

Running Head: NURTURING TALENT

Nurturing Teenagers' Talent: The Role of Parents, Teachers, and Coaches

Corinne Alfeld-Liro
Jennifer A. Fredricks
Ludmila Z. Hruda
Helen Patrick
Allison M. Ryan
Jacquelynne Eccles

University of Michigan

Paper presented at the biennial meeting of the Society for Research on Adolescence, San Diego, CA, Feb. 26, 1998. The authors would like to thank Rena Harold, Allan Wigfield, Phyllis Blumenfeld, Carol Freedman-Doan, Kwang Suk Yoon, Lisa Colarossi, Amy Arbreton, Rob Roeser, Cleanthe Mollasis Milojevic, Jennifer Abraham, Eric Anderman, and Dana Johnston for their contributions to the Childhood and Beyond Study, and to Rachel Heiman for interviewing. Inquiries may be addressed to 5201 Institute for Social Research, P.O. Box 1248, Ann Arbor, MI 48106-1248 or by electronic mail at alfeld@umich.edu, jennyfre@umich.edu or lhruda@umich.edu.

Running Head: NURTURING TALENT

Nurturing Teenagers' Talent: The Role of Parents, Teachers, and Coaches

Corinne Alfeld-Liro
Jennifer A. Fredricks
Ludmila Z. Hruda
Helen Patrick
Allison M. Ryan
Jacquelynn Eccles

University of Michigan

Paper presented at the biennial meeting of the Society for Research on Adolescence, San Diego, CA, Feb. 26, 1998. The authors would like to thank Rena Harold, Allan Wigfield, Phyllis Blumenfeld, Carol Freedman-Doan, Kwang Suk Yoon, Lisa Colarossi, Amy Arbretton, Rob Roeser, Cleanthe Mollasis Milojevic, Jennifer Abraham, Eric Anderman, and Dana Johnston for their contributions to the Childhood and Beyond Study, and to Rachel Heiman for interviewing. Inquiries may be addressed to 5201 Institute for Social Research, P.O. Box 1248, Ann Arbor, MI 48106-1248 or by electronic mail at alfeld@umich.edu, jennyfre@umich.edu or lhruda@umich.edu.

Nurturing Teenagers' Talent: The Role of Parents, Teachers, and Coaches

Involvement in positive, productive activities has been touted as one of the ingredients of successful adolescent development (Carnegie Council, 1992). For example, participation in athletics and the arts can provide developmental benefits such as higher grades, more self-esteem, lower rates of delinquency, and the chance to develop positive relationships with peers and adults (Eccles & Barber, 1995; Holland & Andre, 1987; Larson, 1994; Otto & Alwin, 1977; Ryan et al., 1997). How do children get involved in these activities? What keeps them engaged? As children's first socializers, parents play a critical role in children's early involvement in non-academic activities. What about as children develop into adolescents?

Despite the many positive outcomes, participation in organized activities declines during adolescence (Eccles, Blumenfeld, Wigfield & Harold, 1990; Hustman, 1992). This is unfortunate because of the benefits that can be gained by those who continue their involvement. Significant others may play an important role in keeping adolescents involved in extracurricular activities. In particular, it is critical to understand the role that parents, teachers, and coaches play in either facilitating or impinging on their children's involvement.

Research on the role that parents and teachers and coaches play in adolescents' involvement and talent development in non-academic activities is limited (Brustad, 1992). Most research on socialization into and participation in extracurricular activities has focused on retrospective accounts of exceptionally talented adults (Bloom, 1985; Brustad, 1992; Scanlan, Stein, & Ravizza, 1989). While such studies have provided insight into what was critical for talent development among a few individuals who reached elite levels, it is important to understand the socialization factors that influence engagement in non-academic activities for the larger pool of adolescents who are talented but not necessarily at the elite level. Parents, teachers, and coaches who are interested either in encouraging more youth

extracurricular activities as well as on what role they play in nurturing continued involvement from childhood through adolescence.

Socialization Into Non-Academic Activities. The following review discusses the small body of research conducted on parents' socialization of children's involvement and talent development within extracurricular activities.

Parents influence children's involvement in their activities through the amount of encouragement they offer, the provision of experiences related to the activity, and advice regarding current and future involvement. If a child never receives initial exposure or encouragement in the activity, it is highly unlikely that talent will be recognized or nurtured (Bloom, 1985; Czikszenmihalyi, Rathunde, & Whalen., 1993).

The psychological environment of the home affects how the child approaches an activity. Olszewski, Kulieke, and Buescher (1987) concluded from their literature review on the influence of family environment that parents of talented children tend to value achievement, working hard, success, being active, and developing one's talent. Besides these general values, parents' orientations toward achievement behavior may affect their goals for children's involvement (Brustad, 1992). Parents who hold mastery goals for their children emphasize improving skills, while parents with performance goals focus on the demonstration of ability and competition. For example, Monsaas and Engelhard (1990) found that more competitiveness in the home environment influenced individuals to be more competitive within their talent area.

Beliefs about parenting a talented child interact with the child's own experiences either positively or negatively (Flohr, 1987). For example, when a child is too perfectionistic, a parent can model perspective-taking and emphasize the enjoyment rather than performance aspects of talent involvement. Furthermore, a parent who applies too much pressure may produce negative outcomes such as anxiety and burnout in the child. For example, Ryan (1995) documented the heavy physical and psychological tolls taken on elite female adolescent gymnasts and ice skaters by the high expectations and narrow focus

Olzsewski et al., 1987). Several researchers of children's extracurricular involvement have suggested that parents and children have reciprocal influences on each other. For example, with respect to sports participation, Snyder and Purdy (1982) found that although parents can and do socialize their children into athletics, children also socialize parents into athletics through their interest and involvement. Berlage (1985) found that parents reported both positive and negative effects of their child's participation in sports. It enriched family life, brought family members closer together, and taught their children values such as discipline and teamwork. They agreed that the main reasons their children were involved were to have fun, develop ability, learn teamwork, learn sportsmanship, and learn social skills. However, most parents also said that sports participation interfered with family activities, especially dinner hours, but that this was a minor inconvenience (Berlage, 1985).

Although the family remains a key source of support, as they get older children begin to look increasingly outside of the family for information and advice about their involvement. Horn and Hasbrook (1986, 1987, cited in Brustad, 1992) found developmental changes in children's preferences for sources of information about athletic competence, with younger children preferring adult feedback and older children preferring social comparison with peers. Furthermore, Higginson (1985) found that parents were more influential when the female athletes he studied were younger, while coaches were more important as they got older.

Research on Teachers and Coaches

The research on the influence of coaches and teachers on involvement and talent development in non-academic domains is limited. Two areas of literature have explored this question: (1) research on the instruction of exceptionally talented children and eminent achievers and (2) research on coaching behaviors from sports psychology.

At the elite level, coaches and teachers play a crucial role in teaching skills, providing opportunities, and nurturing talents. In a study of exceptionally talented athletes, artists, and mathematicians, Bloom (1985) found that teachers and coaches served different

demonstrates gaps in our knowledge concerning: 1) whether or not the family environments of talented adolescents are child-centered, 2) how much and what kind of influence significant adults have over time from initial involvement to competition at higher levels, and 3) how much and what kind of an influence teachers and coaches have, as compared with parents.

In this study, we were interested in exploring the role of significant adults in adolescents' talent development.¹ We examined the role of parents, teachers, and coaches in the lives of adolescents involved in sports, music, dance, drama, and art. Specifically, we asked: What role do parents, teachers, and coaches have in nurturing talent development? How do these roles change as children develop into adolescents? How can adults make their involvement in young people's extracurricular activities more positive and encouraging?

Our Study: Applying Stage-Environment Fit Theory to Talent Development

Our study explores the experiences of talented adolescents within and outside the home. Specifically, we are interested in the socializing influences that helped talented adolescents reach their current level of competence and involvement in their activity. Guided by the research findings on achievement motivation, we hypothesize that for talent to be realized, adults in these adolescents' lives need to create environments that are developmentally sensitive to their changing needs, particularly for autonomy, support, and challenge within the talent activity. In examining changing developmental needs in family and school settings, Eccles and colleagues (1993) found that a match between the child's needs and the environment in the home or school had positive consequences for adolescents in terms of well-being and achievement motivation. They called this match a "stage-environment fit" to capture the fit between the needs of the individual's developmental stage and the responsiveness of the context to those needs.

While stage-environment fit theory was originally applied to school settings, we hypothesize that it may also be relevant to the study of talent development. In particular,

we believe that parents, teachers and coaches can nurture general development as well as talent development by being responsive to children's changing developmental needs. By being sensitive both to children's needs at different ages and to their increasing skill levels, parents, teachers, and coaches can achieve a good "fit." This type of responsiveness by significant adults may not only shield young people from the negative psychological and motivational patterns that many adolescents experience, but also enhance both their overall development and their improvement in the talent area.

In order to get a more detailed account of the characteristics of "fit," we needed to hear adolescents speak about their parents, teachers, and coaches in their own words. Furthermore, we wanted to hear about how parents' beliefs and behaviors create an environment that nurtures talent development. Finally, we were interested in both adolescents' and parents' views about what kinds of environments teachers and coaches create that are conducive to talent development. We chose an open-ended qualitative interview method to achieve these purposes.

Method

Participants

This study is part of a larger, longitudinal project (Childhood and Beyond Project) about activity choice in childhood and adolescence conducted by Jacquelynne Eccles and her colleagues at the University of Michigan. Participants in this smaller study were 41 talented adolescents (15 males, 26 females) in grades 9, 10, and 12, and their parents. The adolescents were all European-American and came from a range of middle-class socioeconomic backgrounds in Southeastern Michigan. All adolescents lived with both parents, with the exception of four whose parents were divorced; two of them lived with their mothers and two lived in stepfamilies.

A number of indicators were used to identify talented adolescents from the larger longitudinal study of 873 students. First, we used survey data collected in 1989 and 1990 (five years earlier) to create separate composite measures of perceived ability, value, and

interviewers followed a protocol of questions but let the participants answer the questions in an open-ended manner. The questions were organized around the following areas: (a) general changes regarding the adolescent over the last three to four years, (b) the adolescent's general hopes and plans for the future, (c) family relationships, (d) the adolescent's history of involvement and accomplishment in the talent domain (e) hopes and concerns about the talent domain, (f) the impact of the talent domain on other aspects of life, such as school, peers, and the family, (g) the role of significant others such as family members, coaches or teachers, and peers on their involvement in the talent domain, and; (h) hopes and plans for talent involvement in the future. If the adolescent was involved in multiple activities, the same set of questions was asked about each activity separately.

Each interview was then transcribed and coded by four of the interviewers and an additional team member using HyperResearch (Hesse-Biber, Kinder, Dupis, Dupis, & Tornabene, 1994)--computer software for coding qualitative data--around codes previously generated from theory and from themes that emerged from the interviews.

More detail about the selection of our sample and our research methodology can be found in our recent papers (Fredricks et al., 1997; Ryan et al., 1997).

Results

Overall, we found that "stage environment fit" theory (Eccles et al., 1993) was a useful model for understanding our results. In general, both adolescents and parents reported positive outcomes when there was a good "fit" between the family or the instructor and the adolescent. Families, however, were more geared toward providing a fit for their children's overall development, while teachers and coaches were more concerned with talent development in particular.

We organize the results around areas in which first parents, and then teachers and coaches, provide good stage environment "fits" with the adolescent's developmental needs in the talent area. We divide the parent section into the following ways that they provided a good "fit" with their child's talent development: 1) providing opportunities and resources

M: "Because she was always flipping around here and upside down half the time anyway, hanging by her ankles from the trees. And I thought, hmmm." (mother of a 9th grade female in gymnastics)

When interest stemmed from experience within the home, it was frequently because other family members were involved, or had been involved, in the activity.

M: "The older boys played soccer and she would always go to their game, and even when she was little, she'd just kick the ball around and, you know, she liked the uniforms...And so when she was five we put her on the team." (mother of a 10th grade female in soccer)

In addition, several children involved in music began because there were musical instruments in the house.

M: "I brought my organ down from my parents' house when he was about two, and he spent a lot of time just picking around on that. As he grew, he started to pick out songs and just do it for himself, and when he got to be about in the first grade, ..we found a teacher and he started toward the end of this first grade year. He just showed just a tremendous amount of interest. He couldn't wait to get to the piano." (mother of 10th grade male in music and basketball).

Despite different reasons for the child's initial exposure, it was the child's enjoyment that was the most important factor in settling on an activity. When a child found something of interest, parents were extremely encouraging. For example,

I: "How do you feel about his involvement in music?"

M: "I think it's great. He's with a good group of people. They seem to have a good time when they're playing. I never miss a recital and it never ceases to amaze me how these kids can play so well. I think it's a very positive thing. I encourage it." (mother of 10th grade male who plays 9 instruments)

I: "What were your parents' reactions your initial involvement?"

A: "They were thrilled. They were thrilled. Like, they'd tape all my ballets and all my concerts...They'd buy me flowers the night of my concert. My mom would make it such a big ordeal. She'd let me wear her makeup and stuff when I was little. And it made me feel really good. I need something that makes me feel good about myself, that I know I'm good at. Like, I'd get up and dance, and everybody would clap and smile, and just made me feel really good. I mean, I was a little kid. I thought I was the only person in the world that counted to my parents. And they'd come and watch me and really care, and they'd, like, support it." (9th grade female in dance, show choir, and softball)

Parents differed in whether they encouraged participation in a variety of activities or whether they advocated concentration on one activity. Parents who encouraged

In contrast to most parents, the few parents who limited their children's options were focused on talent development in particular and were not necessarily providing a good "fit" with their child's developmental needs for exploration. However, they were providing a good "fit" for talent development.

As the child became more involved in the activity, parents provided instrumental support to nurture their child's talent. This included signing them up for classes or teams, paying for lessons, and driving them to practices and games. Parents also supported their children instrumentally by spending time with them in the activity, including listening as they played music, helping them learn their lines, and practicing skills with them. Some parents were also involved with booster clubs, constructing sets for plays, or helping out at concession stands during games.

M: "We've helped out a lot, sewing [costumes] for the madrigal dinner they're doing, and for the musical, and building things, building sets... We're making a catapult now." (mother of a 12th grade male in choir)

Parents, to the best of their ability and interests, supported their children in their activities regardless of the gender of the child. However, a gender difference did emerge in parents' investment in sports activities. Although parents did not see gender roles as inhibiting daughters' involvement in sports, parents did see their *own* roles in gender stereotypical terms. Fathers played a more instrumental role for both daughters and sons who played sports, including practicing with them, offering strategies, and sometimes coaching the child's team. Mothers were more likely to offer emotional support and attend games; some mentioned that they lacked knowledge about the sport.

A: "My mom's just supportive of it; she's not as big on it as my dad is."

I: "Why do you say that?"

A: "I don't know. I think, you know, it's just not her thing. I think she likes the fact that I'm doing it, you know, supportive of it. But my Dad's into it more. Just because he played baseball when he was younger. He's helped my little brother go through it now." (10th grade male in baseball and music).

involvement, their parents' behaviors needed to change to continue to provide a good “fit.” We found that parents tended to become more involved, excited, and knowledgeable about the talent domain when their child became more serious about it. Some parents even sought out more information or began taking lessons themselves in order to better understand the activity.

Whereas both instrumental and emotional support were equally important in childhood, parents' emotional support became primary and their “coaching” secondary when their children moved into higher levels of competition. As they entered adolescence, our young participants increasingly relied on their parents for 1) encouragement when they were feeling down about their involvement or abilities, 2) advice on how to manage their time and juggle competing interests, 3) perspective-taking when politics occurred on the team or in the class, 4) input in decisions about continuation in the activity. Parents' timely responsiveness to their adolescents' changing needs for encouragement and support demonstrates a good stage-environment “fit” that enhanced both overall development and talent development.

Allowing autonomy with structure. Most parents in our study allowed their child a great deal of autonomy in making decisions about their involvement.

A: “Basically everything's been my decision. Like my parents haven't told me to do something or to stop doing something. Like it's always been my choice. If I want to do it, they'll pay for it. I can do it. If I don't want to, that's okay.” (12th grade female in sports).

A: “I feel [no pressure] at all. I don't think they really set any goals for me. They told me at this point that I can quit whenever I want to. I've chosen to keep going till I leave for college, assuming I leave for college. I am free to set goals for myself. I have not felt pressure to do anything.” (10th grade male in piano and basketball)

However, this did not mean that parents did not care. While parents were often supportive of these decisions, they were sensitive to potential danger signals, and some

M: “She goofed off pretty bad in the eighth grade, and I had warned her early in the school year in eighth grade, you know, ‘Either shape up or you’ll have to quit gym. If you haven’t got time to do well in school, you haven’t got time to be going to the gym and doing gymnastics.’” (mother of a 9th grade female who quit gymnastics)

A: “I did this show freshman year, or maybe it was sophomore year...at a community theater around here. And, you know, I don’t think they ever really wanted me to do it, but they let me, and I think they thought my grades slipped and that it took over my life. And in a way it sort of did, because I was real busy. And there were a couple of real late rehearsals that sort of teed them off. And then I wanted to do another show and they just, they wouldn’t let me. (12th grade male in drama)

Parents who were sensitive to their children’s needs continued to provide consistent emotional support but allowed their adolescent more autonomy in making decisions about involvement and managing schedules. Giving children increased autonomy as they enter adolescence is especially crucial to stage-environment fit, as it allows adolescents to begin to experiment with the impact of their own decision-making within a somewhat protected sphere.

Beliefs in the benefits of Involvement. Despite their concerns, parental beliefs about the benefits of their children’s involvement in extracurricular activities extended from childhood into adolescence. Parents encouraged their adolescents’ continuing involvement for several reasons: 1) it kept them out of trouble, 2) parents knew where they were and liked the group they were with, 3) it provided balance with school, 4) and it taught them values such as discipline and teamwork.

M: “We’re been real supportive of everything. I think of whatever activities you do at school as a deterrent to doing something otherwise . . . So, I’m more than happy for her to be involved with those things.” (mother of a 10th grade female in writing, soccer, and drama)

M: “She’s giving up all these extra things that provide the fun and balance with school work. But, you can’t get them to realize it.” (mother of 9th grade female who quit ballet and didn’t want to start another activity)

M: “I was supportive of it, because it teaches them a lot.”

I: “What does it teach them?”

the parents had made a conscious choice to be involved in their child's activity, many had not anticipated the magnitude of the effect on the family.

I: "How do you think the family has impacted on his involvement?"

M: "Just allowing him the time and the access and being supportive as far as transportation and that sort of thing...I'm amazed at how much involvement [it demands] whether you want to be or not." (mother of a 10th grade male in music and baseball)

M: "It's the kind of thing that when you get your kid into it, you either do it all or nothing." (mother of a 10th grade female in gymnastics)

M: "In some ways I'm glad its done."

I: "Oh really. Why do you mean that?"

M: "I'm tired of hearing him complain about some of it and it is a pressure to have somebody that does well at it and..."

I: "Pressure for who?"

M: "I think everybody, to make sure he gets to practice, make sure he's healthy, make sure the coach is happy, make sure the school work's done, because you still have to go to practice. And they get tired and they complain, 'I don't want to swim today. The pool's cold.' Or they're tired, and we get tired of hearing that." (mother of a 12th grade male who quit swimming)

Most parents discussed the need to accommodate the child's activity schedule in their daily routines. When the child got into better teams, troupes, or orchestras, parents needed to increase their commitment by going out of state to tournaments and competitions over weekends or during the summer.

M: "It's a commitment. When you get involved at this level, it's a commitment. You have to be willing to put out the expense of going out of state to tournaments, which we did four times this summer. You know, you're spending a weekend in a hotel. It's a time commitment, and you have to leave, take some time off work, Friday and Monday, so you've got some extra commitment there. You know, so, overall, there's a lot of things that you've changed because of this, you know, you don't ... we really didn't take like a family vacation because we always had soccer tournaments." (mother of a 10th grade female in soccer, volleyball, and swimming)

A few parents reported that the family also had to make financial sacrifices in order for the child to remain involved in the activity.

M: "I'm working full time, and trying to keep a home, and trying to help them, and trying to get them to all their activities. I want to give them their music lessons, and

Other parents were surprised to discover that their child had such a high level of skill.

M: "He can just, he picks up instruments and he just plays them. It kind of makes you sick. You know, that somebody can do that. And the thing of it is that he's good at it, you know. You get kind of envious of somebody that can do that.
(mother of a 10th grade male who plays 9 instruments)

M: "So, ah, when he was younger and he started swimming he was making all these good times and I think we were surprised because we're not very athletic."
(mother of a 12th grade male in swimming and choir)

These parents changed their notions of their child's ability as they gathered more information. They could then construct more realistic expectations of their child's ability and future potential.

"So I guess I really didn't ever expect anything, but it got more serious last year when her teacher showed such an interest in her. Before the teacher said, "Oh, you know, she's talented," and gave her an A, but they never really took the interest that he did, both telling her and telling me. So now I'm thinking that there may be more of a career in art." (mother of a 9th grade female in art)

Some parents were ambivalent about their expectations for their adolescent's future involvement. When adolescents had continued for a long time but weren't sure if they would go into the activity as a career, parents realized after the fact that their adolescent's focus might have cut off future opportunities:

M: "Well, I think it's limited her opportunities for other things, because she has no time. And it has narrowed her pathway on her desires, for what she may think she can do in the future, I'm sure. I don't know if that's all. I'm sure it's not a good thing. She should have been exposed to more, to different things."
(mother of a 10th grade female in gymnastics)

Other parents experienced conflict between their desire to allow the child autonomy in decision-making and their realization of how much of the family's resources had already been invested.

M: "We saw how much potential he had. We thought maybe he'd get some kind of scholarship or something in college, so we encouraged it back then. Then when this junior, or senior year came by, and he wanted to quit, we could see the college thing walking out the door." (mother of a 12th grade male who quit swimming)

M: "And I'm wondering if it's going to, you know, in the long run, if it's going to be worth it, because there's no guarantee that she's going to play in college."
(mother of a 10th grade female in soccer, volleyball, and swimming)

In sum, these findings can be discussed as the parental beliefs and behaviors that provided a good "fit" with adolescents' needs as they pursued their activity. The following parental beliefs and behaviors were the key contributors to the creation of a positive emotional and psychological environment in which adolescents could explore their potential in an activity.

- 1) *Provision of opportunities and resources*--Parents believed that it was generally good for children to be involved in extracurriculars, and they provided the means to do so. They drove to practices and games, paid for equipment, and reorganized the family's schedule around the child's activity schedule.
- 2) *Consistent encouragement and support*--Parents provided unconditional emotional support, encouragement, and advice throughout the child's activity involvement.
- 3) *Belief in the benefits of involvement*--Parents generally had positive attitudes about their child's involvement and about the family's role. Although they had some complaints about the time and money involved, they were willing to make sacrifices in return for the perceived benefits.
- 4) *Autonomy with structure*--Parents gave children a choice about what activity to begin in childhood, and they gradually allowed their child more autonomy in decision-making about involvement in adolescence. At the same time, however, they protected their child by providing advice to cut back or quit the activity if it was jeopardizing other aspects of the child's life.
- 5) *Realistic expectations*--Parents' expectations for success or continued pursuit of the activity in the future were relative to perceptions of the child's ability and potential for future success in the domain (as opposed to the parent's own wishes and desires).

In addition, parents often helped the child find a teacher or coach the child liked, and they deferred to that teacher or coach's expert advice regarding the child's involvement in activity as the child moved into adolescence and to higher levels of skill.

Adolescents who were talented in activities such as music, drama, art, swimming, or gymnastics, where instructional attention is more individualized as opposed to group-oriented, reported that good teachers allowed them autonomy to explore their interests. For example, several talented musicians spoke positively about teachers who had let them choose their own music, and one gymnast had this to say about her coach:

I: "How does [your coach] support you?"

A: "She always let me pick what I wanted to do. She never really said, 'Well, no, I don't think you should do that. I don't think you're good enough to do it.' She always let me try it. I mean, if I really wasn't good enough to do it and I was going to hurt myself she'd let me know. But if it was possible for me to do it, she'd let me do it." (9th grade female in gymnastics)

Several of our participants in these more individualized domains developed a special relationship with their teacher, particularly when there was a match between the personalities of the teacher or coach and the adolescent.

M: "Her first coach, who she just thinks the world of, had a very positive influence on her. I mean, Abby just loves her dearly. Their personalities meshed very nicely. I mean, they just plain got along. And she was the one that Abby was working with and was actually developing these skills...this coach helped her with her training you know, and got her through, helped her achieve a lot of different skill levels. And so that was a very positive experience for Abby...and in her eyes, it was 'All thanks to Myra I learned how to do these things.'" (mother of a 9th grade female in sports)

Interestingly, all of the adolescents who planned to continue their activity in some form as a career, as opposed to only as a hobby or not at all, reported having had such close relationships. We found that it was the combination of this type of emotional support with expert instrumental help that was a catalyst in adolescents' aspiring to a career in the domain.

Instrumental Support. When adolescents found a match between their needs and the teacher's or coach's skill, they could continue to hone their talent. Often, when they had reached the highest levels in their current setting, their teachers or coaches would suggest moving on to someone who could provide them with more challenge or they would seek such a person on their own, with the help of their parents.

Furthermore, instructors' depth and breadth of knowledge of the field made their feedback and advice more valuable. According to both parents and adolescents, good coaches were sincere in their feedback: they gave praise for a job well done but provided constructive criticism to help the adolescent improve. Often, the provision of special opportunities by such teachers or coaches placed the adolescents in advantageous positions for receiving other opportunities:

M: "When she started music in grade school, she had a teacher that was outstanding. Very very young, got along real well with the kids. And when my kids like somebody, they'll do anything for that person. That's what started it. She liked that woman so much she just wanted to show her she can play so well, and then eventually she got first chair position. She got into competitions. Was doing very well in the competitions and the more that she did well, the more things that she did well, the more she strived. And it just went further and further. At her grade school the woman asked if we would be interested in putting her in private lessons and she felt she was very talented. Well I got her in private lessons. The private lessons teacher is the one who got her in to the Metropolitan Youth Symphony. So it just snowballed from that." (mother of 12th grade female in violin)

Thus, an optimal "fit" between an expert teacher or coach and an adolescent who had great potential led to opportunities for entering special teams, clubs, or camps, which often propelled adolescents onto a career trajectory in the domain.

In fact, when the adolescents left their childhood teams and became more serious about excelling in their activity, it was critical to have teachers and coaches who could provide them with higher levels of challenge. Most adolescents mentioned the benefits they got from challenging coaches, even though they may have resented the rigorous training at the time.

A: "Our coach is great. He yells at us..we don't need to take it personally. But I think ...I try more things that I would have on the other team. My other team coach would just sit on his butt.... I think [he] just said, "Okay, do this." Now my new coach right now says, "Do this," and then try to perfect it. And keep doing it and keep doing it. [On my other team,] we would just scrimmage. But my new coach says to scrimmage and try not to make mistakes and he tells us he'll stop the game and say, "You should have done this" or "You should do this next time." And show us which way to go. So we learn stuff." (9th grade female in soccer)

I: "Why don't you think you're a good flute player?"

A: "[My high school band teacher] just always told me, 'Oh you're so bad,' you know, all the time....They've always looked down on me..There was a really good flute player who's older than me. And he would always be like, 'Why can't you be as good as her?'"

I: "How did that make you feel?"

A: "Bad, because I tried my hardest and I just didn't have, she had a lot of talent and I just don't have any." (12th grade female in sports and music)

Teachers and coaches who were so focused on the activity that they could not understand that adolescents had a life outside of the activity were also bad "fits." This was especially true for adolescents who were involved in multiple activities.

A: "I stopped marching band because I just couldn't stand it. I don't know. I just don't like it. I don't really like our band director either...It was really difficult for me this year when I went to tell him that I wasn't going to be in symphony band and I had to like explain to him I had no choice, I thought long and hard . . . I mean, he even like . . . one of my friends that she was failing algebra and so she would have had to take it again this year. And she went and told him, she goes, 'Well I don't know if I'm going to be in band next year because I'm not . . . might not graduate if I don't take algebra.' And he's like, 'Well then just don't take algebra.' But, I mean, it's just like everything to him centers around this one thing and I just couldn't do that. And, I mean, I really didn't enjoy marching band, so I dropped that. I took jazz band because I wanted to stay playing, continue playing." (12th grade female in music and sports)

Lack of Instrumental Support. As mentioned earlier, having the right amount of challenge was key. When a sufficiently challenging teacher or coach could not be found, the adolescents' talent suffered:

A: "Well, we get along really well. Of course, she doesn't push me as hard as, she doesn't push. She is almost too nice, I think. I don't think I would be as far as I am if I hadn't pushed myself. I think I've set higher standards for myself than she has." (9th grade male in music and basketball)

If the teacher or coach was not an expert, lacked passion for the activity, or did not model skills or interest, adolescents' motivation and interest in the activity was dampened.

M: "So [the school choir teacher] actually I think deadened some of her interest, I think he did some damage. Whereas the other two teachers that she had were very very positive and reinforced her type of playing and strategy of playing and things like that. So that's where I think that a lot of her not practicing as much and everything, because she was losing her interest in it, because she wasn't being challenged." (mother of 12th grade female in violin)

about them as people, 2) they provided the right amount of challenge so that the adolescent could feel efficacious but still reach for higher goals (see also Csikszentmihalyi & Rathunde, 1993, on “flow”), 3) and they provided information about future options for continuing the activity. For those adolescents headed for a career in the activity, teachers and coaches who had close relationships with the adolescent provided expert instruction, career guidance, and access to special opportunities.

Discussion

In our attempt to understand how parents, teachers, and coaches socialize involvement in non-academic activities over time, we listened to adolescents talk about what behaviors from significant others helped and hindered talent development.⁵ We also looked at the nurturance of talent development from the parents' perspective, in terms of beliefs about good parenting, behaviors that support development, and observations of the kind of teaching and coaching that matched the developmental needs of their children.

The strengths of this study are that we used qualitative interviews with adolescents and their parents to provide a developmental perspective on talent development from childhood through adolescence; we examined the roles of parents, teachers, and coaches in the same study;³ and we were able to bring the themes in talent development together conceptually with a unifying framework. Our application of Eccles' et al. (1993) stage-environment fit theory to the study of extracurricular involvement and talent development advanced our thinking about the complex balancing act that needs to occur between the provision of support, demands, and opportunities geared toward the child's increasing levels of maturity, in order to ensure successful developmental outcomes in multiple areas.

Child-Responsive Environments

We believe that what characterized family and teaching/coaching environments that provided the best “fit” for talent development was the degree of responsiveness of the adult to the developing child's needs. As such, this “fit” for talent development closely matches the overall “fit” for positive developmental outcomes described by Eccles and her

children make more of their own decisions about activities and involvement as they enter adolescence (Csikszentmihalyi et al., 1993; Eccles et al., 1993). However, it is also necessary for parents to communicate that they are there for the adolescent and care about what the adolescent does by providing some structure around adolescents' freedom, for example by placing limits on activity involvement when it interferes with schoolwork, mental health, or the family's functioning.

The combination of both closeness and autonomy is very similar to what Csikszentmihalyi et al. (1993) and Baumrind (1971, 1991b) found was characteristic of the families with positive adolescent outcomes. These families nurture the child along at a developmentally-appropriate pace, providing for their needs but also gradually releasing authority (Smetana, 1995) with the goal of creating independent young people, able to make responsible choices on their own.

Involving More Young People in Extracurriculars

The conscious creation of a child-responsive environment seems to be influenced, at least in part, by social milieu. Parents with the cultural capital, including resources, knowledge, and connections, are more likely to create environments for children in which their development can be maximized. The parents in our study seemed to be influenced by perceived social expectations about what makes a good parent, including providing opportunities for their children and supporting them in their endeavors. Often, this meant an unusual amount of time and financial investment. While many mothers in our study worked outside the home, they were willing and able to volunteer their help on these teams, classes, or clubs and take time off to attend games or performances, sometimes in different parts of the state or the country. Furthermore, they were more than happy to pay the bill when their child was chosen to attend a special camp or tour Europe.

In these ways, this sample is especially privileged. Most research in this field has used samples similar to the middle- to upper-middle class families in our study. These families could afford, both with money and time, to support their adolescents' talents.

teachers and coaches should be able to provide information to children and parents about the kinds of opportunities for talent development for which children at different levels would be eligible. Thus, instructors should have knowledge of special camps, classes, and programs, as well as options for pursuing careers in the future that they can convey to families. In these ways, teachers and coaches can provide stage-environment "fit," in terms of both developmental stage and skill level in talent development, so that children thrive and continue to glean enjoyment and hone skills through adolescence and possible adulthood.

Implications for Youth in Society

Engagement in an activity where a child is receiving optimal stage-environment fit for talent development has potential for developmental benefits in general. Although we did not study this particular aspect of involvement, it is possible that positive relationships with teachers and coaches can model for adolescents what positive relationships with adults are like, so that adolescents are not only socialized into the talent domain but also into society. This contrasts starkly with the portrait painted by many researchers of "alienated youth." It seems reasonable, then, that the positive socialization and developmental experiences possible through extracurricular activities should be made available to a more diverse group of young people. Our examination of stage-environment fit in families and in non-academic instructional settings sheds light on how we can nurture positive development in the wider population of adolescents: by providing emotionally and instrumentally supportive environments that continue to match increasing needs for challenge (see also Csikszentmihalyi et al. , 1993).

Implications for School Policy

Unfortunately, extracurricular activities are often the first to be cut from the budgets of public schools, which are the only options for experiencing organized non-academic activities for many adolescents. Even in the middle-class schools that the adolescents in our study attended, we discovered that the teachers and coaches were not necessarily

NOTES:

1. In previous research, we studied the role of peers (Ryan, Patrick, Alfeld-Liro, Fredricks, Hruda, & Eccles, 1997) and of adolescents' own motivation and identity development (Fredricks, Alfeld-Liro, Patrick, Ryan, Hruda, & Eccles, 1997) in keeping talented adolescents engaged in their activity.
2. The high level of parental involvement is not a surprising finding considering that the adolescents in our sample were chosen because they had already reached a certain level of achievement within the talent domain.
3. In interpreting the results, it is important to take into account that we based our results and conclusions about parenting, teaching, and coaching on reports from the adolescent and, in most cases, the mother. We did not interview the father or the teachers or coaches.
4. There are many other "significant others" that the adolescents mentioned, although none as frequently as parents and teachers or coaches. For example, other extended family members either recognized and supported talent or paid for classes or equipment; boyfriends or girlfriends were mentioned as being involved in the same activity or very supportive; special heroes in their talent areas that adolescents admired from afar and tried to emulate; school programs that provided a special niche; school staff members who recognized adolescents' talent; older peers in the talent area provided incentive to work hard and peer tutors offered strategies for honing skills; band boosters or parents' groups provided encouragement, equipment or materials, and money for private lessons; the audience offered recognition through applause and verbal praise; and friends offered moral support and came to watch games or performances.
5. This may be because we did not probe about relations regarding issues unrelated to the talent or because of sample selectivity.
6. Whereas teachers and coaches outside the school setting may have more expertise and be more committed, they do not necessarily provide good "fits" with adolescents' developmental needs either, such as when they were more focused on winning than on nurturing talent.

- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., and Mac Iver, D. (1993). The impact of stage-environment fit on young adolescents' experiences in schools and in families. American Psychologist, *48*, 90-101.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon (Series Editor), & N. Eisenberg (Volume Editor), Handbook of Child Psychology: Vol 3. Social, emotional, and personality development (5th ed.). New York, NY: Wiley.
- Feldman, D. H., & Piirto, J. (1995). Parenting talented children. In M.H. Bornstein (Ed.), Handbook of Parenting: Vol. 1. Children and Parenting. Mahwah, NJ: Lawrence Erlbaum Associates.
- Fredricks, J. A., Alfeld-Liro, C., Patrick, H., Ryan, A.M., Heiman, R., Huda, L., & Eccles, J.S. (1997, April). Tracing talent development across time: An exploration of adolescents' involvement in athletics and the arts. Paper presented at the biennial meeting of the Society for Research on Child Development, Washington, DC.
- Flohr, J. W. (1987). Parenting the musically gifted: Assumptions and issues. The Creative Child and Adult Quarterly, *8*, 62-65.
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. Journal of Educational Psychology, *81*, 143-154.
- Grotevant, H. D. (1998). Adolescent development in family contexts. In W. Damon (Series Editor), & N. Eisenberg (Volume Editor), Handbook of Child Psychology: Vol 3. Social, emotional, and personality development (5th ed.). New York, NY: Wiley.
- Hesse-Biber, S., Kinder, I.S., Dupis, P.R., Dupis, A. & Tornabene, E. (1994). HyperResearch: A content analysis tool for the qualitative researcher. Randolph, MA: Researchware, Inc.
- Higginson, D. C. (1985). The influence of socializing agents in the female sport-participation process. Adolescence, *20*, 73-82.
- Holland, A., & Andre, T. (1987). Participation in extracurricular activities in secondary school: What is known, what needs to be known? Review of Educational Research, *57*, 437-466.
- Horne, T., & Carron, A.V. (1985). Compatibility in coach-athlete relationships. Journal of Sport Psychology, *7*, 137-149.
- Horowitz, F. D., & O'Brien, M. (1986). Gifted and talented children: State of knowledge and directions for future research. American Psychologist, *41*, 1147-1152.
- Hustman, W. Z. (1992). Constraints to activity participation in early adolescence. Journal of Early Adolescence, *12*, 280-299.
- Larson, R. (1994). Youth Organizations, Hobbies and Sports as Developmental Contexts. In R. K. Silberiesen & E. Todt (Eds.), Adolescence in context. New York: Springer-Verlag.

Table 1. Characteristics of the Talent Interview Sample

15 males, 26 females (64% female)

12 ninth graders, 14 tenth graders, 15 twelfth graders

25 talented in a single domain, 16 talented in more than one domain (this is why numbers do not add to 41 below).

26 sports, 12 instrumental music, 9 singing, 5 drama, 6 dance, 2 art