Adolescent Participation in Organized Activities

Bonnie L. Barber and Margaret R. Stone

University of Arizona

Jacquelynne S. Eccles

University of Michigan

For Indicators of Positive Development Conference
March 12-13, 2003

There is good evidence that participating in school and community-based activities is associated with both short and long term indicators of positive development (e.g., Barber, Eccles & Stone, 2001; Eccles & Gootman, 2002; Eccles & Templeton, in press; Larson, 2000; Mahoney & Cairns, 1997; Roth, Brooks-Gunn, Murray, & Foster, 1998; Youniss & Yates, 1997). Sociological research has documented a link between adolescents' extracurricular activities and adult educational attainment, occupation, and income (Otto, 1975; 1976; Otto & Alwin, 1977). Participation in organized activities is also positively related to achievement, educational aspirations, self-esteem, ability to overcome adversity, active participation in the political process and volunteer activities, leadership qualities, and physical health (e.g., Barber, et al., 2001; Marsh & Kleitman, 2002; Holland & Andre, 1987; Scales, Benson, Leffert, & Blyth, 2000; Youniss, Yates, & Su, 1997).

There has been far less developmental research on constructive leisure activities than on other contexts such as family and school (Kleiber, 1999), but some progress has been made in understanding the mechanisms whereby constructive organized activities facilitate healthy development. First, they provide a developmental forum for initiative and engagement in challenging tasks, and allow participants to express their talents, passion, and creativity (Csikszentmihalyi, 1991; Klieber, 1999; Larson, 2000). Second, organized activities help adolescents meet their need for social relatedness, potentiating a broad range of social developmental opportunities (Fletcher & Shaw, 2000; Youniss, Yates, & Su, 1997). Third, participation may also promote the development of such assets as social, physical, and intellectual skills, meaningful roles and empowerment, positive identity, constructive peer networks, and clear expectations and boundaries (e.g., Eccles & Barber 1999; Marsh & Kleitman, 2002, 2003; Perkins, Borden, & Villarruel, 2001).

Activity participation, social identity, and peer group

To explain the connection between activities and positive development, we have proposed a synergistic system connecting activity involvement with peer group composition and identity exploration (Barber, Stone, Hunt, & Eccles, in press; Eccles & Barber, 1999). Specifically, we believe that enhanced outcomes result for adolescents who experience a confluence of activity participation, activity-based identity adoption, and a benign peer context. Previous research, including our own, has demonstrated the pervasive connections between each of these three factors and numerous outcomes.

The activities adolescents choose can reflect core aspects of their self-beliefs. Therefore, voluntary participation in discretionary extra-curricular activities provides an opportunity for adolescents to be personally expressive and to communicate to both themselves and others that "this is who I am" or "this is what I believe I am meant to do." In addition, extracurricular activity settings provide the opportunity to enhance identification with the values and goals of the school (Barber, et. al., in press; Marsh, 1992; Marsh & Kleitman, 2003).

Activities also help structure one's peer group: adolescents in extracurricular activities 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 less risky friends predicts other positive outcomes for adolescents. Conversely, being part of a peer network that includes a high proportion of youth who engage in, and encourage, risky behaviours predicts increased involvement in risky behaviours and decreased odds of completing high school and going on to college. Some activities facilitate membership in positive peer networks; others facilitate membership in more problematic peer networks (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, Su, and Yates (1999).

Measures of activity involvement

Participation in school and community activities can be measured in a number of ways. Mahoney (Mahoney, 2000; Mahoney & Cairns, 1997) has used the approach of coding participation from school yearbook information available for the participants in his local area study. He uses the photographs of participants in extracurricular activities, and a record of student names and positions of status within the activity. Yearbook activity photos overlapped closely with lists provided by school personnel. Mahoney has categorized activities into nine domains (academics, athletics, fine arts, student government, service, press activities, school assistants, vocational activities, and royalty activities). In his analyses, rather than focus on type of activity, Mahoney generally uses information about number of activities, or a categorical variable reflecting any activity involvement contrasted with no involvement (Mahoney, 2000; Mahoney & Cairns, 1997). Although this method seems useful, non-invasive, and valid, it is restricted to local area studies that have access to yearbooks and administrators.

Marsh and colleagues have used large national samples (e.g., the National Education Longitudinal Study) to test several models of the function of extracurricular activities (Marsh, 1992; Marsh & Kleitman, 2002; Marsh & Kleitman, 2003). In one study (see Marsh & Kleitman, 2002), three measures were employed to reflect the number of school-based activities undertaken and the time spent overall on such participation in 10^{th} and 12^{th} grade, and two to represent the level of participation in structured and unstructured activities outside of school. Summary indices were also created to reflect overall involvement.

In this chapter we report on our use of survey questions to assess activity participation in a local study. We also report information on concurrent and predictive validity of the measure.

Study Design and Sample

The measures of constructive organized activity involvement come from the Michigan Study of Adolescent Life Transitions (MSALT). This is a longitudinal study that began with a cohort of sixth graders drawn from 10 school districts in southeastern Michigan in 1983. The majority of the sample is white and comes from working and middle class families living in primarily middle class communities based in small industrial cities around Detroit. We have followed approximately 1800 of these youth through nine waves of data collection: two while they were in the sixth grade (1983-84), two while they were in the seventh grade (1984-85), one while they were in the tenth grade (spring, 1988), one while they were in the 12th grade (spring, 1990), one in 1992-3 when most were 21-22 years old, one in 1996-1997, when most were 25-26, and one in 2000-2002 when most were 29-30. The validity analyses presented here include 1425 respondents (759 females and 666 males) who participated in the tenth grade survey.

Approximately 88% of the participants were European–American; 8%, African American; 1%, Asian American; 1%, Latino; 1%, Native American; and 1%, other, including mixed-race individuals. We included mother's report of their education as one measure of family socio-economic status using a 4 point ordinal scale with 1 = less than high school diploma (11%), 2 =high school diploma (43%), 3 = some college (27%), and 4 = Bachelors' Degree or more (19%).

Approximately 6% of participants came from families with incomes of less than $10,000 in 1983; 12% with $10,000 to $20,000; 44% between $20,000 and $40,000; and 38% $40,000 and above. Approximately 71% of participants lived with two biological parents, 13% with a

parent and step-parent, and 16% with a single biological parent. Nearly 10% of participants (49 females and 76 males) had been rated by their teachers in sixth grade as suffering from a limiting physical, mental, or emotional condition.

Survey and school record data from approximately 900 MSALT participants were used for longitudinal analyses discussed in this report. Activity data were collected at tenth grade (Wave 5) when participants were approximately 16 years old. Prospective outcomes are discussed for twelfth grade (Wave 6), and two years (Wave 7), six years (Wave 8) and 10 years (Wave 9) after high school graduation. Some of these results have been previously reported (Barber, et al. (2001); Barber et al., in press; Eccles & Barber; 1999).

Measures of activity participation

Activity involvement. At tenth grade, adolescents were provided with a list of 16 sports and 30 school and community clubs and organizations and asked to check all activities in which they participated. To measure sports participation, we asked: "Do you compete in any of the following school teams (varsity, junior varsity, or other organized school program) *outside of PE*? Sports included in the checklist are listed in the appendix. Cheerleading, though listed in the sports section of the measure, is coded as a "School Involvement" activity, and not as a sport. To measure participation in non-sport activities, we asked: "Do you participate in any of the following activities or clubs at school? We also asked about a range of activities outside of school: Do you participate in any of the following clubs or activities outside of school?" The complete checklists for both categories are included in the appendix. This measure was created for the survey by the research team based on their previous research in schools. It was refined through pilot testing with local high school students. Codebook information and question format

for MSALT, as well as for the Childhood and Beyond study (Eccles, PI), are in the appendix, with the participation rates for MSALT.

Analyses of the Measure

Distribution of responses. The Appendix summarizes the distribution of participation in school and community activities by gender. We computed a total number of activities by summing all the in-school and out-of-school clubs and activities that were checked. On average, these adolescents participated in between one and two activities and/or clubs. Girls participated at higher rates than boys, and 31% of the sample did not participate in any activities or clubs. Because sports were so common, we aggregated them separately by summing the different teams checked. Not surprisingly, boys participated on more different teams than girls. However, 45% of the sample had not competed on any school athletic team. Finally, we calculated the breadth of the adolescents' participation by summing the number of different types of activities (art, performing art, church, leadership, sports, academic, service) for each adolescent (participation in several different sports [or several different performing arts] only counted as one type of activity). Girls also participated in a wider range of activities than boys (Eccles & Barber, 1999).

Missing data and subgroup usage. Data regarding individual activities items were missing for approximately 10% of the sample. We attribute the missing data largely to the length of time allowed by schools for the completion of the survey and differential reading ability. The items regarding activities were on pages 34-36 of a 51-page survey. Those who completed the survey did not differ from those who did in terms of sex, family income, family structure, and maternal education. However, there was a higher rate of missing data for disabled participants. Specifically, individuals with mental and emotional disabilities, as rated by teachers in junior high school, were less likely to provide data regarding activities than were

those not so identified by teachers. Individuals with physical disabilities, on the other hand, provided data at the same rate as those not identified by teachers as having a physical disability.

Shortened Version. In Grade 12, sports participation was assessed by asking participants "do you compete in any school teams (varsity, junior varsity, or other organized school program) *outside of PE?*" Non-sport extracurricular involvement was assessed with the question "Do you participate in any activities or clubs at school or outside of school." These questions were coded using the number of teams or clubs listed by the participant, and the types of sports (team vs. individual, male-typed vs. female-typed) and activities. The 1008 responses for sports were as follows: 567 did not compete in any sports, 245 listed 1, 146 listed 2, 42 listed 3, 4 listed 4, 3 listed 5, and 1 listed 6 sports. For the 999 who responded to the activities question, 509 were not involved, 231 listed 1, 146 listed 2, 40 listed 3, 44 listed 4, 14 listed 5, 15 listed 6 or more activities. The difficulty with this format is then coding the data after the open-ended responses are collected. Important information can be lost if too much collapsing is done during coding, and handwriting can be difficult to understand, particularly for less common types of clubs.

In the area of sports participation, we have done some comparisons with time use data that suggest we need both types of information. Students were asked "About how many hours do you usually spend each week taking part in an organized sport?" Responses ranged from 0 = "none" to 7 = "21 or more hours per week." Although the cross-tab for this variable and the sports question listed in the previous paragraph are distributed generally in ways one would have predicted (athletes spend more time taking part in organized sport each week), there are some cells that are interesting. For example, 16% of those who report no time spent on sports say they are on at least one sports team at school. We do not see this as a validity problem – we see it as important information – those who play on fall teams may not spend time in the spring playing

organized sports. Therefore, although time use may be an important indicator in some ways, we argue that the membership on a team may have impact even in the absence of current time spent practicing (connection to adults at school, peer group, identity, and attachment to school).

Having used both checklists stipulating each sport and activity and general questions about sports and activities, with a follow-up question requiring students to list their activities, we prefer the former. Coding is simplified in this strategy, and there is less risk for students to give information only about the activities in which they CURRENTLY participate. We believe that students may miss reporting on football if they fill out the survey in Spring, for instance.

Data reduction. In order to understand patterns related to participation in various types of activities, we grouped the extracurricular activities into five categories: Prosocial Activities - church attendance and/or participation in volunteer and community service activities; Team Sports - participation on one or more school teams; Performing Arts - participation in school band, drama, and/or dance; School Involvement - participation in student government, pep club, and/ or cheerleading; and Academic Clubs – participation in debate, foreign language, math, or chess clubs, science fair, or tutoring in academic subjects. The distribution of females and males in these activity types are included in the appendix, as are the activities coded in each category.

Participants were coded as participating if they had checked off at least one activity/club within the broad category. Consistent with results reported above, the males were more likely to engage in at least one sport activity than females. In contrast, the females were significantly more likely to be involved in Prosocial, Performing Arts, and School Involvement Activities.

We also assessed whether mother's education was related to participation in any of these four general categories. Both academic club participation and prosocial activity involvement were significantly related to maternal education: Adolescents with mothers having a college

degree or higher were more than twice as likely to be involved in Academic clubs and Prosocial activities as adolescents with mother having a high school degree or less education. Similar trends were evident for both Team Sports and Performing Arts. These differences in maternal education, and the expected links of maternal education with many of the variables used to examine validity, lead us to include maternal education as a covariate in our analyses.

Construct Validity of the Measure

Our measure of activities correlates well with our measures of identity, characteristics of peer groups, and relevant measures of values and abilities.

Identity Categories. "The Breakfast Club" (Hughes, 1985) was a prominent film when our study participants were in the 10th grade. We asked the participants to indicate which of five characters (the Princess, the Jock, the Brain, the Basketcase, or the Criminal) was most like them. Twenty-eight percent selected the Jock identity, 40% the Princess, 12% the Brain, 11% the Basketcase, and 9% the Criminal.

We examined the extent to which adolescents in each particular activity identified one as a member of a social identity category. For this question, we analyzed the proportion of students in each sport or organization that claimed each social identity. A series of Chi-Squared analyses revealed that social identities were differentially distributed across sports and activities (Barber, et al., in press). Not all athletes saw themselves as Jocks, especially among female athletes. The highest proportion of female athletes who considered themselves to be Jocks played basketball, softball, soccer, volleyball, and track. However, female athletes also often self identified as Princesses (especially gymnasts and swimmers) rather than Jocks. The vast majority of cheerleaders saw themselves as Princesses rather than Jocks, lending support to our decision to exclude cheerleading from the sports composite. Overall, 22% of female athletes considered

themselves to be Jocks, which is substantially higher than in the general female population (13%).

Sixty-nine percent of the male athletes self-identified as Jocks; this was especially true for those who played basketball, football, baseball, ice hockey, and wrestling. These five sports also had the fewest participants who self-identified as Brains. Overall, male athletes were unlikely to label themselves as Brains (14% of athletes compared to 20% of all males).

Although the distribution of the five identity groups across the non-sport activities was less extreme, the patterns were what one would expect (Barber, et al., in press). Among the females, the Princesses were over-represented in pep club and dance; the Brains were over-represented in the band and orchestra and under-represented in dance. Among the males, the Brains were over-represented in foreign language clubs, math and science clubs, and band or orchestra; the Basketcases and Princesses were over-represented in drama. Although few males self identified as Princesses, the male Princesses were also over-represented in dance, foreign language club, and band.

We think that these data indicate important variability across activities and sports. Not all extracurricular involvement is equal. In fact, even within the category of sports, the teams seem to vary considerably from each other in the types of students who participate, and the meanings attached to team membership. These differences are reflected in the identities of participants. Therefore, we should expect differences in the benefits and risks that may accompany different activities. It is because of this variability that we recommend collecting very specific data about activities, not just counts of the total number of activities or general time use. Our question can certainly be collapsed into subcategories, but if the details are not collected, the more precise information will be unavailable.

Concurrent prediction to peer group. Activity settings provide a peer group as well as a set of tasks. 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. We have examined characteristics of the peer group for those who participated in the different types of activities (Eccles & Barber, 1999). At tenth grade, the peer group characteristics were consistent with the kinds of associates we expected in the different activity types. The peer groups for participants were generally characterized by a higher proportion of friends who planned to attend college and were doing well in school. Adolescents involved in Prosocial Activities had fewer friends who used alcohol and drugs than their peers; they also had few friends who skipped school. Finally, consistent with the association of sports participation with increased drinking (Eccles & Barber, 1999), adolescents who participated in team sports had a higher proportion of friends who drink than their peers.

Concurrent prediction to self concept and task value. Participation in team sports, as one would expect, was associated with higher levels of both self-concept of sports ability and task value for sports, after controlling for gender and ethnicity. Those who participated in Team Sports had significantly higher self-concept of sports ability than non-participants ($F(1,1248) = 306.84$, $p < .001$, Ms = 5.1 and 3.8 respectively). Athletes valued sports more highly as well ($F(1,1248) = 409.83$, $p < .001$, Ms = 5.8 and 4.0 respectively). Interestingly, participants in School Involvement activities also valued sports more highly than non-participants ($F(1,1238) = 12.292$, $p < .001$, Ms = 5.4 and 4.9 respectively) and had higher self concept of sports ability ($F(1,1238) = 7.330$, $p < .01$, Ms = 4.8 and 4.5 respectively). Follow-up analysis indicated that this effect held for boys but not girls. No other activity type predicted to higher self-concept or valuing of sports. However, Performing Arts participation predicted to lower self concept of

sports ability ($F(1,1246) = 7.417$, $p < .01$, Ms = 4.4 and 4.6 respectively) and lower valuing of sports ($F(1,1246) = 8.669$, $p < .01$, Ms = 4.8 and 5.1 respectively). Follow-up analysis indicated that this effect also held only for boys. Clearly, achievement-related beliefs differ among activity types, suggesting the importance of maintaining distinctions.

Predictive Validity: High School Outcomes

In this section, we report on our previously published findings on the relation between 10th grade extracurricular activity involvement and other psychological and behavioral outcomes (from Eccles & Barber, 1999). We examine whether specific types of extracurricular activities are more beneficial or risky than others.

Prosocial Activity involvement. Adolescents involved in prosocial activities in 10th grade reported less alcohol and drug use; this difference was especially marked at grade 12, two years after the activity data were collected. Regression analyses indicated that the students who were involved in activities like attending church and doing volunteer work showed less of an increase in these risky behaviors over the high school years than their non-involved peers, indicating that Prosocial Involvement can be a protective factor with regard to the usual age-related increases in these risky behaviors. Involvement in Prosocial Activities at grade 10 was also positively related to both liking school at the 10th and a higher GPA at the 12th grade.

Team Sports. Involvement in team sports at grade 10 predicted higher rates of drinking alcohol at grade 12. Involvement in team sports also served as a protective condition for academic outcomes. Sport participants liked school more in the 10^{th} and 12^{th} grades, and had higher 12th grade GPAs than non-participants.

Performing Arts. Those adolescents who were involved in Performing Arts at grade 10 were less frequently engaged in risky behaviors at both grade 10 and 12 than those who were not.

This was particularly true for alcohol-related behaviors. However, when we controlled for prior levels of drinking in longitudinal regression analyses, we found no evidence that 10th grade involvement in performing arts affected the direction or magnitude of change in drinking behavior over the high school years. Participation in performing arts was also related to greater liking of school at both 10th and 12th grades and to higher 12th grade GPA.

School-Involvement Activities. Participation in school-spirit and student government related clubs was not related consistently to engagement in risky behaviors. In contrast, it was positively related to liking school at grade 10 and to 12th grade GPA.

Academic Clubs. Participation in academic clubs was primarily related to academic outcomes. Adolescents who participated in academic clubs had higher than expected high school GPAs than those who did not, even after controlling for aptitude and maternal education.

Longitudinal Analyses: Prediction to Outcomes in Young Adulthood

Our measure of activities relates to numerous positive long-term outcomes. For these analyses, some of which have been reported previously reported in Barber, et al. (2001), we have also used the five activity type categories rather than specific individual activities. We examined the association between grade 10 activity involvement and the following Wave 8 and/or Wave 9 young adult educational and occupational attainment, civic engagement, and psychological well-being. Analyses of Covariance (ANCOVAs) were used with activity involvement and gender as predictors, and with mother's education (and high school math and verbal aptitude when applicable) as covariates.

Educational attainment. Participation in all five of the activity types was positively related to completing more years of education, however, participation in prosocial activities was not a significant predictor once maternal education and aptitude score covariates were added.

Logistic regressions examining the effects of participation net of gender, ethnicity, maternal education, and academic ability**,** indicated that college graduation (by age 25) was significantly related to participation in sports (Wald $\chi^2 = 6.655$, $p < .05$), school involvement activities (Wald $\chi^2 = 5.059$, $p < .05$), and academic clubs (Wald $\chi^2 = 8.251$, $p < .01$). Rates for college completion were consistently higher for participants than for non-participants: for team sports, 39% vs. 30%; for school involvement, 47% vs. 32%; and for academic clubs, 56% vs. 31%.

Occupational outcomes. Sports participation was positively related to reporting having more job autonomy at age 24 (after controlling for gender, ethnicity, and maternal education). Similarly, sports predicted greater likelihood of having a job with a future, rather than a short-term job, at age 24 (Barber, et al., 2001). Having jobs with higher Socioeconomic Index (SEI) scores (after controlling for gender, ethnicity, maternal education, and academic ability) was predicted by 10th grade School Involvement activity participation 12 years later at Wave 9 ($F(1,335)=4.704$, $p < .05$; Ms = 62.55 for participants and 57.61 for non-participants). Having participated in a sport was also related at the trend level ($F(1,337)=3.656$, $p < .06$; Ms = 60.40 for sports participants and 56.74 for non-participants).

Civic engagement. After controlling for gender, maternal education, and ethnicity, 10th grade Prosocial Activity participation predicted to increased involvement in volunteer work ($F(1,645)=22.00$, $p < .001$; Ms = 1.7 for participants and 1.2 for non-participants) and civic organizations ($F(1,644)=4.14$, $p < .05$; Ms = 1.6 for participants and 1.4 for non-participants) at age 25-26. At age 29-30, 10th grade Prosocial Activity participation continued to predict increased involvement in volunteer work ($F(1,489)=3.58$, $p < .06$; Ms = 1.5 for Prosocial Activity participants and 1.3 for non-participants).

Psychological Adjustment. Repeated measures MANOVA's with a four-level time component (Waves 5, 6, 7, and 8) nested within person were run for psychological well being and are reported in detail elsewhere (Barber, et al., 2001). Two main effects emerged for activities: athletes reported lower isolation ($\underline{M}$ = 3.0) than non-athletes ($\underline{M}$ = 3.2); and participants in prosocial activities reported higher self-esteem ($\underline{M}$ = 5.0) than did non-participants ($\underline{M}$ = 4.8). Suicide attempts at Wave 8 were associated with participation in performing arts (χ^2 = 3.89, $\underline{p} < .05$): 11% for participants, 6% for non-participants. Performing arts participants were also significantly more likely to report having visited a psychologist (χ^2 = 15.16, $\underline{p} < .001$): 22% for participants versus 11% for non-participants.

Recommendations

We have found that our measure of activity participation at grade 10 is related to identity, peer group composition, and to achievement-related values. It is also an important predictor of alcohol use, GPA, educational and occupational attainment, civic engagement, and psychological adjustment. Based on our work with these items, we suggest it is best to have a checklist of sports and activities, because the detailed information on specific activities is differentially predictive of a broad set of outcomes. Collapsing into such activity types as prosocial, sports, and academic clubs illustrates one fruitful use of these types of questions. We have also tried other combinations of these items. The *total number of clubs and activities* predicted greater attachment to school, higher 11th grade GPA, increased likelihood of college attendance, lower rates of getting drunk in 12th grade, and less frequent use of marijuana in 12th grade (regressions controlling for verbal and math ability, maternal education and gender – Barber & Eccles, 1997). The last two regressions also controlled for the 10th grade level of the risk behavior, and thus indicated that participation in more activities predicted a smaller increase than average in

substance use from 10th to 12th grade. What is important to note is that being in more than one activity is related to better outcomes than being in only one (which is better than being in none), so that a simple question about activity involvement that did not tap the total number would miss such a connection. The *number of sports teams* also predicted increased likelihood of college attendance and 11th grade GPA. This is consistent with Marsh and Kleitman's (2003) evidence that increasing levels of athletic participation are associated with increasing benefits.

Another way to use these items is to construct an index of breadth, or eclectic participation. We 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). Greater breadth, or eclectic participation, was better than participation in only one domain, which in turn was better than none.

Finally, given the interesting relation we find between sports and drinking, we think it is especially important to keep sports separate from other activities. In fact, in some of our current work we are finding that among sports, there is also variability in links to academic outcomes and substance use, so it is advantageous to know which sport the adolescent plays. Our bottom line is that detailed information about participation is desirable, and in checklist format it does not take prohibitively long to collect.

References

Barber, B. L., & Eccles, J. S. (1997, April). *Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters*? Paper presented at the biennial meeting of the Society for Research on Child Development, Washington, DC.

Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). Whatever happened to the Jock, the Brain, and the Princes? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research, 16,* 429-455.

Barber, B. L., Stone, M. R., Hunt, J. & Eccles, J. S. (in press). Benefits of activity participation: The roles of identity affirmation and peer group norm sharing. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.) *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Erlbaum.

Csikszentmihalyi, M. (1991). "An investment theory of creativity and it's development": Commentary. *Human Development, 34*(1), 32-34.

Dishion, T.J., Poulin, F., & Burraston, B. (2001). Peer group dynamics associated with iatrogenic effects in group interventions with high-risk young adolescents. In Nangle, D.W., & Erdley, C.A. (Eds.) *The role of Friendship in Psychological Adjustment.* (pp. 79-92), San Francisco, CA: Jossey-Bass/Pfeiffer.

Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14, 10-43.

Eccles, J.S., & Gootman, J.A. (2001). *Community programs to promote youth development.* Washington, DC: National Academy Press.

Eccles, J.S. & Templeton, J. (In Press) Extracurricular and Other After-School Activities for Youth. *Review of Research in Education*.

Eder, D., & Parker, S. (1987). The cultural production and reproduction of gender: The effect of extracurricular activities on peer-group culture. *Sociology of Education, 60*(3), 200-213.

Fletcher, A.C. & Shaw, R.A. (2000). Sex differences in associations between parental behaviors and characteristics and adolescent social integration. *Social Development, 9*(2), 133-148.

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.

Hughes, J. (Director) (1985). *The Breakfast Club* [film]. Universal City, CA: Universal Studios.

Kinney, D.A. (1993). From nerds to normals: The recovery of identity among adolescents from middle school to high school. *Sociology of Education 66*(1), 21-40.

Kleiber, D. (1999). *Leisure experience and human development: A dialectical approach.* New York: Basic Books.

Larson, R.W. (2000). Toward a psychology of positive youth development. *American Psychologist, 55*, 170-183.

Mahoney, J.L. (2000). School extracurricular activity participation as a moderator in the development of antisocial patterns. *Child Development, 71(2),* 502-516.

Mahoney, J.L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology, 33*, 241-253.

Marsh, H. W. (1992). Extracurricular activities: Beneficial extension of the traditional curriculum or subversion of academic goals? *Journal of Educational Psychology*, *84*, 553-562.

Marsh, H. & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, and the non-linear. *Harvard Educational Review, 72(4),* 464-514.

Marsh, H. W., & Kleitman, S. (2003). School athletic participation: Mostly gain with little pain. *Journal of Sport and Exercise Psychology*, *25*, 205-228.

Otto, L. B. (1975). Extracurricular activities in the educational attainment process. *Rural Sociology, 40*, 162-176.

Otto, L. B. (1976). Extracurricular activities and aspirations in the status attainment process. *Rural Sociology, 41*, 217-233.

Otto, L.B., & Alwin, D.F. (1977). Athletics, aspirations, and attainments. *Sociology of Education, 50*(2), 102-113.

Perkins, D. F., Borden, L. M., & Villarruel, F. A. (2001). Community youth development: A partnership in action. *The School Community Journal*, *11*(2), 39-56.

Roth, J. & Brooks-Gunn, J., Murray, L, Foster, W. (1998). Promoting healthy adolescents: Synthesis of youth development program evaluations. *Journal of Research on Adolescence, 8*, (423-459).

Scales, P.C., Benson, P.L., Leffert, N., & Blyth, D.A. (2000) Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*, 27-46.

Youniss, J., McLellan, J.A., Su, Y., Yates, M. (1999). The role of community service in identity development: Normative, unconventional, and deviant orientations. *Journal of Adolescent Research 14*(2), 248-261.

Youniss, J. &Yates, M. (1997). *Community service and social responsibility in youth.* Chicago: University Press.

Youniss, J., Yates, M., & Su, Y., (1997). Social integration: Community Service and marijuana use in high school seniors. *Journal of Adolescent Research Special Issue: Adolescent Socialization in Context: Connection, Regulation, and Autonomy in Multiple Contexts, 12*(2), 245-262.

APPENDIX

Activity Types
Participation in individual activities was measured through checklists (see below, where we have indicated participation rates for females and males in parentheses after each activity). Then, participation in the five more general activity types was determined by ascertaining whether individuals participated in one or more of the activities associated with the type:
Performing Arts - participation in school band, drama, and/or dance (43% females, 21% males)
Team Sports - participation on one or more school teams, except cheerleading (46%, 67%)
Academic Clubs - participation in debate, foreign language, math, or chess clubs, science fair, or tutoring in academic subjects (16%, 11%)
School Involvement - participation in student government, pep club, and/ or cheerleading (23%, 8%)
Prosocial Activities - church attendance and/or volunteer and community service (27%, 16%)

SPORTS ACTIVITIES

Answer the following questions about the current School Year.

Do you (did you) compete in any of the following school teams (varsity, junior varsity, or other organized school program) outside of Physical Education? (Check all that apply)

___ Baseball (46%, 67%)
___ Basketball (11%, 25%)
___ Cheerleading (12%, 0%)
___ Field Hockey (1%, 2%)
___ Football (3%, 32%)
___ Gymnastics (5%, 1%)
___ Ice Hockey (1%, 9%)
___ Softball (17%, 3%)
___ Swimming/Diving (12%, 13%)
___ Tennis (9%, 8%)
___ Track/Cross Country (12%, 16%)
___ Volleyball (17%, 5%)
___ Wrestling (1%, 16%)
___ Other (Please Specify) _____

ORGANIZATIONS/CLUBS

Which of the following activities or clubs at school do you (did you) do in this school year? (Check all that apply)

___ Art (9%, 8%)
___ Band or Orchestra (19%, 14%)
___ Career related club (3%, 2%)
___ Cheerleading (12%, 0%)
___ Chess club (0%, 1%)
___ Computer club (1%, 2%)
___ Dance (14%, 5%)
___ Debate club/Forensics (1%, 1%)
___ Drama (13%, 6%)
___ Foreign language club (13%, 5%)
___ Gaming clubs (D&D) (0%, 3%)
___ Math Club (0%, 1%)
___ Peer counseling (4%, 1%)
___ Pep club/Boosters (12%, 3%)
___ ROTC (0%, 3%)
___ S.A.D.D. (10%, 3%)
___ Science fair (11%, 5%)
___ Service clubs (3%, 2%)
___ Sports clubs (13%, 26%)
___ Student government (11%, 5%)
___ Tutoring in math, science, or computers (2%, 2%)
___ Tutoring in other academic subjects (1%, 1%)
___ Other (Please Specify) _____

Do you (Did you) participate in any of the following clubs or activities outside of school? (Check all that apply)

___ Athletic/recreational club (16%, 28%)
___ Scouts/Girls,Boys Clubs/Ys (2%, 5%)
___ Junior Achievement (1%, 2%)
___ Church groups (18%, 11%)
___ Pop or Rock band (6%, 9%)
___ 4-H (4%, 2%)
___ Political campaign (0%, 1%)
___ Volunteer/service work (14%, 5%)

Other (Please Specify) _____

TIME USE

Think about the kinds of things you usually do after school and on weekends. About how many hours do you usually spend each week (check one line for each question)

___ none
___ 1 hour or less
___ 2-3 hours
___ 4-6 hours
___ 7-10 hours
___ 11-15 hours
___ 16-20 hours
___ 21 or more hours

___ taking part in an organized sport?
N = 1,340 Mean = 2.77 STD = 2.14 Skew = .99 (total N = 2,427)

___ doing other athletic or sports activities?
N = 1,208 Mean = 2.81 STD = 1.82 Skew = 1.00

___ playing pickup sports games like basketball, touch football, etc.?
N = 133 Mean = 2.25 STD = 1.36 Skew = 1.40

___ providing volunteer or community service?
N = 1,334 Mean = 1.41 STD = .88 Skew = 2.85

___ doing religious activities?
N = 1,334 Mean = 1.67 STD = 1.04 Skew = 2.06

___ participating in any school clubs or organizations?
N = 1,274 Mean = 1.96 STD = 1.35 Skew = 1.63