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**HANDBOOK OF  
RESEARCH ON  
SCHOOLS, SCHOOLING,  
AND HUMAN  
DEVELOPMENT**

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## Protect, Prepare, Support, and Engage

### *The Roles of School-Based Extracurricular Activities in Students' Development*

BONNIE L. BARBER, MARGARET R. STONE, AND JACQUELYNNE S. ECCLES

Going to school involves much more than formal classroom education for the majority of students. The broader school environment can offer a range of opportunities for students to find their niche and invest their energies in endeavors such as sports, music, or student government. The earliest examinations of the effects of such participation comprised research in sociology and leisure studies concerned with the apparent benefits of extracurricular activities for future educational attainment (e.g., Hanks & Eckland, 1976; Holland & Andre, 1987; Otto & Alwin, 1977; Spady, 1970), with little attention to the processes whereby activity participation enhanced development for students (Brown, 1988). Though relatively neglected in studies of child and adolescent development, school-based extracurricular activities have attracted increasing attention in research (Mahoney, Larson, & Eccles, 2005). Current investigations are exploring the factors that attract young people to participate, the barriers they encounter and overcome in order to persist, and the array of benefits out-of-school activities provide. There is growing interest in the developmental consequences of extracurricular activities for youth, fueled by increasing recognition of the possible role of such activities in both promoting school achievement and preventing school dropout and school disengagement (Eccles, Barber, Stone, & Hunt, 2003). However, recent reviewers have observed that the scientific research base pertaining to school-based activity participation has been limited (Eccles & Gootman, 2002; Feldman & Matjasko, 2005). There has been far less research on the developmentally facilitative processes one might find in constructive leisure activities than on those manifest in other contexts such as family and school. Nevertheless, it is becoming clear that structured leisure activities are important, with mounting evidence that participation in school and community-based activity facilitates healthy development (e.g., Eccles & Barber, 1999; Eccles & Gootman, 2002; Larson, 2000; Mahoney & Cairns, 1997; Marsh

& Kleitman, 2002; Roth, Brooks-Gunn, Murray, & Foster, 1998; Youniss & Yates, 1997).

The lack of research on extracurricular activities relative to that on other key developmental contexts is particularly surprising given the high rates of extracurricular participation found among students. For example, 70% of students in the National Longitudinal Study of Adolescent Health reported participating in at least one school-based activity (Feldman & Matjasko, 2005). This rate is consistent across a number of other studies, despite measuring activity participation in different ways (e.g., Eccles & Barber, 1999; Mahoney, Schweder, & Stattin, 2002). Sports are the most commonly reported activities, followed by the performing arts (Eccles & Barber, 1999; Feldman & Matjasko, 2007; Zill, Nord, & Loomis, 1995). Girls tend to participate in more types of activities, while boys are most likely to play sports (Eccles & Barber, 1999; Feldman & Matjasko, 2007; Mahoney & Cairns, 1997). Youth from lower SES families participate in most school-based extracurricular activities at lower rates than higher SES youth (Feldman & Matjasko, 2007; Mahoney, Harris, & Eccles, 2006; Pedersen & Seidman, 2005; Zill et al., 1995), but there is evidence that the participation benefits may be more pronounced for these youth (Mahoney & Cairns, 1997). Given the prevalence of extracurricular activities in the daily lives of youth, it is important to understand their role in successful development and healthy adjustment.

This chapter summarizes the research on school-based extracurricular activities and their connection to adolescents' social and emotional development. First, an outline of the conceptual approaches guiding the study of the effects of activities is provided, including a review of research on the influences of activities on student behavior, attitudes, achievement, and adjustment. Second, an examination of the theoretical and methodological approaches used in this research is presented, which highlights a number of proposed mechanisms whereby extracurricular activity participation

exerts its effects. The strengths and limitations of existing research are considered, and the chapter concludes with suggestions for further research and educational policy applications.

### **The Impact of Extracurricular Activity Participation on Development**

As in much developmental research, there are varied approaches to examinations of the impact of extracurricular activities on youth. A broad array of outcomes has been examined, ranging from problem prevention to promotion of engagement and initiative. One branch of the work on activities has focused on the role of participation in risk reduction. Such studies have been concerned with whether activity participation is related to lower rates of risk behavior and delinquency, substance use, and school dropout. A second, large, and growing set of studies has examined the impact of extracurricular activity participation on a broad range of skills and attitudes with an eye toward preparation for successful transition to adulthood. The final and somewhat more recent cluster of research on activities has focused on the opportunities provided by activities for optimizing development and enjoyment.

**Risk Reduction and Problem Prevention** One area to be considered in extracurricular activity research is the extent to which participation may protect youth from risk and harm. Studies in this area examine the extent to which those who participate in activities manifest fewer problems than those who do not. A smaller group of studies go further, examining longitudinal patterns that suggest long-term reduction of harm.

**Risk Behavior and Delinquency** Activity participation has been found to be associated with lower levels of problem behavior in adolescence (Elliot & Voss, 1974; Mahoney, Larson, Eccles, & Lord, 2005). Feldman and Matjasko's comprehensive review (2005) evaluated the evidence for this protective role of participation, and highlighted a number of studies linking participation to less delinquency. For example, Mahoney and his colleagues have documented the link between extended participation in extracurricular activities during high school, and reduced rates of criminal offending, particularly for high risk youth (Mahoney, 2000; Mahoney & Cairns, 1997).

**Substance Use** The evidence for extracurricular participation as protective against substance use is more equivocal. Participation in activities that provide the opportunity for service predicts lower rates of drinking and drug use in adolescence (Dawkins, Williams, & Guilbault, 2006; Eccles & Barber, 1999; Youniss, McLellan, Su, & Yates, 1999; Youniss, Yates, & Su, 1997) and young adulthood (Barber, Eccles, & Stone, 2001). More cumulative years of participation predict less marijuana and other drug use

(Darling, 2005). Amount of time spent participating in activities is also related to substance use: in general more time participating is related to less smoking, drinking, and drug use (Mahoney, Harris, & Eccles, 2006; Zill et al., 1995). There is some evidence, however, that sports involvement is not unambiguously positive. Some studies have found that sports participation predicts higher delinquency (Fauth, Roth, & Brooks-Gunn, 2007) and greater substance use (Barber et al., 2001; Fauth et al., 2007).

**School Dropout** Activity participation is related to lower rates of dropping out of school (Zill et al., 1995). More specifically, sports participation has been shown to predict a lower likelihood of school dropout and higher rates of college attendance, particularly for low achieving and male athletes from blue-collar families (Deeter, 1990; Feldman & Matjasko, 2005; Holland & Andre, 1987; McNeal, 1995). A likely mechanism that holds participants in school is attachment to the activity that is based at school. We have found that school engagement is higher among activity participants (Eccles & Barber, 1999). The next section details the links between participation in extracurricular activities and positive educational outcomes.

**Achievement, School Attachment, and Attainment** Although activities may help to reduce risks for students, Pittman reminds us that being problem-free is not the same as being fully prepared (Pittman, Irby, Tolman, Yohalem, & Ferber, 2002). We generally hope for more for our youth than simply a lack of delinquency and substance use. In addition to considering the potential problems that can be prevented in youth, developmental scientists consider youth as resources to be developed (Lerner, 2001). Alongside the prevention of problems, students need key opportunities for growth and help in navigating the primary tasks of adolescence, including acquiring education and other experiences needed for adult work roles, resolving issues of identity, and becoming increasingly autonomous. Of central importance with regard to this chapter's place in this volume is the role of school-based extracurricular activities as complementary to the academic curriculum in pursuit of the accomplishment of a range of developmental tasks.

School-sponsored activities such as sports and performing arts are important contexts that can support or undermine these developmental goals (Barber, Eccles, & Stone, 2001). Previous research has suggested that school activities link students to the larger society of the school (Entwisle, 1990), and that these experiences are positively related to adolescents' feelings of school competence, efficacy, and academic achievement (Holland & Andre, 1987; Marsh & Kleitman, 2002). School-based activities also offer opportunities that regular classroom activities may not, including initiative, identity work, and engagement (Dworkin, Larson, & Hansen, 2003; Fraser-Thomas, Côté, & Deakin, 2005; Larson, 2000; Larson, Hansen, & Moneta, 2006), increasing the likelihood that students will feel connected

to their school (Feldman & Matjasko, 2005). It should not be surprising, therefore, that participation predicts academic achievement and educational attainment.

**School Attachment and Engagement** We have argued that although a sense of belonging at school can result from a number of personal and social contextual factors, extracurricular activities are an especially likely path to school attachment, particularly for those youth who do not excel academically (Eccles et al., 2003). Participation in extracurricular activities can facilitate connections in the school context that satisfy adolescents' developmental need for social relatedness, competence, and autonomy. Activities also contribute to one's identity as a valued member of the school community. In turn, a strong attachment to one's school can facilitate the internalization of other aspects of the schools' agenda—such as those related to academics. In support of this idea, research has documented the connections between activity participation and higher achievement and aspirations (e.g., Barber et al., 2001; Cooper, Valentine, Nye, & Lindsay, 1999; Darling, 2005; Darling, Caldwell, & Smith, 2005; Eccles & Barber, 1999; Eccles et al., 2003; Mahoney & Cairns, 1997; Mahoney, Cairns, & Farmer, 2003; Mahoney, Lord, & Carryl, 2005; Marsh, 1992, 1993; Marsh & Kleitman, 2002).

**Academic Achievement** Participation in organized activities has been shown to be positively related to academic performance, with students participating in activities such as sports, performing arts, service learning, and academic clubs receiving better grades than their nonparticipating peers (Broh, 2002; Crosnoe, 2001; Eccles et al., 2003; Guest & Schneider, 2003; Marsh & Kleitman, 2003). These relations generally hold up even when key variables are controlled, including family background and both prior achievement and scores on standardized aptitude tests. Several researchers have documented that benefits seem to be especially pronounced for sports (e.g., Barber, Eccles, & Stone, 2001; Mahoney & Cairns, 1997; Marsh, 1993; Marsh & Kleitman, 2002). For example, in National Educational Longitudinal Study (NELS) data, sport participation was related to numerous positive academic indicators (Marsh & Kleitman, 2003).

**Educational and Occupational Attainment** A long research tradition in sociology has focused on the beneficial link between adolescents' extracurricular activities and their future educational attainment, occupation, and income (Hanks & Eckland, 1976; Holland & Andre, 1987; Otto, 1975, 1976; Otto & Alwin, 1977; Spady, 1970). In our research, we have found that participation in sports, school-based leadership and spirit activities, and academic clubs predicted increased likelihood of being enrolled full-time in college at age 21 (Eccles et al., 2003). Participation in extracurricular and service learning activities has also been linked to better job quality, more active participation in the political process and other types of volunteer activi-

ties, continued sport engagement, and better mental health during young adulthood (Barber et al., 2001; Marsh, 1992; Perkins, Jacobs, Barber, & Eccles, 2004; Youniss, McLellan et al., 1999).

**Optimal Development and Engagement** Although preparation for adult roles is useful and important, scholars have argued that we need to provide more than that for youth. If adolescents are often bored and unmotivated (Larson, 2000), then they need something in which to become engaged. Organized activities offer that opportunity (Abbott & Barber, 2007). Extracurricular activities provide a forum for the development of initiative and engagement in challenging tasks, and allow participants to express their talents, passion, and creativity (Agnew & Petersen, 1989; Csikszentmihalyi, 1990; Csikszentmihalyi & Kleiber, 1991; Haggard & Williams, 1992; Kleiber, 1999; Kleiber, Larson, & Csikszentmihalyi, 1986; Larson, 2000; Larson & Kleiber, 1993; Larson & Richards, 1989). Sport psychologists have been describing the crucial role of enjoyment in sports participation and motivation for some time (see Scanlan, Babkes, & Scanlan, 2005 for a review). The opportunity for mastery development in optimally challenging activities and persistence in the pursuit of goals are proposed as crucial aspects of sport participation that can result in enjoyment (Duda & Ntoumumis, 2005; Scanlan et al., 2005).

Similarly, initiative is proposed as a central aspect of activity involvement affording optimal development (Larson, 2000). In working toward achieving an activity-related goal, students are likely to use skills such as planning, time management, problem solving, and contingency thinking over a period of time (Larson et al., 2005). Therefore, school-based extracurricular activities may challenge adolescents, and time spent in such activities may enhance the development of initiative (Larson, 2000). To test this connection, Larson and his colleagues have developed the Youth Experience Survey (YES) 2.0 that has allowed them to map the developmental experiences of youth participating in organized activities (Hansen, Larson, & Dworkin, 2003; Larson et al., 2006). In one of their recent studies, comparing different organized activities, arts and sports activities were reported by adolescents as providing more experiences related to initiative than other activities, and all organized activities examined offered more opportunities for initiative than core school classes did.

**The Importance of Patterns of Participation** Most of the studies summarized so far have compared participants to nonparticipants, often in sports activities, or have pooled all types of activities. However, there is a growing number of more complex approaches to the conceptualization of "activity participation," including number of activities, duration, intensity, participation profiles, and breadth. Generally, there is a positive relation between number of activities and outcomes for students (Feldman & Matjasko, 2005). For example, Gilman (2001) found that participating

in more activities predicted higher school satisfaction. Fredricks and Eccles (2006a, 2007) have documented positive linear relationships between the number of activities and school belonging, grades, educational expectations, and adjustment. In our own research, the total number of clubs and activities has predicted greater attachment to school, higher GPA, increased likelihood of college attendance, and lower rates of substance use (Barber & Eccles, 1997; Barber, Stone, & Eccles, 2005). The number of sports teams on which a student played also predicted increased likelihood of college attendance and higher GPA. Such results were also consistent with Marsh and Kleitman's (2002, 2003) evidence that higher levels of athletic participation were associated with greater benefits.

Some research has taken an approach focused on stability or *duration* of involvement. Results indicate that continuity of participation across the years predicts positive development, including better grades, psychological resilience, and school belonging (Darling, 2005; and for duration of school club participation, but not sports, Fredricks & Eccles, 2006a), and higher educational attainment in young adulthood (e.g., Mahoney et al., 2003; Zaff, Moore, Papillo, & Williams, 2003). Stability, or continuity, of sport team participation has been shown to predict greater attachment to high school, particularly for those most invested in sports (Barber & Hunt, 2004; Eccles et al., 2003).

In some quarters, there has been rising concern with the amount of time youth spend in structured activities. Thus, another focus of activity research, given this overscheduling worry, has been to consider the *intensity* of involvement, or amount of time spent participating. Results generally indicate that the more time spent in structured extracurricular activities, the greater the achievement, connection to school, and adjustment of the students (Cooper et al., 1999; Mahoney, Harris, & Eccles, 2006; Marsh & Kleitman, 2002; Roth, Linver, Gardner, & Brooks-Gunn, 2007). More time spent in an activity also predicts higher self-concept and fewer problem behaviors, and reporting more positive peer group characteristics, even after controlling for prior levels of these indicators (Roth et al., 2007). A few studies have found a leveling off of benefits at the highest levels of participation (Cooper et al., 1999; Zill et al., 1995), but even so, there remains a developmental advantage to the highest-level participants compared to those students who did not participate at all. Darling (2005) has reported that more time spent on activities also buffered adolescents from the negative effects of life events on academic aspirations and drug use.

Furthermore, there has been a recent call to consider the *patterns or profiles* of participation; in other words, the ways that students combine multiple activities, or not (Feldman & Matjasko, 2007). For example, while some students play on a sport team or two, and others spend their time in academic clubs, still others combine different types of activities. In fact, Feldman and Matjasko (2007) found that multiple activity portfolios were the most common profiles of participation, with 43% of students engaged in more than

one type of activity, and of those in multiple activities, patterns including a sport were the most common. This study also highlighted the challenge to researchers examining the effects of distinct portfolios, as they identified 26 different combinations of 2, 3, 4, and 5 activity type portfolios in the nationally representative Adolescent Health data set.

Another way to study the role of activities in the lives of youth is to construct an index of *breadth*, or eclectic participation. We have found that the extent of participation across a broad range of activity domains (number of different types of activities) such as music, art, sports, leadership, and community service predicted greater school attachment, higher GPA, and greater likelihood of college attendance, even after controlling for academic aptitude (Barber & Eccles, 1997; Barber et al., 2005; Fredricks & Eccles, 2006a, 2006b). In follow-up analyses motivated by the current interest in overscheduling, we have tested for both the linear and quadratic (leveling off) effects of breadth of involvement in grade 10 on number of years of education attained in later life. The linear effect was significant, and the quadratic was not. Greater breadth, or eclectic participation across a range of 3 or more activities, predicted more years of education, net of math and verbal aptitude and mother's education (adjusted  $M = 15.1$  years) than participation in only one activity domain ( $M = 14.8$  years), which in turn was better than no activity participation (adjusted  $M = 14.1$  years).

**Summary** A majority of youth participates in some kind of organized activity, and research to date suggests numerous potential benefits of that involvement. Through extracurricular activities, students are offered opportunities for learning and healthy development at school outside of their formal classroom settings. A range of tests of key patterns of participation by and large shows that more participation is better than less participation, which is in turn better than none. How these activities structure and facilitate the developmental experiences of students is the focus of the next section.

### Developmental Properties of Activities

There is adequate descriptive data to suggest that organized activities may be beneficial in establishing healthy pathways for adolescents. The lines of research summarized above clearly suggest the profound potential that activities may have for furthering the development of participants. Unfortunately, research on developmental outcomes has often, in effect, conceived of activities as a commodity whose good effects may be related simply to exposure or "dosage." In the past, researchers rarely examined the sequelae of participation in extracurricular programs that afford higher and lower levels of developmentally facilitative opportunities. However, given the growing evidence for the benefits of activity participation, a number of scholars have turned their attention to explaining the associations between activity involvement and these outcomes. The methodology for this

research has moved from primarily descriptive correlational work identifying concurrent links between activities and development, to more predictive, longitudinal research. Key advances in this field have involved longitudinal studies testing specific theoretically based hypotheses about the mechanisms likely to explain the association between activity participation and healthy development. Although comprehensive high-quality research assessing the impact of different aspects of extracurricular activity experiences is scarce (Eccles & Gootman, 2002; Larson, 2000), some progress certainly has been made in understanding the potential reasons that activity participation facilitates healthy development.

As yet, there is no overarching theory integrating all the mechanisms that have been proposed by scholars working in the area of extracurricular activity participation. Research on extracurricular activities has been guided by several theoretical approaches, and lies at the interface between person-environment fit frameworks and ecological approaches. Person-environment fit frameworks have focused on the match between the attributes of the students, including their identities and motivations, and the characteristics of the activities in which they participate. Ecological approaches have considered the features of the activity contexts that might prevent problems and facilitate positive development. Such studies often consider the features common to activities that may account for their benefits. Among such features are the involvement of adult leaders, and affiliation with prosocial peers. In this review, we focus on three properties of activities that have been shown to foster positive development in research from the two theoretical perspectives mentioned above: the extent to which activities (a) are identity enhancing, (b) facilitate connections to positive peers, and (c) open doors to relationships with supportive adults at school.

***Identity Enhancement in a Conventional and Valued Endeavor*** Voluntary participation in discretionary activities fosters assessment and clarification of one's talents, values, and motivations (Erikson, 1963). More rigidly structured arenas of participation such as school, work, and religion may provide less freedom to explore and express identity options than do discretionary activities. Therefore, voluntary participation in discretionary extracurricular activities provides an opportunity for adolescents to be personally expressive and to communicate to both themselves and others that "this is who I am" (Barber et al., 2005; Coatsworth, Sharp, Palen, Darling, Cumsille, & Marta, 2005). Eccles and her colleagues refer to this aspect of activities as attainment value; that is, the value of an activity to demonstrate that one is the kind of person one most hopes to be. The opportunity to both express and refine one's identity is a key aspect of socioemotional development during adolescence, and activity participation offers a meaningful and constructive domain for such work. Coatsworth and his colleagues have provided evidence from three countries of a broad range of activities that youth consider to be "self-defining," which

include organized activities such as sports, performing arts, religious and altruistic activities (Coatsworth et al., 2005). Within those activities, it appears that greater personal expressiveness of activities predicts lower delinquency (Palen & Coatsworth, 2007), and explains the link between activity participation and adolescent wellness (Coatsworth, Palen, Sharpe, & Ferrer-Wreder, 2006). More specifically, with reference to school belonging, activities also contribute to one's identity as a valued member of the school community. Such links to school likely result in the findings that activity participants have higher academic focus (Marsh & Kleitman, 2002) and reduced likelihood of dropping out (Mahoney & Cairns, 1997).

The process can be described using sport as an example activity. Engaging in sports allows one to demonstrate that one is an athlete or a jock and to explore whether being an athlete or a jock is an identity that feels compelling. Engaging in sports should also facilitate the internalization of an identity as an athlete or a jock. To the extent that one both develops a jock identity and engages in sports, one is likely to pick up other characteristics associated with the athletic peer culture in one's social world. We have explored these connections in our research, and have found clear links between high school social identities and activities (Barber et al., 2005; Eccles & Barber, 1999).

Youniss and Smollar (1985) have argued that adolescents develop a social sense of self as well as an individual and autonomous sense of self during adolescence. In addition, Brown and colleagues have suggested that adolescents develop socially construed representations of their peers' identities, or "crowd" identities, which serve not only as preexisting, symbolic categories through which they can recognize potential friends or foes, tormenters, collaborators, or competitors (Brown, Mory, & Kinney, 1994), but also provide public identities for themselves that are recognized and accepted by peers (Stone & Brown, 1998). Some recent research (Horn, 2006) also provides evidence that peers perceive their classmates as appropriate or inappropriate for roles in certain activities (e.g., student council and cheerleading) depending upon their social identity. These social identities have been linked to both positive and risky outcomes (Barber, Eccles, & Stone, 2001; Brown, Dolcini, & Leventhal, 1997), but there has been very little research on whether self-perceptions of belonging to particular social "crowds" in high school might influence one's experiences in particular activities. Of central importance from a person-environment fit perspective, we need to know if those students who perceive themselves to be "jocks" or "princesses" tend to benefit most from participating in activities such as sports or cheerleading that validate their self-images and foster integration into relevant social traditions.

In our recent work in this area, we have found that, in keeping with our expectations regarding both additive and contingent effects, consistency between one's identity and one's activities predicts better functioning than does inconsistency. For example, those self-perceived jocks who were not involved in school sports had lower GPAs and felt more

socially isolated than those who were involved in school sports (Barber et al., 2005). Similarly, dropping out of sports appears to undermine attachment to school for those who highly value sports. Consistent with a person–environment fit framework, we have found that those students who placed a high value on sports in 10th grade and were no longer involved in sports in the 12th grade suffered the most dramatic decline in attachment to school. Those athletes who had not placed high value on sports in 10th grade and were no longer involved in sports in 12th grade did not experience this decline in school attachment (Barber, Jacobson, Horn, & Jacobs, 1997). Thus, the extent to which sports were more central to one’s identity influenced the connection between participation and school attachment (Barber et al., 2005). Guest and Schneider (2003) have demonstrated that such links are also context-dependent, with athletic identity being a stronger predictor of higher achievement in lower class and middle class schools, compared to upper class schools, because the meaning of being athletic differs across these contexts.

**Peer Networks** Extracurricular activities also help adolescents meet their need for social relatedness, connecting youth to constructive peer networks (e.g., Barber et al., 2005). Involvement in a school organization or sport links an adolescent to a set of similar peers, provides shared experiences and goals, and can reinforce friendships between peers. To the extent that one spends a lot of time in these activity settings with the other participants, it is likely that one’s friends will be drawn from among the other participants. It is also likely that the collective behaviors of this peer group will influence the behaviors of each member. Thus, some of the behavioral differences associated with activity participation may be a consequence of the behavioral differences of the peer groups and of the peer cultures associated with these different activity clusters (Eccles et al., 2003; Fredricks & Eccles, 2005; Mahoney, 2000). For example, adolescents who play on teams together or work together on projects or performances are likely to spend a substantial amount of time together, developing new friendships; sharing experiences; discussing values, goals, and aspirations; and coconstructing activity-based peer cultures and identities. Our previous research has found significant relations between friendship network characteristics and activity participation (Barber et al., 2005; Blomfield & Barber, 2008; Fredricks & Eccles, 2005). Adolescents in extracurricular activities generally have more academic friends and fewer friends who skip school and use drugs than adolescents who do not participate in activities (Eccles & Barber, 1999). In turn, having more academic and fewer risky friends predicts other positive outcomes for adolescents (Fredricks & Eccles, 2005). Conversely, being part of a peer network that includes a high proportion of youth who engage in and encourage risky behaviors predicts increased involvement in risky behaviors and decreased odds of completing high school and going to college. Patterson and colleagues (Patterson, Dishion, & Yoerger, 2000)

have documented a pattern wherein early involvement with deviant peers is associated with more “mature” forms of deviance, such as risky sexual behavior, substance abuse, and crime. Such a dynamic makes it imperative to understand how some activities facilitate membership in positive peer networks while others facilitate membership in more problematic peer networks (Blomfield & Barber, 2008; Dishion, Poulin, & Burraston, 2001). The critical mediating role of peer affiliations in the link between extracurricular activities and youth outcomes has also been documented by Eder and Parker (1987), Kinney (1993), and Youniss, McLellan, et al. (1999). Similarly, the mechanism proposed by Mahoney (2000) to effect the moderation of antisocial behavior patterns was beneficial peer associations. This research indicated that it was critical for participants at high risk for criminal offending (based on earlier antisocial patterns) that their peer group also participated in school activities.

**Activity Participation and Connections with Adults** Another mechanism through which activities can influence positive development is the interpersonal and institutional supports created by participation. Most activities involve public participation that may help adults recognize and support the students who occupy these roles. Structured extracurricular activities provide adolescents with access to caring nonfamilial adults, who are often teachers or counselors acting as coaches and leaders. Coaches, club advisors, and other involved adults often invest a great deal of time and attention in these young people, acting as teachers, mentors, friends, and problem solvers (e.g., Youniss & Yates, 1997). This investment provides adolescents with a range of social developmental opportunities, establishes supportive networks of adults and adolescents, integrates adolescents into adult-sponsored culture, and allows them to achieve positive recognition (e.g., Camino, 2000; Fletcher & Shaw, 2000; Youniss, Yates, & Su, 1997). With the right adults, such contact is likely to have positive effects on development, particularly during adolescence. For example, Mahoney, Schweder, and Stattin (2002) found that participation in after-school activities is linked to lower levels of depressed affect primarily for those youth who perceived high social support from their activity leader. Similarly, the evaluation work on mentoring has documented the positive power of a good mentor in the lives of adolescents living in risky neighborhoods (Rhodes & Spencer, 2005). Our research also supports this idea (Eccles et al., 2003), with school-sport participants reporting closer connections to adults at school.

**The Character and Quality of Activities** In addition to these three key mechanisms whereby extracurricular activities may afford positive developmental opportunities, scholars have suggested other factors that are important to consider in evaluating the quality of experiences in activities for adolescents. Larson (2000) stressed the importance of activities being both voluntary and requiring concerted



engagement over time so that participants can learn the skills associated with taking initiative. Eccles and Gootman (2002), in their report on community-based activities for youth from the National Research Council, reiterated these criteria and added the following characteristics: opportunities to do things that really matter to the organization and the community in which the adolescents live (e.g., service activities and leadership activities); opportunities to learn quite specific cognitive, social, and cultural skills; opportunities to form close social relationships with nonfamilial adults; clear and consistently reinforced positive social norms and rules; and practices that both respect the adolescents' growing maturity and expertise and foster strong bonding of the adolescents with prosocial community institutions. Hansen and Larson (2007) articulate several amplifiers of developmental experiences in activities: amount of time spent in the activity, involvement in a leadership role, and ratio of adults to youth. Future research needs to consider more of these attributes in attempting to explain the benefits of some activities, and the ineffectiveness of others.

### Methodological Issues

The growing evidence for the benefits of participation in extracurricular activities is encouraging, with a major caveat: We often do not know to what extent the "effects" are attributable to the characteristics of the youth who nominate for and stay in the programs. One of the major challenges to those studying extracurricular activities is, thus, the issue of "selection effects." In this section, we examine the characteristics of youth, their families, and their communities that predict initial and continued participation in various types of organized activities.

#### *Do Activities Attract Young People with Particular Skills, Interests, and Backgrounds?*

*Human Capital* Numerous sources of differences between participants are evident in the literature on extracurricular activity participation. We focus briefly here on attributes at three different levels: youth, family, and culture. Such youth characteristics as gender, ethnicity, socioeconomic status background, and earlier participation history have been shown to have an impact on participation in school-based activities (Antshel & Anderman, 2000; Vidéon, 2002). More "psychological" individual attributes (e.g., motivation, self-concept, aptitude, and social competence) have also been shown to predict which adolescents choose to take up activities, whether they are likely to persist, and how much they benefit (e.g., Eccles, Barber, & Jozefowicz, 1998; Stone, Barber, & Eccles, 2001). Over the past 25 years, Eccles and her colleagues have developed and tested a model of the motivational and social factors influencing such achievement goals and behaviors as educational and career choices, recreational activity selection, and the allocation of effort across various achievement-related activities (see Eccles, 1987; Eccles et al., 1983; Meece, Eccles, Kaczala, Goff, & Futterman, 1982). The model

links achievement-related choices such as whether or not to participate in sports or activities directly to two sets of beliefs: the individual's expectations for success in and sense of personal efficacy for, the various options, and the importance or value the individual attaches to the choices available.

For example, consider activity participation decisions. The model predicts that people will be most likely to participate in activities that they think they can master and that they value. Expectations for success depend on the confidence the individual has in his or her abilities and on that person's estimations of the difficulty of the activity. These beliefs have been shaped over time by the student's experiences and subjective interpretation of those experiences (e.g., does the person think that her or his successes are a consequence of high ability or lots of hard work?). Likewise, the value of a particular activity to the individual is assumed to be influenced by several factors. For example, does the adolescent enjoy doing the sport or activity? Does the activity validate the adolescent's identity? Is the activity seen as instrumental in meeting one of the individual's long- or short-range goals? Furthermore, the assumption that achievement-related decisions, such as the decision to try out for the marching band or to switch to the school newspaper rather than nominate for student government, are made from among a wide variety of choices; each has both long-range and immediate effects. Consequently, the choice is often between two or more positive options or between two or more options with both positive and negative aspects. For example, the decision to join the swim team is typically made in the context of other important decisions such as whether to compete for a place in the school play or get an after-school job.

Over the last several years, we have been conducting longitudinal work to investigate how useful the model is in predicting involvement in sports, social activities, instrumental music, and academic subjects. The model works very well in each of these activity domains. It is especially powerful in predicting individual differences in participation in voluntary leisure type activities like sports. The evidence supporting the power of expectancies and values as both directly effecting participation decision and as mediating gender differences in behavioral choices in domains such as sports is quite strong (Eccles, Barber, & Jozefowicz, 1998). Positive self-beliefs, clearly defined interests, and a tendency to perceive the usefulness of activities characterize those youth who choose to participate, and we see these attributes as important considerations in efforts to estimate the benefits of activities. Not only might these qualities predict who will participate, but they themselves may be important third variables useful in explaining differences between activity participants and nonparticipants, depending on the "outcome" domains tested. In addition to directing choices about selecting activities, self-beliefs predict persistence in activities (Barber et al, 2005). Consistent with the Eccles expectancy-value model, ratings of enjoyment, perceived importance, and self-concept of ability in sports predict

persistence in sports (Barber, Jacobson, Eccles, & Horn, 1997). We imagine that similar processes may operate in nonathletic extracurricular activities. Those who enjoy and value activities are more likely to maintain participation, whereas those who find the experience irrelevant, boring, or lacking in challenge may opt out. Thus, psychological attributes of the participants are likely to be important predictors of continued participation, and in turn may influence program “outcomes.” Such methodological issues can compromise study results, and can thus limit our ability to test effects of participation.

*Social and Physical Capital* We also need to take an interest in the function of social capital—an attribute that is differentially distributed across individuals. For example, research on the function of peer relationships of youth in organized activities (Loder & Hirsch, 2003; Persson, Kerr, & Stattin, 2007) suggests that peer groups may play an especially salient role not only in recruitment and retention, but also in the effectiveness of participation. Mahoney’s research on at-risk males (Mahoney, 2000) also suggests that individuals may not benefit from activity participation unless they also have a peer network that participates in activities. The demonstrated importance of peer relationships in adolescence means that this issue is appealing to consider as a subtle and yet malleable selection factor, and an opportunity for research that could be used to inform practice and improve youth supports under varying conditions.

Family characteristics, including parental behaviors and attitudes (e.g., opportunity provision, involvement, and encouragement), as well as social class, have been shown to predict initiation and continuity of participation in extracurricular activities (Fletcher, Elder, Mekos, 2000; Videon, 2002). Families clearly differ in levels of interest in organized activities for their children and in their ability to provide opportunities and encouragement for participation. As an economic perspective would suggest, families must make decisions about the allocation of their time and financial resources to various competing and worthwhile ends. They must also decide which sacrifices of competing opportunities they are willing to make to obtain any particular benefit (Foster, 2002). Among families living above the poverty line, some have very limited resources beyond the provision of necessities while others enjoy more discretionary funds and time. Income, the specific earning-power of each parent, parental employment, family configuration, and family size are crucial determinants for constraints such as these.

However, there are also differences in the extent to which families value activities, in the kinds of activities they value, and in the goals they have for such participation. In more general terms, families differ in the value they place on present and future goods, on their attitudes toward equity for siblings (Foster, 2002) and the entitlements accruing from differential ability (e.g. musical or athletic talent). Both developmental and economic perspectives would probably confirm that families make decisions about such

issues as providing parental chauffeur service for activity participation or the money to rent a musical instrument in light of numerous cost–benefit calculations. The result is that financial and transportation constraints continue to reduce the participation levels and continuation of youth from families who do not enjoy affluence (Newman, Lohman, Newman, Myers, & Smith, 2000). Some less obvious features of adolescent experience that are correlated with disadvantage and have an impact on participation relate to relatively frequent residential transitions and family structure changes (Olive, 2003).

Communities reflect macrolevel effects of socioeconomic disadvantage. The National Research Council (NRC) report on youth programs (Eccles & Gootman, 2002) suggests that insufficient access to programs in low- to moderate-income communities is the most serious and long-standing challenge to national efforts to support youth development with after-school programs. It has been estimated that in some urban areas programs can only meet the needs of one quarter of youth who need and want organized after-school activity options (U.S. General Accounting Office, 1997).

*Culture and Inclusion* Multiple studies have offered an understanding of the role of community and cultural contexts in family process and the development of young people (Lamborn, Dornbusch, & Steinberg, 1996). For example, Furstenberg and colleagues found in their extensive study on relatively less advantaged families that a family with high-functioning parents with good parenting strategies could facilitate the positive development of their children no matter where they lived, but the sheer accumulation of risks in less advantaged households and communities was definitely related to patterns of outcomes (Furstenberg, Cook, Eccles, Elder, & Sameroff, 1999). Nevertheless, community and cultural contexts are often neglected in research on activity participation (for a recent exception that focuses on neighborhoods, see Fauth et al., 2007).

Further, ethnic background and sexual orientation are characteristics that are rarely considered in activity participation research (Rodriguez, Morrobel, & Villarruel, 2003; Russell & Andrews, 2003). This is problematic, insofar as both factors are known to have an impact on well-being and identity development. One recent study of a sample of Latino/a youth (Borden, Perkins, Villarruel, Carleton-Hug, & Stone, 2006) found that participation was often dependent on barriers related to resources, family, culture, religion, and outside responsibilities. Darling (2005) found that European American youth were most likely to participate, relative to Hispanic, African American, and Asian youth, especially in sports. Researchers believe that nationality, immigrant history, generational status (Umana-Taylor & Fine, 2001) national subgroup, and skin color (Rodriguez et al., 2003) are all underresearched, but play important roles in the adjustment of Latino/a youth. Other researchers point out that sexual orientation, gender, and child-bearing can have a tremendous impact on adolescent well-being, as well as the activity opportunities adolescents have and their

experiences within activities (Eccles & Gootman, 2002; Russell & Andrews, 2003). It seems logical to expect that any developmental benefits of activities would be contingent on the willingness and capacity of activity leaders to engage with the differing characteristics of the entire target population as well as their families.

***How Much of an Activity's Benefit Is Attributable to the Young People Who Participate?*** Scholars interested in the effects of activities (as well as those who study other potentially beneficial experiences) have pointed out that activity participation may not be a cause of positive adaptation, but rather a result or marker of preexisting positive characteristics and developmental assets (Mahoney, 2000). It is clear that more motivated, competent, and socially advantaged youth are more likely to select opportunities to participate in activities, and to choose to continue their participation. To what then should we attribute good "outcomes" for extracurricular activity participants?

*Activities: "Markers" or Promoters of Well-Being?* The importance of the issue of selection effects is related to both practical concerns and to basic theoretical and methodological challenges. When interpreting apparent effects in research, it is important not to overestimate the effects of activities. Youth with a relatively large store of preexisting assets are likely to experience relatively positive outcomes with or without activities. Therefore, we should not automatically interpret positive sequelae in the lives of asset-rich youth who participate as being the result of their participation. Further, some of the same factors that are associated with activity participation are also, in themselves, associated with positive outcomes (e.g., parental support and involvement).

This theoretical and practical challenge is made more complicated by the tendency for resources and risk factors to occur in correlated "packages" of "developmental constraints" operating at biological, behavioral, and societal levels (Cairns, 1996). This phenomenon can be illustrated by the example of a student from an advantaged background whose physical competence, family support, and intelligence are coupled with private music lessons, relationships with peers who encourage academic engagement, constructive experiences in the school orchestra, and a positive identity based on her achievements. Clearly, positive outcomes cannot be fairly attributed to any one of the correlated developmental assets she enjoys. Because assets do not appear to be independent, numerous researchers and theorists have suggested that development must be viewed "organismically," "ecologically," or "holistically," such that any one asset (or risk) can only be seen to have an effect in the context of its relationship and its bidirectional transactions with other asset and risk systems (Barber, Stone, Hunt, & Eccles, 2005; Bronfenbrenner, 1979; Cairns, 1996; Cairns & Cairns, 1994; Ford & Lerner, 1992; Mahoney, 2000).

Risk factors may be seen to collaborate against numerous young people who do not enjoy a coherent system of social

capital enjoyed by the hypothetical student in our example. However, some research has suggested that activity participation might forestall the effects of correlated risks. Many disadvantaged participants may be most likely to benefit from youth programs because they have few other supports (Marsh, 1992; Marsh & Kleitman, 2002). Mahoney and Cairns have shown, for example, that school activity participation may be associated with reduced levels of both dropping out and criminal behavior for at-risk youth (Mahoney, 2000; Mahoney & Cairns, 1997; Mahoney et al., 2003).

***For Whom Do Activities Afford Developmental Benefits?*** The benefits of activity participation may be stronger for some subgroups of youth than for others. Two approaches to this question seem promising: (a) examining issues related to the starting point for youth on the outcomes of interest, and how those levels influence findings related to outcomes; and (b) considering the fit of program demands and opportunities with youth resources and interests.

*Pretest Scores as Starting Points* Divorce intervention research by Wolchik provides a model for considering youth characteristics in evaluating activity participation effects. Using pretest scores on targeted outcomes (e.g., internalizing and externalizing), Wolchik has found that child characteristics moderate program effects. A number of pretest by intervention condition interactions emerge—most often indicating greater impact for those most in need (Wolchik, Sandler, et al. 2002; Wolchik, West, Westover, & Sandler, 1993; Wolchik, Wilcox, Tein, & Sandler, 2000). This approach may be fruitful for evaluating the effects of activity involvement. We know little about differential benefits of activity participation, but when subgroup differences are considered, social disadvantage emerges as crucial. Students from lower SES families and those at greater risk for dropping out benefit more from school-based extracurricular activity participation than those from advantaged backgrounds (Mahoney & Cairns, 1997; Marsh, 1992). Analytic strategies that include pretest levels of assets or risks not only as control variables but also in interaction terms with activity participation, can identify groups who benefit more from a program.

*Fit of Program to Youth* Developmental researchers have found that problems in psychological adjustment are sometimes related to a mismatch between the needs of individuals and the environmental context in which they develop (Eccles, Midgley, et al., 1993). We believe that activity-person mismatch may lead not only to attrition and lack of motivation for activities, but also to reduced benefits for those whose developmental needs are not met by specific programming. Evidence of benefit, or competent behavior, is most likely to occur when the resources of the individual are a fit with environmental demands (Huebner, 2003). Further, as noted above, we have found that the benefits of activities are sometimes contingent on adolescent self-beliefs.

**Summary** Because of such moderating effects, we want to assert that selection effects and the selection mechanisms that produce such effects cannot be viewed only as simple control variables. Instead, we view selection mechanisms as involving transactions between the characteristics of individuals and the specific characteristics and developmental opportunities provided by the activities. For instance, an after-school sports program that has hair-length requirements (as mentioned in Eckert, 1989) becomes a participation or attrition problem only in relation to (and mismatch with) youngsters whose peer group values alternative grooming styles. Similarly, after-school activities that allow youngsters who must care for younger siblings to bring the siblings to the program can provide a beneficial match in communities and cultures where this family pattern is a norm, but would not be relevant in other communities.

We need more research on activity participation for adolescents that considers preexisting characteristics of participants in longitudinal studies. Such studies should be designed to test notions about the qualities of activities that are believed to enhance developmental outcomes, using methods dedicated to separating out confounds of selection bias. In addition to understanding the characteristics that should be *controlled for* in analyses, there is also a need to examine these characteristics as possible *moderators* of program impact. Although much research indicates general benefits of activity participation for youth, few scholars in this area have examined how the relations vary in different subgroups. When differences are considered, social disadvantage is one youth attribute that emerges as crucial.

### Conclusions and Implications for Policy

In this chapter, we have reviewed the existing literature on the relation of school-based extracurricular activities to students' development, outlined the most prevalent concerns about methodological issues in this body of research, and suggested viable and important future directions for this area of study. We have tried to make clear the historical roots of this research area, as well as its promise for our future understanding of social development within the context of schools. There has been tremendous growth in the area of study over the last 10 to 15 years, after a long hiatus. It is very exciting and gratifying to see this growth in theories, studies, and methods. But more work is needed.

We understand that we are asking for more complex models explaining how activities might be beneficial, but we think it is imperative for the advancement of the field to initiate multicomponent and multilevel modeling of activity effects. Because of the challenge involved in testing "what works" for youth (Dryfoos, 1990), it has been difficult to examine the specifics about "why" particular activities work. We are proposing a focus on the developmental contexts offered in activities, a focus that could facilitate and enhance future decision making. With such insight into extracurricular activities, policymakers may be in a better position to recommend funding directions when

faced with budget cuts or surpluses. Through informed and intentional change in activity contexts, we can maximize the potential for supporting youth who experience varying conditions of life. It is through such methods that we are most likely to facilitate substantial improvement in the quality engagement of youth in activities that enhance their development.

As we think more about the policy implications of this field of research, it is important to put what we have reviewed into a larger context. The last 15 years have seen the growth of interest in both in and out of school activities for positive youth development. In fact, we have seen the emergence and growth of the new field of positive youth development. The amount of support from the federal government for youth programs has grown exponentially, as have pressures to evaluate the effectiveness of both in and out of school based youth programs. Similar interest has grown in other countries as well, both in funding such programs and in evaluating their effectiveness. We of course find this expansion in interest and funding very promising.

But, as noted earlier, many youth, particularly youth living in poor communities and neighborhoods, still have quite limited access to high quality programs. At the same time, as school budgets have been cut, the availability in schools of extracurricular activities has declined, leaving many youth with little opportunity to participate in well-designed programs. Thus, at the policy level, there is great need for more coordinated efforts between schools, communities, and funding agencies to increase the number and range of high quality programs available to young people, particularly to young people living in poor, underresourced neighborhoods in both rural and urban areas. We now know a great deal about the general characteristics of programs that are likely to have a positive impact on youth's development. We also know how hard it is for such programs to be sustained in poor communities and poor schools. School budgets are very tight and schools are under great pressure to focus on academic achievement. Administrators in community-based programs have to navigate a complex funding environment just to keep their programs running—distracting them from the very important business of providing high quality programs with a stable core of staff members.

Lest we leave you with a pessimistic view of youth programming, it is very important to acknowledge all of the many educators and policy makers who have dedicated their lives to improving the opportunities for youth to participate in meaningful and effective extracurricular activities both in and out of schools. As noted above, this country has seen a major increase in interest in such programs—interest in both research and program development. Youth have responded with enthusiasm, seeking out such programs in large numbers. Programs become filled as soon as they become available. Schools are rethinking decisions to cut extracurricular programs and they are exploring ways to work more effectively with community based organizations to meet the needs of all youth. But we have a ways to go! And it is an exciting time to do research in this area.

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