refining their likes and dislikes and spending more time on those activities that have value to them. It is clearly a very complex process, one that takes place over time and across many interactions. We are continuing to explore the processes that underlie both continuity and change across time in varied settings and across activities.

ACKNOWLEDGMENT

This research was supported by Grant HD17553 from the National Institute for Child Health and Human Development to Jacquelynne S. Eccles, Allan Wigfield, Phyllis Blumenfeld, and Rena Harold.

REFERENCES

- Bandura, A. (1994). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, 11, 135-172.
- Eccles, J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75-146). San Francisco, CA: W. H. Freeman.
- Eccles, J. S., Adler, T. F., & Meece, J. L. (1984). Sex differences in achievement: A test of alternative theories. *Journal of Personality and Social Psychology*, 46, 26-43.
- Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Youth and Adolescence*, 6(3), 281-294.

- Eccles, J. S., & Harold, R. D. (1991). Gender differences in sport involvement: Applying the Eccles' expectancy-value model. *Journal of Applied Sport Psychology*, 3, 7–35.
- Eccles, J. S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related-beliefs and self-perceptions. *Personality and Social Psychology Bulletin*, 21, 215–225.
- Eccles, J. S., Wigfield, A., Harold, R., & Blumenfeld, P. (1993). Age and gender differences in children's achievement self-perceptions during the elementary school years. *Child Development*, 64, 830–847.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 105–107). New York: Wiley.
- Feather, N. T. (1988). Values, valences, and course enrollment: testing the role of personal values within an expectancy—value framework. *Journal of Educational Psychology*, 80, 381–391.
- Fredericks, J. (1999). "Girl-friendly" family contexts: *Socialization into math and sports*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.
- Garton, A. F., & Pratt, C. (1987). Participation and interest in leisure activities by adolescent schoolchildren. *Journal of Adolescence*, 10(4), 341–351.
- Harter, S. (1990). Causes, correlates, and the functional role of global self-worth: A life-span perspective. In J. Kolligan & R. Sternberg (Eds.), *Perceptions of competence and incompetence across the life span* (pp. 43–70). New York: Springer-Verlag.
- Harter, S. (1998). The development of the self. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 553–617). New York: Wiley.
- Jacobs, J. E. (1991). The influence of gender stereotypes on parent and child math attitudes: Differences across grade-levels. *Journal of Educational Psychology*, 83, 518–527.
- Jacobs, J. E., & Eccles, J. S. (1992). The influence of parent stereotypes on parent and child ability beliefs in three domains. *Journal of Personality and Social Psychology*, 63, 932–944.
- Jacobs, J. E., & Eccles, J. S. (2000). Parents, task values, and real life achievement choices. In C. Sansone & J. Harackiewicz (Eds.), *Intrinsic motivation* (pp. 408–433). San Diego, CA: Academic.
- Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self-competence and values: Gender and domain differences across grades one through twelve. *Child Development*, 73(2), 509–527.
- Larson, R. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55(1), 170–183.
- Larson, R., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 125(6), 701–736.
- Mahoney, J. L. (2001, April). *After-school activities in the community: What helps and what hurts?* Paper presented at the 2001 biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33(2), 241–253.
- McHale, S. M., Crouter, A. C., & Tucker, C. J. (1999). Family context and gender role socialization in middle childhood: Comparing girls to boys and sisters to brothers. *Child Development*, 59(2), 990–1004.
- McHale, S. M., Crouter, A. C., & Tucker, C. J. (2001). Free-time activities in middle childhood: Links with adjustment in early adolescence. *Child Development*, 72(6), 1764–1778.

- Parsons, J. E., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development*, 53, 322-339.
- Posner, J. K., & Vandell, L. (1999). After-school activities and the development of low-income urban children: A longitudinal study. *Developmental Psychology*, 35(3), 868-879.
- Stoneman, Z., Brody, G. H., & MacKinnon, C. E. (1986). Same-sex and cross-sex siblings: Activity choices, roles, behavior, and gender stereotypes. *Sex Roles*, 15(9-10), 495-511.
- Wankel, L. M., & Berger, B. G. (1990). The psychological and social benefits of sport and physical activity. *Journal of Leisure Research*, 22(2), 167-182.
- Wigfield, A., & Eccles, J. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, 12, 265-310.
- Wigfield, A., Eccles, J. S., Yoon, K. S., Harold, R. D., Arbreton, A. J., Freedman-Doan, C., & Blumenfeld, P. C. (1997). Change in children's competence beliefs and subjective task values across the elementary school years: A 3-year study. *Journal of Educational Psychology*, 89, 451-469.
- Youniss, J., McLellan, J. A., Su, Y., & Yates, M. (1999). The role of community service in identity development: Normative, unconventional, and deviant orientations. *Journal of Adolescent Research*, 14(2), 248-261.

Organized Activities
as Contexts of Development
Extracurricular Activities, After-School
and Community Programs

Edited by

Joseph L. Mahoney
Yale University

Reed W. Larson
University of Illinois at Urbana-Champaign

Jacquelynne S. Eccles
University of Michigan



2005

LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
Mahwah, New Jersey London

Copyright © 2005 by Lawrence Erlbaum Associates, Inc.

All rights reserved. No part of this book may be reproduced in any form, by photostat, microform, retrieval system, or any other means, without prior written permission of the publisher.

Lawrence Erlbaum Associates, Inc., Publishers
10 Industrial Avenue
Mahwah, New Jersey 07430

Cover design by Kathryn Houghtaling Lacey

Library of Congress Cataloging-in-Publication Data

Organized activities as contexts of development : extracurricular activities, after-school and community programs / edited by Joseph L. Mahoney, Reed W. Larson & Jacquelynne S. Eccles.
p. cm.

Includes bibliographical references and index.

ISBN 0-8058-4430-9 (cloth : alk. paper)

ISBN 0-8058-4431-7 (pbk. : alk. paper)

1. Student activities—United States. 2. Students—Services for—United States. 3. Community and school—United States. 4. Child development—United States. 5. Youth. 6. Adolescence. I. Larson, Reed, 1950— II. Eccles, Jacquelynne, S.

LB3605.O74 2004
371.8'9—dc22

2003062650
CIP

Books published by Lawrence Erlbaum Associates are printed on acid-free paper, and their bindings are chosen for strength and durability.

Printed in the United States of America
10 9 8 7 6 5 4 3 2 1