

# DEVELOPMENTAL SPORT AND EXERCISE PSYCHOLOGY: A LIFESPAN PERSPECTIVE

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## CHAPTER FIVE

# Parental Influences on Youth Involvement in Sports

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After visiting any playing field or gymnasium, it is easy to observe that parents are substantially involved in their children's sports experiences. However, despite the clearly important role that parents play in youth sports, the research on family socialization in the sport context is relatively limited (Brustad, 1992; Woolger & Power, 1993). In a review of the research on sport socialization, Greendorfer (1992) argued that one of the critical areas for future work is parent socialization of sports participation. Brustad (1992) echoed this sentiment, claiming, "Everybody talks about parents in sport, but nobody does any research on them" (p. 72). Although researchers have recently responded to these claims, there are still several unanswered questions concerning parents' role in children's sport experience.

In contrast to the limited research in sports, family socialization has been well documented in a variety of other domains (e.g., academic achievement, social development, and moral development). Through their beliefs and practices, parents teach children values and provide them with opportunities that influence their choice of different activities and goals (Eccles, 1993; Maccoby & Martin, 1983). There are several reasons that the family should play a particularly important role in the athletic domain. First, a large proportion of children's time is spent in the family, especially in the early years. Second, many parents are highly involved in the athletic experience of their children. Family members play a variety of roles including coach, chauffeur, financier, spectator, and cheerleader. Third, because athletics is a highly public context, parents have several opportunities to provide immediate and specific feedback to their children (Scanlan, 1996). Through this feedback, parents can positively influence children's enjoyment of sports and self-concept development (Brustad, 1996a). However, unrealistic expectations and too much parental pressure can produce negative outcomes. Considering the potential of parents to have either a positive or negative role in children's sports experience, it is unfortunate that the research on this topic is limited.

Because athletics is a highly public context, parents have several opportunities to provide immediate and specific feedback to their children.

This chapter has several purposes. First, we present a theoretical framework that we believe will be useful for conducting future research on parent socialization. Second, we review the existing research on parent socialization and children's sports participation. Third, we discuss some problems with previous work in this area that has limited our understanding of family

socialization in the athletic context. Fourth, we describe promising directions for future research. Finally, we discuss the implications of these findings for interventions with parents in the sporting domain.

## DEVELOPMENTAL ISSUES

Weiss and Bredemeier (1983) advocate taking a developmental theoretical orientation to study children's sports experience. We believe this approach is particularly appropriate to study the question of parental influences. Unfortunately, the majority of research on family socialization has not adequately considered developmental changes that occur within the child and parent-child relation (Woolger & Power, 1993). Cognitive and physical developmental changes may greatly affect parent socialization and children's athletic motivation (Brustad, 1992). Changes in children's capacity to differentiate ability and effort and increases in their capacity to incorporate social comparative information influence how they will interpret feedback from their parents. As a consequence young children rely more on adult feedback, whereas older children rely more heavily upon social comparative sources (Horn & Hasbrook, 1986). In addition, children's rate of physical development can influence the level of parental encouragement. Boys who mature earlier are likely to receive more social support from their parents for athletic participation than are boys who mature at later ages. Research that takes into account children's cognitive and physical maturity levels can help to illuminate the role that developmental factors play in parent socialization.

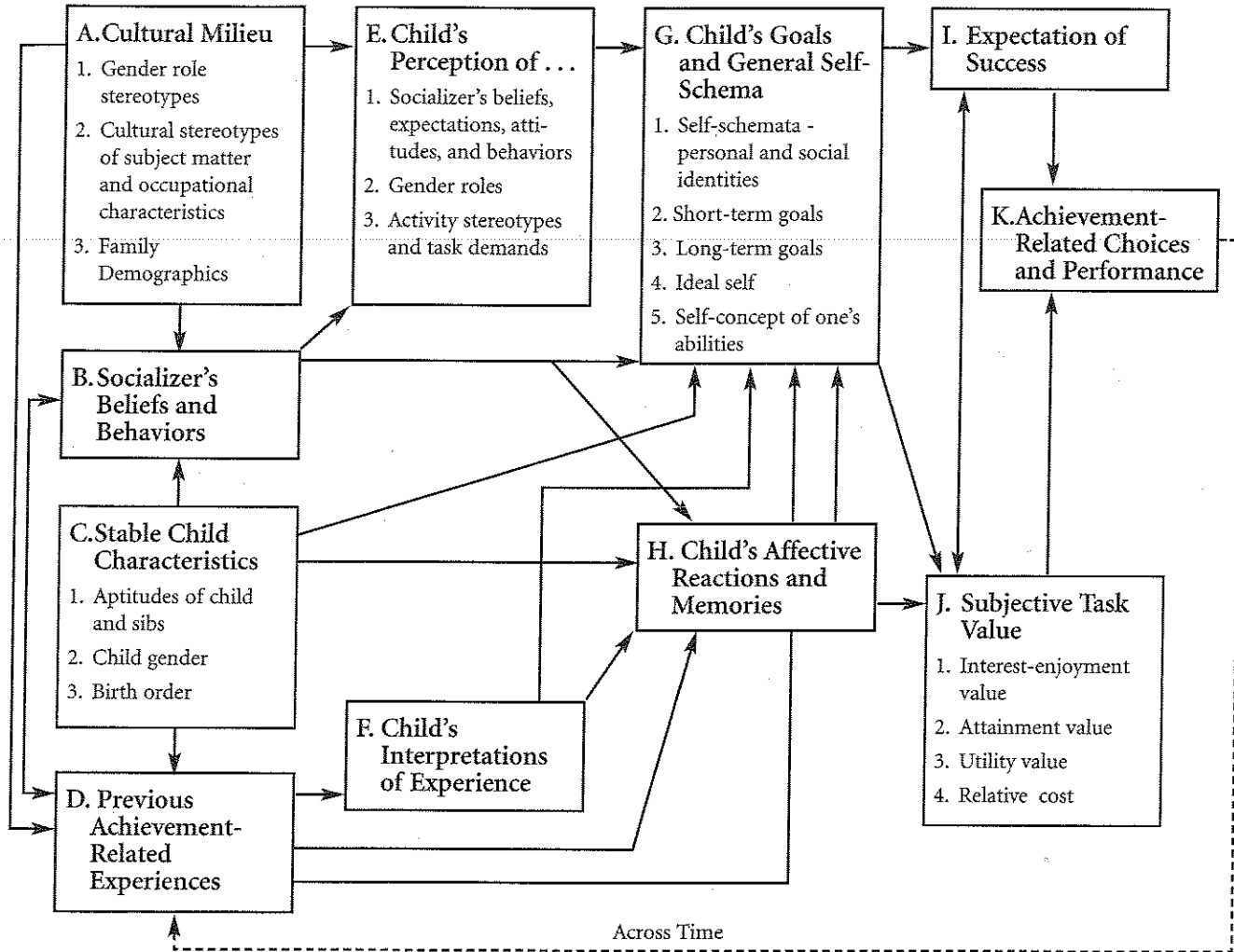
Young children rely more  
on adult feedback, while  
older children rely more  
heavily upon social  
comparative sources.

The importance of parent socialization may also vary by children's developmental stage. Early research on sports socialization compared the effect of the family, peer group, and school on children's sport participation at different developmental stages (Greendorfer, 1977; Lewko & Greendorfer, 1988; Loy, McPherson, & Kenyon, 1978). Evidence from this work indicates that parents play an important role in the early athletic socialization of their children, but their influence decreases in adolescence when peers and coaches take on a more prominent role. These changes in parents' influence are likely a result of increases in the amount of time children spend with their peers and developmental changes in children's cognitive abilities. However, because this work has been primarily descriptive, it is not clear what developmental and situational factors explain differences in parent socialization over time. It is also important to remember that parents are going through their own developmental changes as children age. A critical question for future inquiry is how these concurrent changes within the child and the family influence children's sports participation.

## MODEL OF PARENT SOCIALIZATION

The first purpose of this paper is to provide a conceptual framework for understanding family socialization in the athletic context. Figure 1 presents a general model developed by Eccles and her colleagues (Eccles et al., 1983; Eccles, Wigfield, & Schiefele, 1998) to explain contextual influences on the ontogeny of individual differences in motivation. The Eccles' expectancy-value model is based on the assumptions that individuals' decisions to participate in activities are made in the context of a variety of choices and it is important to understand how significant adults influence these decisions. This model was initially developed to explain the socialization of gender differences, and we believe it provides an excellent framework for understanding parent influences in the athletic domain. Using this model to explore individ-

### General model of achievement choices



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ual differences in sport participation can help address the concern that much of the existing research in sports socialization has been atheoretical (Greendorfer, 1992).

The two most important predictors of choice behaviors are children's expectations for success and task value (see Eccles et al., 1983). Expectations for success are influenced by one's self-concept of ability and one's perception of task difficulty. When this model is applied to the athletic domain, children who perceive that they have high athletic ability will be more likely to participate in athletics than will children who have less favorable beliefs about their athletic competencies. Task value comprises four components: (a) intrinsic value (enjoyment of the activity), (b) utility value (usefulness of the task in terms of future goals), (c) attainment value (personal importance of doing well at the task), and (d) costs (perceived negative aspects of engaging in the task). According to this model, individuals will have higher rates of athletic participation if they have a higher enjoyment of the activity, believe that athletics is important to both their short- and long-range goals, believe that sports participation confirms aspects of their self-schemas, and perceive low costs of involvement.

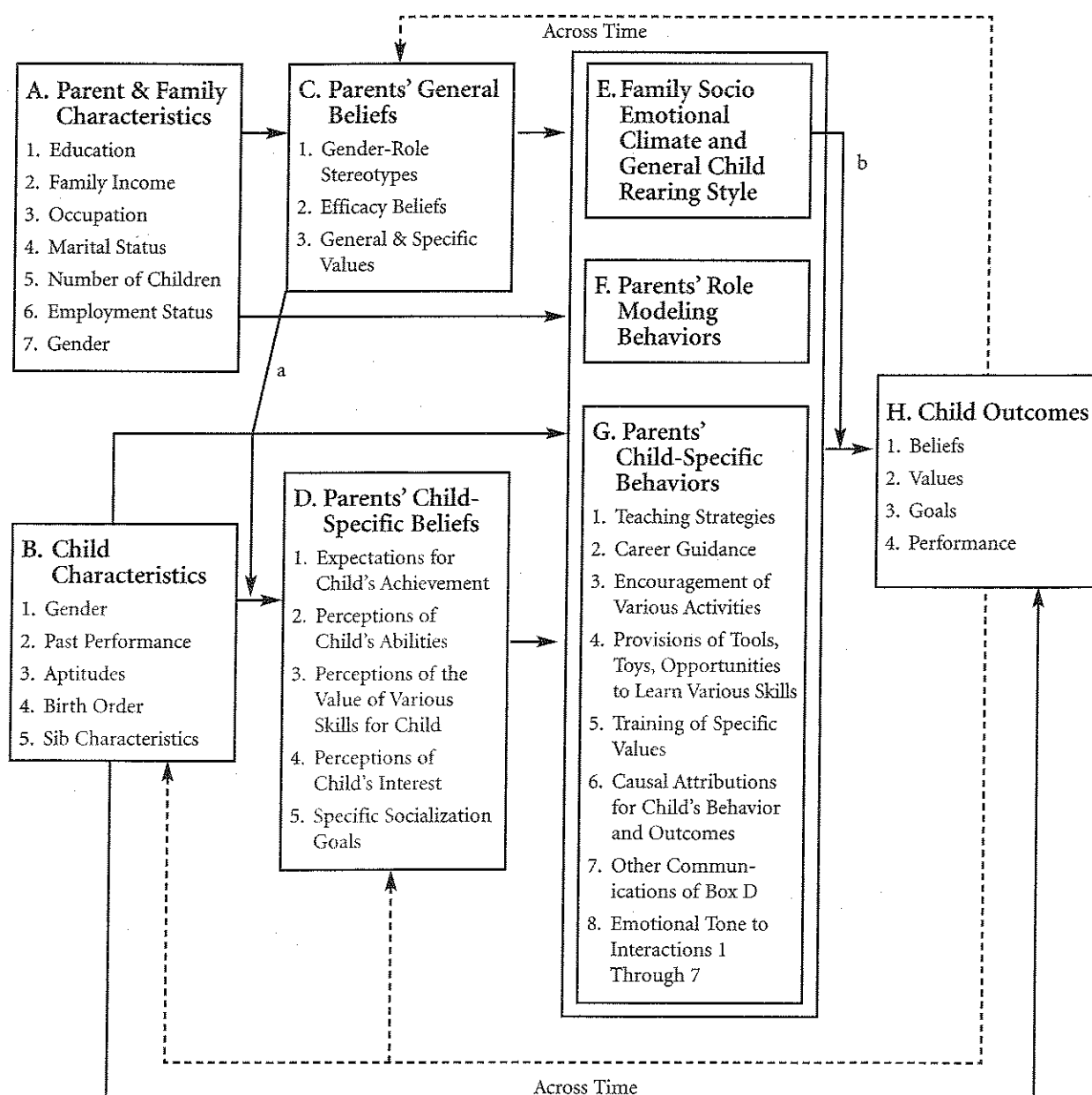
According to the expectancy-value model, socializers (parents, teachers, and peers) influence children's motivation through their beliefs and behaviors. Eccles and her colleagues

(1998) expanded their general achievement model to focus on how parents shape children's beliefs and values (see Figure 2). The two primary ways parents influence children's motivation are by being (a) interpreters of experience and (b) providers of experience (Eccles, 1993; Eccles et al., 1998). Parents help to interpret their children's experiences by providing messages about the likelihood that their children will attain success in a particular achievement domain, in combination with messages about the value of participating in that activity. Applying this model to the athletic domain, parents who have high expectations for their children's success and provide messages about the value of participating in sports will have children who have more favorable motivational outcomes.

Parents also influence their children's motivation through their behaviors. By providing experiences inside and outside of the home, parents help to structure children's exposure to

**FIGURE 2**

Model of parental influences on their children's motivation and achievement



athletics. For example, parents can expose their children to athletics by taking them to sporting events, buying them equipment and toys, and signing them up for special lessons. These experiences can, in turn, influence children's skills, preferences, and activity choices. Parents also influence motivation by providing differential levels of encouragement to participate in athletics. Punishment decreases the likelihood that children will engage in the activity in the future. However, it is less clear whether positive reinforcement increases children's motivation. In fact, excessive positive reinforcement that is not linked to the quality of children's performance can decrease the likelihood that they will participate in the activity in the future (Deci & Ryan, 1985). Conversely, contingent praise and appropriate feedback for performance does result in positive motivational outcomes (see Horn, 1987).

Parents adjust their beliefs and behaviors in response to characteristics of their children, including the child's gender, aptitude, interest, prior performance, and developmental level (Eccles, 1993; Eccles et al., 1983). If parents believe that boys have superior athletic competencies than do girls it is likely that they will provide different opportunities and encouragement to their children depending on their gender. As a consequence, their sons and daughters will come to have different beliefs about their athletic abilities. Similarly, parents are likely to provide more encouragement if they notice that their child has a talent in athletics, but will lower their expectations if their child loses interest in the activity.

According to the Eccles' expectancy-value model, parents' beliefs about their children's abilities are shaped by their gender stereotypes, beliefs about their athletic ability, and knowledge of how to help their children with athletics (Eccles, 1993). For example, parents who endorse more gender stereotypic beliefs about females' competencies will likely hold lower perceptions of their daughters' athletic abilities than will parents who do not endorse traditional notions of males' and females' roles. Additionally, parents who have more knowledge of athletics will be more involved in their children's sporting pursuits than will parents who have less knowledge of appropriate teaching strategies in this domain.

Finally, this model assumes that one cannot understand the effect of the family on children's motivation unless one considers the larger social context. Parents' beliefs and behaviors are shaped by demographic factors such as education, income, marital status, employment status, cultural traditions, number of children in the family, and resources in the neighborhood (Eccles, 1993; Eccles et al., 1983). Participation in athletics requires a financial and time investment by the family. Parents who have monetary resources are in a better position to buy athletic equipment and pay for special teams and camps. The availability of athletic resources in the community also influences children's athletic participation. In some communities, children have several opportunities to be involved in sports at a variety of levels; in other neighborhoods, there are more limited opportunities for children to develop their athletic competencies.

### ***Support for the Eccles Model***

The Eccles expectancy-value model has been used extensively to study parent socialization of motivation in math and English. Several studies have documented that parents' perceptions of their children's abilities are significant predictors of children's own ability and interest in math and English, even after controlling for children's performance (Eccles, 1993; Frome & Eccles, 1998; Jacobs, 1992; Jacobs & Eccles, 1992; Parsons, Adler, & Kaczala, 1982). Further, using longitudinal data, Eccles and her colleagues have found support for the hypothesized causal relations between parents' beliefs and children's self and task beliefs (Eccles, 1993; Yoon, 1996).

Parents adjust their behaviors in response to their children's gender, aptitude, interest, prior performance, and developmental level.

The expectancy-value model has recently been applied to the athletic domain, and researchers have found some support for various aspects of the model (e.g., Dempsey, Kimiecik, & Horn, 1993; Eccles & Harold, 1991; Fredricks, 1999; Kimiecik & Horn, 1998). Because the Eccles model was designed to explain individual differences in choice behavior, it is not surprising that researchers in sport psychology have used this model. Decisions regarding math and English are relatively constrained until later in students' academic careers. In contrast, participation in athletics is voluntary. As a consequence, there should be more variation in athletic participation rates that should be more highly tied to the socialization factors outlined in the model (Eccles & Harold, 1991).

In the next section, we outline research on family socialization in the athletic context. First, we outline the existing research that has been based on the assumption that role modeling is the critical mechanism in parent socialization. We begin our review with this work because it has been a primary focus of the sport psychology literature. Next, we outline the research on the influence of parents as interpreters and providers of experiences, two central components of the Eccles model. We present the results of research that have used the expectancy-value model, as well as findings from scholars who did not explicitly test this model but whose findings fit within this theoretical framework.

## PARENTS AS ROLE MODELS

The process of observational learning has been suggested as the underlying mechanism by which the child internalizes the attitudes and behaviors of the role model (Bandura, 1977; Maccoby & Jacklin, 1974). This theory leads to the assumption that children of parents who engage in athletic activities will also be physically active. Parents can be role models by being a coach, participating in athletics on an organized team, or just doing sports for fun. Through their involvement in athletics, parents provide a model of what is considered appropriate and inappropriate behavior and help to normalize involvement in athletics. However, although modeling is often cited as theoretically important for children's acquisition of attitudes and behaviors (Bandura), the empirical support for role modeling is equivocal. In one of the few studies to empirically test the effect of role modeling on academic outcomes, Parsons (aka Eccles) and her colleagues (1982) found that parents did not influence children's achievement through role modeling. Instead, they found that the primary source of influence was parental expectations.

The findings concerning the effect of role modeling on children's athletic participation have also been mixed. A few studies have used objective measures to document a strong relation between the physical activity levels of parents and children (Freedson & Evenson, 1991; Moore et al., 1991). For example, pediatric researchers in the Framingham Children's Study (Moore et al.) used an electronic monitoring device to track the physical activity behavior of parents and their young children. Children of two active parents were six times more likely to be active than were children of two inactive parents. Freedson and Evenson used a comparable protocol to document a positive relation between the physical activity level of young children and their parents.

Parents who play sports  
on any level provide a  
model for their children  
and help to normalize  
involvement in athletics.

Studies using self-report measures of role modeling have been less conclusive; some scholars document positive associations, and others find no relation between parent and child activity levels. These discrepant findings may be function of differences in measures (objective, children's perceptions, and parents' self-reports) and differences in the age groups examined. For example, Babkes and Weiss (1999) showed that athletes who reported that their mothers and fathers were good role models had higher

perceptions of competence, enjoyment, and intrinsic motivation than did athletes whose parents were not perceived as good role models. In contrast, they did not find a significant relation between mothers' and fathers' reported involvement and children's psychosocial outcomes. Several other studies have failed to document a significant relation between role modeling and children's athletic participation (Dempsey et al., 1993; Fredricks, 1999). For example, Dempsey and her colleagues reported that parents' self-reported moderate-to-vigorous physical activity (MVPA) was not related to children's MVPA behavior. Similarly, Fredricks found that parents' self-reported time involvement in athletics was not related to children's self-concept or participation in organized sports.

Parent participation in sports can be particularly important for female athletes. Across a range of sports, females who participate in sports at the college level reported that one or more of their parents also participated in sports (Greendorfer, 1983; Weiss & Knoppers, 1982). In these families, games and sports were considered normal activities and were part of the family routine. Similarly, Brown, Frankel, and Fennell (1989) found that mothers' participation in sports was a significant predictor of female adolescents' continued participation in both school and community athletic pursuits. There is also some evidence to indicate that parental participation is more important for girls' athletic involvement than for boys' involvement. For example, Greyson and Colley (1986) reported that mothers' and fathers' sport participation was significantly associated with adolescent females' sports participation, but not with males' sports participation. In a similar study, female athletes rated the influence of mothers, siblings, coaches, and friends higher than male and female nonathletes did (Weiss & Barber, 1995).

Although several studies have established an empirical link between parent participation and children's athletic involvement, there are several problems with this hypothesis. First, the role-modeling explanation focuses on the amount of participation (quantity), rather than considering the quality of parent involvement (Dempsey et al., 1993). However, more is not always better. Parents also can model affective reactions to sports participation. For example, a child would be more likely to imitate a parent who is enthusiastic about athletics than a parent who participates at the same level but does not express positive sentiments. Brustad (1993, 1996b) found empirical support for this assumption, documenting a positive relationship between parents' enjoyment of physical activity and children's attraction to athletics. A second problem is the lack of specificity in the role-modeling research. As models, parents can engage in a variety of behaviors that children can imitate. Because this research has been primarily descriptive, it is not clear what specific parenting behaviors help to explain the underlying relation between parents' and children's sport participation.

## PARENTS AS INTERPRETERS OF EXPERIENCE

Another way parents influence children's ability perceptions and sports involvement is through their beliefs and values. The relation between parents' beliefs and children's motivation and achievement has been well established in the educational literature (e.g., Alexander & Entwistle, 1988; Eccles et al., 1998). There is a growing interest in how parents' beliefs may contribute to individual differences in children's athletic outcomes. We divide our review of the research on the effect of parents' beliefs on children's motivation into two sections: (a) affective outcomes and (b) self-concept development.

### *Research on Affective Outcomes*

Several studies have examined how parents contribute to children's affective development in sport. The impact of parental pressure has been a central question in this work; the impetus



behind much of this research has been a concern over the high level of stress, anxiety, and burnout experienced by some young athletes (Brustad, 1996a). In research on young wrestlers, Scanlan and Lewthwaite (1984) documented that male athletes who perceived high levels of pressure by their parents had higher state anxiety regarding wrestling competition. Similarly, Gould and his colleagues (Gould, Eklund, Petlichkoff, Peterson, & Bump, 1991) found that parental pressure to wrestle was related to young wrestlers' prematch anxiety. Weiss, Wiese, and Klint (1989) provided additional support for the potential negative effects of parental pressure. They reported that youth gymnasts' two most frequently cited worries were "what my parents will think" and "letting my parents down." Borman and Kurdek (1987) outline further evidence of the effect of parental pressure on sport participation, documenting that motivation to play soccer was significantly related to lower maternal control.

Parents can also positively influence favorable outcomes for youth in sports, though much less research has been done on this topic. Children's enjoyment of sports (amount of fun youngsters experience) has been a central component of this work. Several scholars have reported a relation between lower levels of parental pressure and greater enjoyment of athletics (Babkes & Weiss, 1999; Brustad, 1988). Additional evidence of families' influence on children's enjoyment comes from an interview study of elite figure skaters (Scanlan, Stein, & Ravizza, 1989). Results of the qualitative analysis indicated that bringing pleasure to the family was an important dimension of sports enjoyment.

### *Research on Self-Concept*

Several studies have used the Eccles expectancy-value model to examine the effect of parents' expectations and values on children's athletic competence beliefs. For example, Eccles and Harold (1991) examined parental socialization of gender differences in sports involvement. Results from this research support the Eccles' theoretical model: Children's perceptions of the value of sports involvement to their parents were related to children's beliefs about their own physical ability. Girls reported that their parents placed lower value on sports participation than did boys. In turn, these gender differences were linked to girls' lower participation in sports (Eccles & Harold, 1991). Using longitudinal data, Fredricks and Eccles (2002) provided further evidence of the impact of parents' beliefs on the development of children's athletic competence beliefs. Parents' expectations of children's sport ability in the elementary school years helped to explain changes in children's sports competence beliefs from 1st through 12th grade. When parents had high expectations for children's sports ability, children had less dramatic declines in their self-concept over time. These findings were independent of actual ability differences.

Eccles and her colleagues found that even parents of early elementary school children report that boys have more talent in athletics and that sports is more important for their sons than for their daughters.

An important question is how gender mediates the relation between parents' beliefs and children's self-perceptions. Many parents of adolescents hold gender-stereotyped beliefs, believing that males have more athletic ability than females (Eccles, Jacobs, & Harold, 1990; Greendorfer, 1993; Jacobs & Eccles, 1992). When do these gender-stereotyped beliefs emerge? Eccles and her colleagues found that even parents of early elementary school children reported that boys had more talent in athletics and that sports was more important for their sons than for their daughters (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Eccles et al., 2000).

The origin of these gender-stereotyped beliefs has been an important focus of this research. Jacobs and Eccles (1992) examined how mothers' gender-role stereotypes influence both mothers' and children's appraisals of ability in athletics. Mothers who reported that boys were more natural-

ly gifted in sports had higher perceptions of athletic ability for their sons and lower perceptions for their daughters than did parents with less stereotyped beliefs. In accordance with the Eccles model, children's own self-perceptions of ability tended to be congruent with their mothers' appraisals of their sports ability.

The Eccles' expectancy-value model has also been applied to research on the socialization of children's MVPA, an important focus of recent public health objectives (U.S. Department of Health and Human Services, 2000). This research has contributed to our understanding of the impact of parents' beliefs on children's physical activity participation (Dempsey et al., 1993; Kimiecik & Horn, 1998; Kimiecik, Horn, & Shurin, 1996). For instance, Dempsey and colleagues reported a relation between parents' perceptions of their children's competence in MVPA and children's actual level of MVPA participation. Extending this work on the determinants of MVPA, Kimiecik and colleagues (1996) found that children who perceived that their parents valued fitness and had higher competence beliefs reported higher MVPA levels. Further, Kimiecik and Horn (1998) examined gender differences in parents' beliefs regarding children's MVPA and the relation between these beliefs and children's self-reported MVPA. In contrast to much of the other work on parent socialization, mothers and fathers did not differ in their perceptions of children's physical activity competence and the importance of MVPA for their sons and daughters. However, similar to the previous findings in this domain, parents' competence beliefs for their children were significantly related to children's MVPA (Kimiecik & Horn, 1998).

Though not explicitly testing the Eccles model, several other studies have documented a strong correspondence between parent and child appraisals of children's competence beliefs (Felson & Reed, 1986; McCullagh, Matzkanin, Shaw, & Maldonado, 1993). Related research by Scanlan and Lewthwaite (1984) provides additional support of an association between parent and children's beliefs. Young wrestlers who perceived high parental satisfaction had higher expectancies for future performance. Additionally, Babkes and Weiss (1999) found that youth soccer players who reported that their mothers and fathers had more positive beliefs about their competencies and gave more frequent positive responses to their performance were more likely to report greater enjoyment of sports and more positive beliefs about their ability. In contrast, Babkes and Weiss found no significant relation between parents' reported beliefs and behaviors and children's outcomes.

One question that arises from this work concerns how parents' beliefs are communicated to their children. Parents' extensive involvement in athletics gives them multiple opportunities to provide feedback to their children about their abilities and values. However, there has been surprisingly little research on the nature of parental feedback and the effect of these comments on children's sports beliefs and behavior. One interesting area of research categorizes parents' comments during youth sporting events (Kidman, McKenzie, & McKenzie, 1999; Randall & McKenzie, 1987). This work leads to several questions about the salience and meaning of feedback, the types of comments that are the most beneficial for young athletes, and how children integrate these comments into their developing beliefs and values.

## PARENTS AS PROVIDERS OF EXPERIENCE

Parents' behaviors can influence children's sports participation in a number of ways. One way is through the pattern of reinforcement and level of encouragement parents give for engaging in athletic activities. Early encouragement of sports by the family is a critical factor in continued involvement. Most athletes acknowledge that their family stimulated their early interest and participation in sports (Brustad, 1992). Those who achieve elite status in athletics often

began their participation as early as 5 or 6 years of age with the interest generated by the family. Parental encouragement is also positively associated with continued participation in athletic activities. For example, Brustad (1993) found that parental encouragement to be physically active was related to children's attraction to physical activity. Brustad (1996b) extended these findings to an urban sample, reporting that parental encouragement was positively related to both female and male children's attraction to physical activity and perceived physical competence.

Parental encouragement appears to be especially important to counteract the negative effect of gender stereotypes on girls' involvement in sport. Several studies have reported a positive correlation between parents' encouragement and current sport participation for females (Greendorfer, 1983; Higginson, 1985; Weiss & Knoppers, 1982). Social support from family members appears to be an important factor in girls' participation. For example, Lewko and Ewing (1980) found that highly involved girls identified more support from fathers, mothers, and siblings than did girls who were not as highly involved in athletics. In addition, Brown (1985) reported that social support from parents was positively related to female adolescent swimmers' participation status.

Parents also support children's sports participation by providing a variety of opportunities and athletic experiences in and outside the home. For instance, it is typically the parent (usually the mother) who enrolls children in their first sports program (Howard & Madrigal, 1990). Parents also support children's involvement by purchasing equipment and services and providing volunteer labor to help maintain children's sports programs (Green & Chalip, 1998). Spending time with children helping them to develop their skills is another way parents can bolster children's athletic involvement. Finally, parents can support children's sports involvement by becoming actively involved in coaching and/or the administration of youth sports program.

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The importance of opportunities and experiences in the home for children's continued athletic participation and skill development has been illustrated in qualitative research on talent development (Alfeld-Liro, Fredricks, Hruda, Patrick, & Ryan, 1998; Bloom, 1985). In a study of elite athletes, Bloom reported that parents introduced children to the activity, provided resources and equipment to encourage their children's interest, and practiced skills with them. As children gained competence, parents played a larger role in helping them to gain access to coaches and teams to help them to improve their skills.

### *Gender Differences*

Researchers have documented that parents are gender stereotyped in their level of encouragement and provision of opportunities in the home (Eccles, 1993; Greendorfer, 1993). Since the advent of Title IX, women have made great strides in their athletic participation. Today, young girls are much more likely to be encouraged to be involved in sports. However, despite these advances, parents continue to endorse the gender-stereotypic belief that boys are more suited for sports than girls. In addition, parents continue to encourage their daughters to try certain sports (e.g., gymnastics, skating, tennis) that may also communicate gender-stereotypic beliefs. In a recent review of the literature, Greendorfer, Lewko, and Rosengren (1996) concluded that differential treatment of play styles, toy preferences, and gender labeling of physical activities continues to exist.

Gender differences in parental encouragement of opportunities begin at a very young age. Both mothers and fathers are more likely to encourage motor activity in their sons than in their daughters (Huston, 1983; Power & Parke, 1986). Boys are also given earlier autonomy and are

less restricted in their opportunities to play outside than are girls (Huston). Fathers are also more likely to play roughly with boys and teach them gross motor behavior (Huston; Power & Parke). This early exposure to rough and tumble play is likely to prepare boys for the context of many athletic teams. There is also evidence that parents reward and encourage gender-stereotyped play and discourage cross-typed play (Caldera, Huston, & O'Brien, 1989; Langlois & Downs, 1980). Boys are more likely to be given toys that are congruent with their gender such as athletic equipment, trucks, and military toys (Fisher-Thompson, 1990). This differential exposure to toys and activities gives children the opportunity to develop different competencies and values. Without the opportunity to try a particular activity, children will never get the chance to find out if they are good at it or if they enjoy it.

Parental differential treatment by gender continues in middle childhood and adolescence. Parents are more likely to encourage their sons to be physically active and participate in sports than they are to encourage their daughters (Brustad, 1993; Eccles, 1993; Greendorfer, 1993). Parents also report gender-stereotyped differences in time use with their children; they are more likely to spend time playing sports with their sons and are more likely to take their sons to sporting events (Eccles, 1993; Eccles et al., 2000). These results clearly demonstrate that parents are providing different types of athletic experiences for boys and girls. An important question is how this differential treatment within the family affects children's sports participation over time.

### *Extent of Overinvolvement*

The amount of parental involvement in athletics activities helps to make a statement in the family about the relative importance of sports. According to Hellstedt (1987), parent involvement ranges on a continuum from under- to overinvolvement. Parents who are underinvolved do not make much of an emotional, financial, or functional investment in their children's athletics. In contrast, parents who are overinvolved emphasize winning, become angry if their children do not perform well, and make frequent attempts to help coach from the sidelines. The ideal level of involvement is between these two extremes. Parents who are moderately involved support their children's participation without being excessive, leaving ultimate decisions about participation levels up to the athlete (Hellstedt, 1987). However, although the benefit of moderate involvement is an appealing idea, there is presently no empirical data to verify the relationship between over- and underinvolvement and child outcomes.

There is a growing concern about parents' excessive involvement in athletics (Williams & Lester, 2000). For some parents, their own self-esteem is tied to their child's athletic success, which results in high levels of parental involvement and an emphasis on winning at all costs (Hellstedt, 1987). This overinvolvement by parents can contribute to children's negative sports experience and can undermine even the best-intentioned youth sports program (Kamm, 1998; Smilkstein, 1980). Parents can also contribute to athlete burnout, a negative emotional outcome that is the consequence of chronic stress (Gould, Tuffey, Udry, & Loehr, 1996; Smith, 1986). In his research, Coakley (1992) reported that highly accomplished athletes whose parents made great commitments of time and energy most frequently experienced burnout.

However, although there is strong anecdotal evidence of the negative effects of excessive levels of parental involvement, more systematic research is needed to document the extent of this problem and differences in the athletic experiences of children with overly involved parents and those with less involved parents.

Healthy involvement means that parents support their children's participation in sports without being excessive and leave ultimate decisions about participation levels up to the athlete.

## WHAT WE HAVE LEARNED

To help the reader synthesize our review, we developed a brief profile that summarizes the current knowledge of family socialization in the athletic context. We organize this profile around the three components of parent socialization: (a) parents as role models, (b) parents as interpreters of experiences, and (c) parents as providers of experience.

### *Parents as Role Models*

- Active parents have active children.
- Parent participation in athletics is particularly important for girls. Female athletes are more likely to have parents who participate in athletics than are female nonathletes.
- More research is needed to understand how and why parent participation in athletics influences children's participation.

### *Parents as Interpreters of Experience*

- Higher parental pressure is related to negative child outcomes (stress, anxiety, and burnout).
- Low to moderate levels of parental pressure is related to children's higher enjoyment of athletics.
- Parental beliefs (perceived competence, value, and enjoyment) are positively related to children's own competency beliefs, interest, and participation.
- Parents hold gender-stereotyped beliefs, believing that athletics is more important for boys than for girls and that boys have more athletic talent than girls.
- Children's perceptions of parents' beliefs are more strongly related to children's self-perceptions than are parent-reported beliefs.

### *Parents as Providers of Experience*

- Parents support and encourage children's athletic involvement in a variety of ways, from time involvement to monetary support. There is a need for more research on how specific behaviors influence children's participation.
- Parental encouragement is positively related to children's sports involvement.
- Parents are gender-typed in their behaviors. They encourage their sons to be physically active more than they encourage their daughters. They provide more athletic opportunities to their sons than to their daughters.

- Overinvolvement by parents can contribute to children's negative emotional reactions to sports and ultimately to athlete burnout.

## LIMITATIONS AND FUTURE RESEARCH

There are several gaps in the research that limit our knowledge of the sport socialization process. The majority of the research falls into two categories: (a) retrospective reports of parental behavior with college age and adult samples and (b) primary and secondary student self-reports about parental practices (Woolger & Power, 1993). In addition to assessing children's perceptions, there is a need for research that gathers information directly from parents about their beliefs, attitudes, and expectations regarding the sports involvement of their sons and daughters (Brustad, 1992). The importance of assessing both parents' and children's beliefs in the sport socialization process is illustrated in the Eccles model of parent socialization (see Figure 2).

As outlined in our review, both parents' beliefs and behaviors are important determinants of children's sports participation, and future studies should include measures of both. These parenting dimensions should not be examined in isolation, as much of the previous research has done. It is likely that parents' beliefs and behaviors interact in complex ways to influence children's motivation (Woolger & Power, 1993). For example, the effect of parental encouragement may vary as a function of parental warmth. The same level of encouragement could be viewed as either supportive or manipulative, depending on the quality of the parent-child relation.

The majority of the sport psychology research has used regression or "variable-centered" techniques to examine these questions. The usual approach in variable-centered analysis is to examine whether a factor still has an effect after accounting for its intercorrelations with other variables in the model. Although it is important to examine the effect of each socialization factor on children's sport participation after taking into account other variables in the model, it gives limited insight into the potential interactive and cumulative effect of parents' beliefs and behaviors. Supplementing variable-centered analyses with "person-centered" analyses is one approach that has been suggested to provide a more comprehensive picture of the relations among variables (Magnusson & Bergmann, 1988). In this kind of methodology, individuals are grouped together based on the patterns of their responses. Fredricks (1999) used this approach to examine the effect of different family contexts on children's athletic motivation. Families were typed based on the number of positive socialization factors in the home. Children who lived in families with a higher number of positive socialization factors had higher athletic motivation than did children living in families with less supportive factors.

Another concern is the lack of specificity in measures of parental behavior. In order to compare the influence of the family, peer group, and teachers, researchers have tended to use undifferentiated measures of "encouragement" or "involvement" (e.g., Greendorfer & Ewing, 1981; Higginson, 1985; Snyder & Spreitzer, 1973). Researchers who examine parent involvement in the achievement context have demonstrated that the type of parent involvement is more important than undifferentiated measures of the overall amount (Eccles & Harold, 1993; Grolnick, Benjet, Kurowski, & Apostoleris, 1997). Several new studies in the sports psychology literature have used specific indices of parental influences (see Babkes & Weiss, 1999; Brustad, 1993, 1996b), but it is clear that much more attention needs to focus on unpacking the constructs of parent involvement, encouragement, and support in the athletic context. Scholars who examine sport socialization might benefit by seeking relevant articles on measuring and conceptualizing these constructs.

Assessing potential differences in the effect of mothers' and fathers' beliefs on children's sports participation is another fruitful area of inquiry. There is some evidence that the same-sex parent is the most influential member of the family with regards to children's sport involvement (Lewko & Ewing, 1980; Snyder & Spreitzer, 1973). It has also been argued that fathers help to contribute to gender-stereotyped physical activity patterns because of their stricter differentiation of roles for girls and boys (Johnson, 1975; Langlois & Downs, 1980). However, the evidence that fathers are a more important figure in sport socialization is equivocal (Lewko & Greendorfer, 1988). In fact, several studies have demonstrated that mothers are more important than fathers in sport socialization (Howard & Madrigal, 1990; Kimiecik & Horn, 1998; Sallis, Patterson, Buono, Atkins, & Nader, 1988). Research that examines differences in the effect of mothers' and fathers' socialization practices on girls' and boys' sports experience can help to address this debate.

It is also important to examine parent socialization at different stages of children's involvement. The reliance on samples of children and adolescents already involved in athletics has resulted in limited information about the factors that contribute to early involvement of children in sports. As a consequence, there is information on the factors that maintain children's participation in athletics once they have become actively involved, but research "leaves unanswered the general question of how family, peers, and school shape children's socialization into sports" (Lewko & Greendorfer, 1988, p. 291). A way to help remedy this problem is for researchers to assess the socialization and motivational factors that precede children's initial sports involvement and follow these children over time (Brustad, 1992). Furthermore, understanding attrition from youth sports has been identified as a major goal of the research (Gould, 1987). Although it is likely the family plays a role in children's decision to drop out of sports, few studies have examined the impact of the family on youths' attrition from sports.

Using the Eccles  
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There are several methodological problems with the previous research. First, most studies assume that parent socialization is unidirectional. However, it is very likely that sport socialization is bidirectional (Hasbrook, 1986; Snyder & Purdy, 1982). Not only do parents' beliefs and behaviors exert influence on children's behavior, but children's self-perceptions and interests also affect parent socialization in a bidirectional manner. We believe that the Eccles (1983, 1998) expectancy-value model provides a valuable theoretical framework for researchers to test bidirectional relations in the athletic domain. For example, using this model, researchers can

test the effect of parents' beliefs and behaviors on children's motivation as well as testing how parents adjust their socialization in response to characteristics of the child such as the child's gender, age, interest, and ability (see Figure 2). We are encouraged that some researchers in sport psychology are beginning to use more sophisticated statistical techniques to test bidirectional influences (Green & Chalip, 1997, 1998).

A consideration of alternative research methodologies would also contribute to our understanding of the sport socialization process. Most of our current knowledge is based on cross-sectional data. Unfortunately, the dynamic and interactive nature of socialization cannot be adequately captured by data collected at a single point in time. From the current research, it is not clear how parents' beliefs and behaviors influence children's psychosocial development over time. The importance of examining socialization "across time" is illustrated in the Eccles model (see Figure 2). Assessing parent and child behaviors over time will help researchers to examine how concurrent developmental changes occurring in the child and within the parent-child relationship influence athletic participation. Qualitative research methods can also provide a greater understanding of the reciprocal nature of socialization. The reciprocal influence of sports participation on the family is eloquently articulated in the interviews with

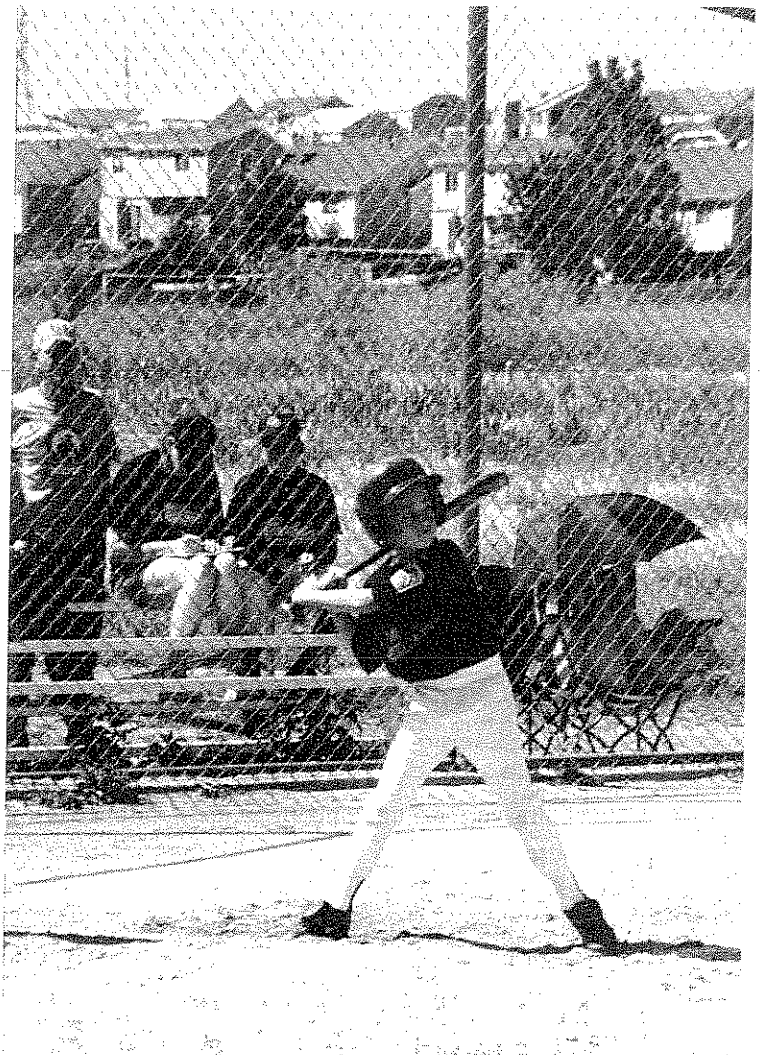


highly involved athletes (Alfeld-Liro et al., 1998; Bloom, 1985). These parents adjusted their socialization techniques in response to their child's developing talent. As their child's skills increased, the parents sought out opportunities that would facilitate their child's continued success.

To characterize the sport socialization process more effectively, research that takes a systems approach is also needed. Parents do not socialize children in isolation. They often take their cues on how to support their children from the feedback they receive from others, especially their children's coaches. Unfortunately, the majority of research has looked at parents and coaches separately, rather than considering how they jointly influence children's sports experience. Evidence from this work could be used to help improve communication between parents and coaches, a common concern of both parties (Hellstedt, 1987). Although less research has been conducted on peer influences in youth sports, it is very likely that parents and peers work together in influencing children's activity participation. For example, the quality of the parent-child relation can affect children's ability to form peer relations in the sport context (Weiss, in press). The relative influence of adults and peers on children's motivation, cognitive, and affective outcomes may also differ depending on children's developmental level.

Another application of a systems approach to the study of sports socialization concerns the role of siblings in children's sports involvement. The Eccles model includes sibling characteristics as an important aspect of the socialization process (see Figure 2). There are anecdotal accounts of how parents treat siblings differently in the athletic context, giving more or less support to one sibling depending on the needs of the other children in the family. However, there is no empirical evidence of the effect of sibling characteristics (gender, birth order, and number) on children's sports participation. We believe this represents a fruitful area of future inquiry.

Finally, there is a need for research with more diverse samples. Our current knowledge base has been generated primarily from research with white (European-American), upper-middle-class suburban families. These families have access to the time and resources necessary to support their children's sports participation. This limitation greatly affects the generalizability of these findings. In future work, it is critical that researchers consider the effect of race, ethnicity, and social class on parent socialization of children's athletic participation. Given changes in current family dynamics, it is also important to examine the impact of different



The way parents interpret a child's involvement in sport significantly affects the child's experience.



family structures on children's sports experience (Babkes & Weiss, 1999). For example, it is possible that single parents may have less free time to devote to their children's sports participation than do two-parent families. By studying more diverse samples, researchers can assess the extent to which the previously identified patterns of parental influence extend to a more representative group of families.

## PRACTICAL IMPLICATIONS

These findings have a number of practical implications. Parents can positively support children's athletic involvement through their beliefs and behaviors. Specifically, they can support children's participation by communicating positive feedback about their children's ability, giving messages to their children about the value of participation, encouraging their children's involvement, providing financial support for equipment and lessons, and attending their children's games and competitions. However, there can be too much of a good thing. Parents who put too much pressure on their children to perform, criticize their children's performance, and are too involved in their youth's sporting activities can contribute to anxiety, stress, and burnout.

Researchers have surveyed youth athletes about what they want from their parents (Stein, Raedeke, & Glenn, 1999; Wood & Abernethy, 1991). These results support the assumption that moderate levels of parental involvement are ideal. Parents need to remember that the child's enjoyment of athletics is the paramount concern. They can enhance their child's experience by providing support and encouragement, not becoming overinvolved, and not placing too much pressure on the child (Wood & Abernethy). In the end, decisions about participation should be left up to the athlete.

Although several workshops have been developed for coaches, there has been only limited intervention with parents of athletes. A few books have been written for youth sport parents (e.g., Hanlon, 1994; Rotella & Bunker, 1987; Smith, Smoll, & Smith, 1989). In addition, a few workshops have been developed that provide parents with guidelines for ways to interact with their child athlete. Parents are provided suggestions for how they can positively support their children and information on danger signs that can warn of their overinvolvement. Parents are also given a background to the benefits of athletics and children's motives for involvement. For example, one activity is to have parents examine their own motivations for signing their child up for athletics to make sure that these motives focus on the child rather than the parent's self-interest (Kamm, 1998).

Parent support and encouragement appears to be particularly important to female's ability to transcend traditional gender stereotypes.

Although these workshops have the best intentions, it is not clear how effective parenting education classes have been in changing parents' attitudes and behaviors. There is a need for research that evaluates the impact of these programs on parents' attitudes and behaviors and athletes' subsequent sports experiences. Studies of the effectiveness of training programs for coaches can provide a guide for these evaluations (see Smith & Smoll, 1996). Additionally, because much of the research on parental influences has used general measures of parent involvement, suggestions for parents have tended to focus on general issues. If more specific parenting behaviors and attitudes can be identified as either enhancing or interfering with children's sport experiences, researchers can make more specific suggestions regarding parental influences.

Finally, the findings have implications for family socialization of gender roles. Parent support and encouragement appear to be particularly important for females to help them transcend traditional gender stereotypes. Unfortunately, many parents still have gender-stereotyped beliefs and behaviors. Despite the inroads that females have made in athletics, many

parents still believe boys are more suited for sports than girls are. It is critical that parents are given the message that both their sons and their daughters can benefit from athletic participation and that they provide equal opportunities for both sexes to enjoy these benefits.

## REFERENCES

- Alexander, K. L., & Entwisle, D. (1988). Achievement in the first two years of school: Patterns and processes. *Monographs of the Society for Research in Child Development*, 53 (2, Serial No. 218).
- Alfeld-Liro, C., Fredricks, J. A., Hruda, L. Z., Patrick, H., & Ryan, A. (1998, March). Nurturing teenagers' talent: The role of parents, teachers, and coaches. In T. Scanlan (chair), *Maintaining commitment to one's talent*. Symposium conducted at the biennial meeting of the Society for Research on Adolescence, San Diego.
- Babkes, M. L., & Weiss, M. R. (1999). Parental influence on cognitive and affective responses in children's competitive soccer participation. *Pediatric Exercise Science*, 11, 44-62.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bloom, B. S. (1985). *Developing talent in young people*. New York: Ballantine Books.
- Borman, K. M., & Kurdek, L. A. (1987). Gender differences associated with playing high school varsity soccer. *Journal of Youth and Adolescence*, 16, 379-399.
- Brown, B. A. (1985). Factors influencing the process of withdrawal by female adolescents from the role of competitive age group swimmer. *Sociology of Sport Journal*, 2, 111-129.
- Brown, B. A., Frankel, B. G., & Fennell, M. P. (1989). Hugs or shrugs: Parental and peer influence on continuity of involvement in sport by female adolescents. *Sex Roles*, 20, 397-409.
- Brustad, R. J. (1988). Affective outcomes in competitive youth sport: The influence of intrapersonal and socialization factors. *Journal of Sport & Exercise Psychology*, 10, 307-321.
- Brustad, R. J. (1992). Integrating socialization influences into the study of children's motivation in sport. *Journal of Sport & Exercise Psychology*, 14, 59-77.
- Brustad, R. J. (1993). Who will go out and play? Parental and psychological influences on children's attraction to physical activity. *Pediatric Exercise Science*, 5, 210-233.
- Brustad, R. J. (1996a). Parental and peer influences on children's psychological development through sport. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth sport: A biopsychosocial perspective* (pp. 112-124). Dubuque, IA: Brown & Benchmark.
- Brustad, R. J. (1996b). Attraction to physical activity in urban schoolchildren: Parent socialization and gender influences. *Research Quarterly for Exercise and Sport*, 67, 316-323.
- Caldera, Y. M., Huston, A. C., & O'Brien, M. (1989). Social interaction and play patterns of parents and toddlers with feminine, masculine, and neutral toys. *Child Development*, 60, 70-76.
- Coakley, J. (1992). Burnout among adolescent athletes: A personal failure or social problem? *Sociology of Sport Journal*, 9, 271-285.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Dempsey, J. M., Kimiecik, J. C., & Horn, T. S. (1993). Parental influences on children's moderate to vigorous physical activity participation: An expectancy-value approach. *Pediatric Exercise Science*, 5, 151-167.
- Eccles, J. S. (1993). School and family effects of the ontogeny of children's interests, self-perception, and activity choice. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation* (pp. 145-208). Lincoln, NE: University of Nebraska Press.
- Eccles, J. S., Adler, T. E., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectations, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75-146). San Francisco: W. H. Freeman.
- Eccles, J. S., Freedman-Doan, C. R., Arberton, A. J., Yoon, K. S., Harold, R. D., & Wigfield, A. (2000). *Parents hold the key to the land of opportunity*. Manuscript in preparation.
- Eccles, J. S., & Harold, R. D. (1991). Gender differences in sport involvement: applying the Eccles' expectancy model. *Journal of Applied Sport Psychology*, 3, 7-35.
- Eccles, J. S., & Harold, R. D. (1993). Parent-school involvement during the early adolescent years. *Teachers College Record*, 94, 560-587.
- Eccles, J. S., Jacobs, J. E., & Harold, R. D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues*, 46, 183-201.
- Eccles, J. S., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Ontogeny of children's self-perceptions and subjective task values across activity domains during the early 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: Vol. 3. Social, emotional and personality development* (5<sup>th</sup> ed., pp. 1017-1094). New York: Wiley.

- Felson, R. B., & Reed, M. (1986). The effect of parents on the self-appraisal of children. *Social Psychology Quarterly*, 49, 302-308.
- Fisher-Thompson, D. (1990). Adult sex typing of children's toys. *Sex Roles*, 23, 291-303.
- Fredricks, J. (1999). "Girl-friendly" family contexts: Socialization into math and sports. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.
- Fredricks, J., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood through adolescence: Growth trajectories in two male-sex-typed domains. *Developmental Psychology*, 38, 519-533.
- Freedson, P. S., & Evenson, S. (1991). Familial aggregation in physical activity. *Research Quarterly for Exercise and Sport*, 62, 384-389.
- Frome, P., & Eccles, J. (1998). Parents' influence on children's achievement-related perceptions. *Journal of Personality and Social Psychology*, 2, 435-452.
- Gould, D. (1987). Understanding attrition in children's sport. In D. Gould & M. R. Weiss (Eds.), *Advances in pediatric sports science: Vol. 2. Behavioral issues* (pp. 61-85). Champaign, IL: Human Kinetics.
- Gould, D., Eklund, R. C., Petlichkoff, L., Peterson, K., & Bump, L. (1991). Psychological predictors of state anxiety and performance in age-group wrestlers. *Pediatric Exercise Science*, 3, 198-208.
- Gould, D., Tuffey, S., Udry, E., & Loehr, J. (1996). Burnout in competitive junior tennis players: II. Qualitative analysis. *The Sport Psychologist*, 10, 341-366.
- Green, C. B., & Chalip, L. (1997). Enduring involvement in youth soccer: The socialization of parent and child. *Journal of Leisure Research*, 29, 61-77.
- Green, C. B., & Chalip, L. (1998). Antecedents and consequences of parental purchase decision involvement in youth sport. *Leisure Sciences*, 20, 95-109.
- Greendorfer, S. L. (1977). Role of socializing agents in female sport involvement. *Research Quarterly*, 48, 304-310.
- Greendorfer, S. L. (1992). Sports socialization. In T. S. Horn (Ed.), *Advances in sport psychology* (pp. 201-218). Champaign, IL: Human Kinetics.
- Greendorfer, S. L. (1993). Gender role stereotypes and early childhood socialization. In G. L. Cohen (Ed.), *Women in sport: Issues and controversies* (pp. 3-14). Newbury Park, CA: Sage Publications.
- Greendorfer, S. L., & Ewing, M. E. (1981). Race and gender differences in children's socialization into sport. *Research Quarterly for Exercise and Sport*, 52, 301-310.
- Greendorfer, S. L., Lewko, J. H., & Rosengren, K. S. (1996). Family and gender-based influences in sport socialization of children and adolescents. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (pp. 89-111). Dubuque, IA: Brown & Benchmark.
- Greyson, J. F., & Colley, A. (1986). Concomitants of sport participation in male and female adolescents. *International Journal of Sport Psychology*, 61, 311-318.
- Grolnick, W. S., Benjet, C., Kurowski, C., & Apostoleris, N. H. (1997). Predictors of parent involvement in children's schooling. *Journal of Educational Psychology*, 89, 538-548.
- Hanlon, T. (1994). *Sport parent*. Champaign, IL: Human Kinetics.
- Hasbrook, C. A. (1986). Reciprocity and childhood socialization into sport. In L. V. Velden & J. H. Humphrey (Eds.), *Psychology and socialization of sport: Current selected research* (pp. 135-147). New York: AMS Press.
- Hellstedt, J. C. (1987). The coach-parent-athlete relation. *The Sport Psychologist*, 1, 151-160.
- Higginson, D. C. (1985). The influence of socializing agents in the female sport participation process. *Adolescence*, 20, 73-82.
- Horn, T. S. (1987). The influence of teacher-coach behavior on the psychological development of children. In D. Gould & M. R. Weiss (Eds.), *Advances in pediatric sport sciences: Vol. 2. Behavioral issues* (pp. 121-142). Champaign, IL: Human Kinetics.
- Horn, T. S., & Hasbrook, C. A. (1986). Informational components influencing children's perceptions of their physical competence. In M. R. Weiss & D. Gould (Eds.), *Sport for children and youths* (pp. 81-88). Champaign, IL: Human Kinetics.
- Howard, D., & Madrigal, R. (1990). Who makes the decision: The parent or child? *Journal of Leisure Research*, 22, 244-258.
- Huston, A. C. (1983). Sex typing. In P. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology* (Vol. 4, pp. 387-487). New York: Wiley.
- Jacobs, J. E. (1992). The influence of gender 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. (1992). The impact of mothers' gender-role stereotypic beliefs on mothers' and children's ability perceptions. *Journal of Personality and Social Psychology*, 63, 932-944.
- Johnson, M. M. (1975). Fathers, mothers, and sex typing. *Sociological Inquiry*, 45, 15-26.
- Kamm, R. L. (1998). A developmental and psychoeducational approach to reducing conflict and abuse in Little League and youth sports. *Child and Adolescent Psychiatric Clinics of North America*, 7, 891-918.
- Kidman, L. K., McKenzie, A., & McKenzie, B. (1999). The nature and target of parents' comments during youth sport competitions. *Journal of Sport Behavior*, 22, 54-68.
- Kimiecik, J. C., & Horn, T. S. (1998). Parental beliefs and children's moderate-to-vigorous physical activity. *Research Quarterly for Exercise and Sport*, 69, 163-175.

- Kimiecik, J. C., Horn, T. S., & Shurin, C. S. (1996). Relation among children's beliefs, perceptions of their parents' beliefs, and their moderate-to-vigorous physical activity. *Research Quarterly for Exercise and Sport*, 67, 324-326.
- Langlois, J. H., & Downs, A. C. (1980). Mothers, fathers, and peers as socialization agents of sex-typed play behaviors in young children. *Child Development*, 51, 1217-1247.
- Lewko, J. H., & Ewing, M. E. (1980). Sex differences and parental influence in sport involvement of children. *Journal of Sport Psychology*, 2, 62-68.
- Lewko, J. H., & Greendorfer, S. L. (1988). Family influences in the sports socialization of children and adolescents. In F. L. Smoll, R. A. Magill, & M. J. Ash (Eds.), *Children in sport* (3rd ed., pp. 265-286). Champaign, IL: Human Kinetics.
- Loy, J. W., McPherson, B. D., & Kenyon, G. S. (1978). *Sport and social systems*. Reading, MA: Addison Wesley.
- Maccoby, E. E., & Jacklin, C. N. (1974). *The psychology of sex differences*. Stanford CA: Stanford University Press.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Ed.), *Handbook of child psychology* (4th ed, pp. 1-101). New York: John Wiley & Sons.
- Magnusson, D., & Bergman, L. R. (1988). Individual and variable-based approach to longitudinal research on early risk factors. In M. Rutter (Ed.), *Studies of psychosocial risk: The power of longitudinal data* (pp. 200-220). New York: Cambridge University Press.
- McCullagh, P., Matzkanin, K. T., Shaw, S. D., & Maldonado, M. (1993). Motivation for participation in physical activity: A comparison of parent-child perceived competencies and participation motives. *Pediatric Exercise Science*, 5, 224-233.
- Moore, L. L., & Lombardi, D. A., White, M. J., Campbell, D. L., Oliveria, S. A., & Ellison, R. C. (1991). Influence of parents' physical activity levels on activity levels of young children. *Journal of Pediatrics*, 118, 215-219.
- Parsons, J., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development*, 53, 310-321.
- Power, T. G., & Parke, R. D. (1986). Patterns of early socialization: Mother and father interactions in the home. *International Journal of Behavioral Development*, 9, 331-341.
- Randall, L., & McKenzie, T. L. (1987). Spectator verbal behavior in organized youth soccer: A descriptive analysis. *Journal of Sport Behavior*, 10, 200-211.
- Rotella, R. J., & Bunker, L. K. (1987). *Parenting your young superstar*. Champaign, IL: Human Kinetics.
- Sallis, J. F., Patterson, T. L., Buono, M. J., Atkins, C. J., & Nader, P. R., (1988). Aggregation of physical activity habits in Mexican-American and Anglo families. *Journal of Behavioral Medicine*, 11, 31-41.
- Scanlan, T. K. (1996). Social evaluation and the competitive process: A developmental perspective. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (pp. 298-308). Dubuque, IA: Brown and Benchmark.
- Scanlan, T. K., & Lewthwaite, R. (1984). Social psychological aspects of competition for male youth sport participants: I: Predictors of competitive stress. *Journal of Sport Psychology*, 6, 208-226.
- Scanlan, T. K., & Lewthwaite, R. (1986). Social psychological aspects of competition for male youth sport participants: IV: Predictors of enjoyment. *Journal of Sport Psychology*, 8, 25-35.
- Scanlan, T. K., Stein, G. L., & Ravizza, K. (1989). An in-depth study of former elite figure skaters: II: Sources of enjoyment. *Journal of Sport & Exercise Psychology*, 11, 65-83.
- Smilkstein, G. (1980). Psychological trauma in children and youth in competitive sport. *The Journal of Family Practice*, 10, 737-739.
- Smith, R. E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology*, 8, 36-50.
- Smith, R. E., & Smoll, F. L. (1996). The coach as a focus of research and intervention in youth sports. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (pp. 125-141). Madison, WI: Brown & Benchmark.
- Smith, R. E., Smoll, F. L., & Smith, N. J. (1989). *Parents' complete guide to youth sports*. Costa Mesa, CA: HDL Publishing.
- Snyder, E. E., & Purdy, D. A. (1982). Socialization into sport: Parent and child reverse and reciprocal effects. *Research Quarterly for Exercise and Sport*, 53, 263-266.
- Snyder, E. E., & Spreitzer, F. (1973). Family influence and involvement in sports. *Research Quarterly*, 44, 249-255.
- Stein, G. L., Raedeke, T. D., & Glenn, S. D. (1999). Children's perceptions of parental sport involvement: It's not how much, but to what degree that's important. *Journal of Sport Behavior*, 22, 591-601.
- U.S. Department of Health and Human Services (2000). *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: Public Health Service.
- Weiss, M. R. (in press). Social influences on children's psychosocial development in youth sports. In R. M. Malina (Ed.), *Youth sports in the 21st century: Organized sport in the lives of children and adolescents*. Monterey, CA: Exercise Science Publishing.
- Weiss, M. R., & Barber, H. (1995). Socialization influences of collegiate female athletes: A tale of two decades. *Sex Roles*, 33, 129-140.

- Weiss, M. R., & Bredemeier, B. J. (1983). Developmental sport psychology: A theoretical perspective for studying children in sport. *Journal of Sport Psychology*, 5, 216-220.
- Weiss, M. R., & Knoppers, A. (1982). The influence of socializing agents on female collegiate volleyball players. *Journal of Sport Psychology*, 4, 267-279.
- Weiss, M. R., Wiese, D. M., & Klint, K. A. (1989). Head over heels with success: The relationship between self-efficacy and performance in competitive youth gymnastics. *Journal of Sport and Exercise Psychology*, 11, 444-451.
- Williams, W., & Lester, N. (2000). Out of control: Parents' becoming violent at youth sporting events. *Sports Illustrated*, 93, 86-95.
- Wood, K., & Abernethy, B. (1991). Competitive swimmers' perceptions of parental behaviors. *Sport Coach*, 14, 19-23.
- Woolger, C., & Power, T. G. (1993). Parent and sport socialization: Views from the achievement literature. *Journal of Sport Behavior*, 16, 171-189.
- Yoon, K. S. (1996). Testing reciprocal causal relations among expectancy, value and academic achievement of early adolescents: A longitudinal study. *Dissertation Abstracts International*, 57, 2362.