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# Patterns of Organized Activity Participation in Urban, Early Adolescents

## Associations With Academic Achievement, Problem Behaviors, and Perceived Adult Support

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This study examines patterns of organized activity and their concurrent association with academic achievement, problem behavior, and perceived adult support in a sample of urban, early adolescent, middle school students (mean age = 13.01;  $N = 2,495$ ). Cluster analyses yielded six activity profiles: an uninvolved group ( $n = 775$ , 31.1%), a multiply involved group ( $n = 247$ , 9.9%), a sports group ( $n = 469$ , 18.8%), a church group ( $n = 486$ , 19.5%), a school and community clubs group ( $n = 278$ , 11.1%), and a community clubs and sports group ( $n = 240$ , 9.6%). These profiles are differentially associated with academic achievement, problem behavior, and adult support. While some form of organized activity is generally associated with more positive outcomes, the school and community and community and sports profiles also report the highest levels of delinquency, drug use, and school suspensions. Results support the utility of using person-centered approaches to studying youth-organized activities.

**Keywords:** *prosocial behavior; person-centered; organized activities; extracurricular activities; urban youth; adult support*

Many adolescents in the United States today are engaged in organized activities outside the classroom, and larger numbers of youth are volunteering in their towns and communities than ever before (Barber, Stone, & Eccles, 2005; Sagawa, 1998). Such participation occurs in a number of contexts and is coordinated by school extracurricular activities and clubs (Feldman & Matjasko, 2005), by community organizations (Flanagan,

2004; Flanagan, Gill, & Gallay, 2005), and through churches and other religious groups (Youniss, McLellan, & Yates, 1999). Research in adolescent activity involvement has been of interest to both developmental and applied researchers because of the consistent links between such activity participation and positive youth outcomes, including decreased delinquency, increased self-esteem, and increased academic achievement (Mahoney, Harris, & Eccles, 2006; Mahoney, Larson, & Eccles, 2005).

Because a variety of activities in which youth may participate exists, researchers have begun to focus on the unique benefits of different categories of adolescent-organized activities. For instance, church attendance and volunteer activities have been linked to reductions in risk-taking behaviors and identity development and social capital, whereas adolescents involved in sports have not only been found to demonstrate more initiative and be more likely to attend college but also been found to engage in more risk-taking behaviors and to experience more stress (Eccles, Barber, Stone, & Hunt, 2003; Larson, Hansen, & Moneta, 2006; Marsh & Kleitman, 2003). Thus, some forms of activity involvement have been associated with both positive and negative developmental outcomes. In some instances, adolescent gender has been found to moderate the positive youth benefits of some activities. For instance, while performing-arts involvement was related to both reductions in risk-taking behaviors and increases in academic achievement for both boys and girls, the effects were stronger for boys than for girls (Eccles et al., 2003). In addition, several mechanisms have been theorized to mediate the relationship between youth activities and positive benefits including nonfamilial adult support, positive and risky peer associations, and identity development (Eccles et al., 2003; Roth & Brooks-Gunn, 2003).

To better account for the wide array of activities in which adolescents might be involved, some research has begun to use a person-centered approach, involving cluster analytic techniques to form profiles of adolescent involvement. For instance, Bartko and Eccles (2003) used cluster analyses to examine both the structured and unstructured activities of 12th-grade adolescents. Six activity profiles were identified, which were differentially associated with students' grade point averages (GPA) and psychosocial indicators such as problem behaviors, self-esteem, and depression. Morris and Kalil (2006) engaged in a similar strategy using a more limited number of activities in a sample of low-income children in middle-childhood and found 5 activity profiles, which differed in problem behaviors and academic achievement. Pedersen (2005) examined out-of-school activity profile trajectories of urban adolescents' in three contexts: school, religion, and team sports. The different trajectory profiles

were found to be associated with school-transition timing and parental employment status.

Whereas lower socioeconomic status (SES) youth participate less in extracurricular activities than do higher SES students (Hart, Atkins, & Ford, 1998; Luthar & Latendresse, 2005; O'Brien & Rollefson, 1995), recent intervention and policy initiatives have attempted to increase such resources for inner-city youth (Warren, Feist, & Nevarez, 2002). Despite these efforts, recent studies have found that children and youth from lower social class backgrounds are still less involved in organized activities than are children and youth from more higher income families, and Latino and African American youth participate less than White youth (Wimer et al., 2006). Moreover, urban children, particularly those from low-income families, are at increased risk for delinquency, illicit substance use and abuse, and lower educational and occupational aspirations when compared to their higher socioeconomic status peers (see Black & Krishnakumar, 1998 for a review), though illicit substance use has also been found to be problematic among very wealthy youth (Luthar & Latendresse, 2005). Whether participation in extracurricular activities is associated with less adverse outcomes for high-risk youth is addressed in the current study.

The present study has two goals. The first was to examine patterns of organized activity participation in a large sample of urban early adolescents and examine whether demographic differences are evident in such patterns. The second goal was to examine associations between patterns of early adolescent organized activity participation and three areas of adolescent psychosocial development and functioning: academic achievement, problem behaviors (e.g., delinquency, illicit substance use, negative affect), and adult support. A limitation of previous research on adolescent organized activity participation is the lack of attention devoted to urban, low-income adolescents; thus, less is known about the possible developmental benefits of these adolescents. This study aims to provide a broader picture of the out-of-school life of early adolescents being raised in the inner-city.

## Methods

### Participants

Four urban middle schools located in an upstate New York urban area participated in the present study as part of a local school district needs assessment. In these schools, between 75% and 90% of the students were enrolled in the federal government's free or reduced lunch program.

Participants were 2,495 middle school students: 847 were sixth graders (34%), 943 were seventh graders (38%), and 705 were eighth graders (28%). Of these students, 215 (9%) were classified as special education students. The sample included 1,214 boys (49%) and 1,281 girls (51%); 1,518 (61%) of the participants were African American, 371 (15%) were Hispanic, 216 (9%) were White, 80 (3%) were Asian, and 243 participants (10%) reported being of other ethnicity. In addition, 67 students (3%) chose more than one ethnic category.

Students reported living with an average of 1.8 adults caring for them ( $SD = .69$ ; range = 0-6). The most common family configuration was both father and mother at home (640, 26%) with 531 participants (21%) coming from single-mother homes. Additional configurations included stepfather and mother (368, 15%) and "other male" and mother (122, 5%). Other family configurations comprised the remaining 33% (e.g., grandmother and grandfather [86, 3%], just grandmother [81, 3%], just father [38, 1%], no male or female adult present [32, 1%], and other male and other female [29, 1%]).

Parental permission was obtained using letters written in both English and Spanish and sent home two weeks prior to administering the study survey. Passive parental consent was used; if parents did not want their child to participate in the survey, they were to sign and return the consent form (parents of 34 students from the four participating schools opted not to allow their child to participate). Each student was also asked to sign a student assent form indicating their willingness to participate. Survey administration was conducted at each school on a different day. The study survey was designed to be completed in one 50-minute class period and was administered by trained research assistants. To insure participant anonymity, no names were attached to the survey. Instead, each student was handed an identified manila folder that included the survey which was identified using a unique identification number (not the school district student number). All surveys were administered within a 6-week period during the spring of the academic year (April-May). In collaboration with the study team, staff from the school district's Research and Evaluation Department maintained the database linking the students' names and identification numbers, which then allowed the information to be linked with school records and other study information.

## Measures

Youth behavioral and academic measures were collected from both youth self-report and school records. Schools reported students' grade point

average, attendance, and the suspension histories for the year. In addition, students completed the Children Institute's Assessment of Adolescent Behaviors and Attitudes Towards School and Community, a self-report instrument which uses scales from a number of empirically validated instruments (see Crean & Hildreth, 2001 for a more complete description of the measure). The delinquent behaviors, use of illicit substances, negative affect, parental support, teacher support, other adult support, and participation in organized activities subscales were used in the current study.

*Participation in organized activities.* Students were asked to indicate how many hours (during an average week) they spent in the following six activities: playing on or helping with sports teams at school or in the community; in clubs or organizations (other than sports) at school; in clubs or organization outside school; going to programs, groups, or services at a church, synagogue, mosque, or other religious or spiritual place; helping other people without getting paid to make your city a better place to live; and practicing or taking lessons in music, art, drama, or dance, after school or on weekends. Students rated each item on a 5-point scale: 1 = 0 hours, 2 = 1 or 2 hours, 3 = 3-5 hours, 4 = 6-9 hours, 5 = 10 or more hours. The participation in organized activities and adult support scales were each adapted from the Search Institute's Profiles of Student Life: Attitudes and Behaviors surveys (Leffert et al., 1998) and used with permission from the Search Institute.

*Participation in delinquent behaviors.* Adapted from the Youth Risk Behavior Survey (Brener, Collins, Kahn, Warren, & Williams, 1995), five items assessed participation in delinquent behaviors ( $\alpha = .67$ ). All five items required participants to rate their delinquent behavior "during the past 30 days." Two items asked adolescents to report on the number of days they had carried a weapon such as a gun, knife, blade, or club, and the number of days they had been in a physical fight (1 = 0 days, 2 = 1 day, 3 = 2 or 3 days, 4 = 4 or 5 days, 5 = 6 or more days). Participants were also asked to report the number of times they had stolen something from a store, gotten into trouble with the police, and damaged property just for fun. Participants rated their activity in each of these behaviors on a 5-point Likert-type scale (1 = 0 times, 2 = 1 time, 3 = 2 times, 4 = 3 or 4 times, 5 = 5 or more times). Scale scores were formed by summing the five items: higher scores indicate more participation in delinquent activities.

*Illicit substance use.* Seven items assessed participants' involvement in illicit drug and alcohol consumption ( $\alpha = .74$ ). Participants were asked how

many times they had used each illicit substance “during the past 30 days,” on a 5-point scale (1 = 0 times, 2 = 1 or 2 times, 3 = 3 to 9 times, 4 = 10 to 19 times, 5 = 20 or more times). The seven items assess frequency of smoking cigarettes, having at least one drink of alcohol, having five or more drinks of alcohol in a row, using marijuana, using cocaine, using inhalants, and using other types of illegal drugs (e.g., LSD, ecstasy). Again, scale scores were formed by summing items, and higher scores indicate more illicit substance use.

*Negative affect.* A six-item subscale assessed participants’ negative feelings about themselves (e.g., “At times, I think I am no good at all,”  $\alpha = .77$ ). Level of agreement with each item was assessed using a 4-point scale (1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree). Each item was reverse keyed and summed to form a negative affect score with higher scores indicating greater negative affect.

*Adult support.* Three subscales measured participants’ feelings of support from adults in three different contexts: parents ( $\alpha = .68$ ), teachers ( $\alpha = .74$ ), and adults in the community ( $\alpha = .74$ ). All three subscales asked participants to provide their level of agreement with statements on a 4-point scale (1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree). The parental support subscale consisted of three items (e.g., “My parents give me help and support when I need it”). The teacher support subscale also consisted of three items (e.g., “I get a lot of encouragement from adults at this school”). Finally, the adults in the neighborhood support subscale consisted of 4 items (e.g., “Adults in my neighborhood make me feel important,” “Adults in my neighborhood don’t care about people my age” [reverse scored]). Each scale score was formed by summing the respective items; higher scores indicate greater levels of perceived adult support.

*Academic variables—grade point average, attendance, and suspensions.* Individual students’ grade point averages (GPA) were provided by the participating school district for the year in which data collection occurred. Students’ letter grades were converted to a numeric average having a possible range from 0 to 4.5 (A+ = 4.5; A = 4.0; B+ = 3.5; B = 3.0; C+ = 2.5; C = 2.0; D+ = 1.5; D = 1.0; F = 0.0). The school district provided students’ GPA for the Fall and Spring marking periods, allowing for both students’ year-long average GPA and change in GPA across the school year to be examined. In addition, the district provided information on students’ absences across the school year. The participating school district also provided information on the number of students’ short- and long-term suspensions during

the academic year. However, only short-term suspensions are examined in the present study, due to the limited frequency of long-term suspensions.

## Results and Discussion

*Cluster Analyses.* Standardized scores of the six organized activity items were submitted to cluster analysis to help isolate distinct profiles of organized activity involvement. These analyses were conducted in two steps. First, the six activity items were submitted to Ward's hierarchical agglomerative cluster analysis. This technique provides numerous stopping rules and is recommended for determining the number of clusters present in a data set (Henry, Tolan, & Gorman-Smith, 2005; Lorr, 1994). A six-cluster solution was found to provide the best description of the data based on visual inspection of the resulting dendrogram and the obtained pseudo- $F$  scores. In addition, this solution yielded clusters that seemed intuitively meaningful, had adequate sample sizes for further analyses, and were similar in both number and type to profiles that have been isolated in previous research on adolescent organized activity (Bartko & Eccles, 2003).

In the second step, a nonhierarchical,  $K$ -means analysis was used, starting with the number of clusters recommended by the hierarchical analysis. While nonhierarchical techniques do not provide stopping mechanisms for determining the number of clusters present in a data set, such procedures do allow cases to be reassigned after their initial classification. Thus, this second step takes advantage of the strengths of both hierarchical and nonhierarchical techniques, is consistent with conventional quantitative procedures, and also provides a test of the stability of the cluster solution. The six-cluster solution was found to be substantially stable across the hierarchical and nonhierarchical cluster analyses.

Additional analytic steps were taken to validate the six-cluster solution. First, as recommended by Henry and his colleagues (2005), the data set was randomly split in half and nonhierarchical  $K$ -means cluster analyses were run on each half separately. In addition, a series of additional cluster analyses were run with nonorganized activity variables (e.g., working for pay, reading for fun, helping family and friends) were added to examine if participants would still cluster on our organized activity variables of interest. Finally, the cluster analyses were run using the nonstandardized scores. All three of these analytic checks validated the original six-cluster solution.

Table 1 displays the item means and standard deviations for the six activity profiles solution. With few exceptions, the profiles were significantly

**Table 1**  
**Means, Standard Deviations, and Organized Activity Significance Tests**  
**for the Six Adolescent Activity Profiles**

Activity Items	Total Sample	Uninvolved Group	Community and Sports	School and Community	Sports	Church	Multiply	Significance Test
Involvement in school clubs/groups	0.65 (0.98)	0.16 <sup>abcde</sup> (0.39)	0.60 <sup>efghi</sup> (0.81)	1.86 <sup>bfjk</sup> (0.92)	0.38 <sup>dhkm</sup> (0.73)	0.38 <sup>dhkm</sup> (0.73)	1.94 <sup>elmn</sup> (1.25)	$F(5, 2494) = 1057.73^{**}$
Involvement in community clubs/groups	0.77 (1.07)	0.25 <sup>abc</sup> (0.56)	2.51 <sup>adeh</sup> (0.81)	1.51 <sup>bfijk</sup> (0.92)	0.23 <sup>eli</sup> (0.42)	0.34 <sup>fm</sup> (0.60)	1.71 <sup>cklmn</sup> (1.23)	$F(5, 2494) = 407.19^{**}$
Sports Involvement	1.41 (1.31)	0.29 <sup>abcde</sup> (0.45)	2.57 <sup>efghi</sup> (1.00)	0.98 <sup>bfjkl</sup> (0.71)	2.76 <sup>gijmn</sup> (0.82)	0.81 <sup>dhkm</sup> (0.78)	2.88 <sup>cln</sup> (0.97)	$F(5, 2494) = 582.56^{**}$
Arts and music involvement	0.70 (1.01)	0.28 <sup>abcd</sup> (0.64)	0.83 <sup>def</sup> (1.05)	0.87 <sup>gh</sup> (0.88)	0.33 <sup>efj</sup> (0.64)	0.84 <sup>ck</sup> (0.98)	2.15 <sup>dbjkl</sup> (1.22)	$F(5, 2494) = 372.42^{**}$
Church and religious involvement	1.04 (1.08)	0.32 <sup>abcde</sup> (0.55)	1.02 <sup>efgh</sup> (0.93)	1.02 <sup>bfjk</sup> (0.88)	0.63 <sup>eflm</sup> (0.78)	2.09 <sup>gij</sup> (0.92)	2.02 <sup>cklmn</sup> (1.13)	$F(5, 2494) = 209.86^{**}$
Volunteering in the community	0.86 (1.06)	0.32 <sup>abcde</sup> (0.59)	0.72 <sup>efghi</sup> (0.87)	1.03 <sup>bfjkl</sup> (0.91)	0.52 <sup>clm</sup> (0.75)	1.39 <sup>dfghm</sup> (1.18)	2.12 <sup>cklmn</sup> (1.19)	$F(2494) = 201.57^{**}$

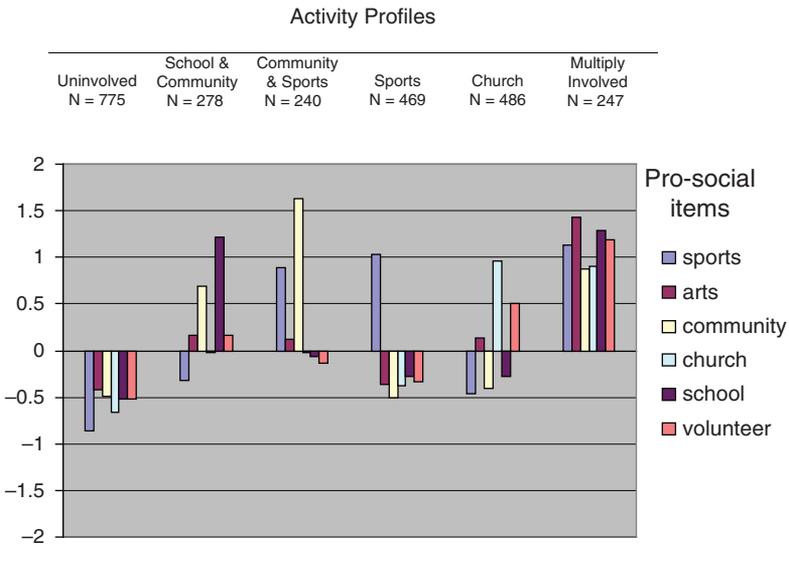
Note: Means with similar superscripts are significantly different at the .05 level. 0 = 0 hours per week; 1 = 1-2 hours per week; 2 = 3-5 hours per week; 3 = 6-9 hours per week; 4 = 10 or more hours per week.  
 $^{**}p < .001$ .

different from one another on each of the organized items. One group of participants ( $N = 775$ , 31.1%) were relatively uninvolved, reporting low levels of involvement across all six activity types. A second group of participants ( $N = 247$ , 9.9%) reported the opposite pattern, being relatively highly involved in all six activities and the highest level of involvement in arts and music activities and volunteering. We term this group the multiply involved one. In addition, two groups reported high levels of involvement in primarily one type of activity. One group reported high levels of sports involvement ( $N = 469$ , 18.8%), and another group reported high levels of church involvement ( $N = 486$ , 19.5%). Finally, two profiles reported not only high levels of involvement in one type of activity but also moderate levels of involvement in a second type of activity. For instance, community and sports profile reported the highest amount of involvement in community groups ( $N = 240$ , 9.6%) but also reported significantly higher sports involvement than three of the other profiles. Another group, the school and community profile ( $N = 278$ , 11.1%), not only reported high levels of involvement in school clubs and activities but also reported the third highest community group involvement relative to the other clusters. The standardized activity scores for the different profiles are illustrated in Figure 1. In the following analyses, the profiles will be referred to as uninvolved, school and community, community and sports, sports, church, and multiply involved.

The composition of these activity clusters was similar in multiple ways to the profiles found in previous research with both older (Bartko & Eccles, 2003) and younger students (Morris & Kalil, 2006). For instance, the uninvolved, multiply involved, and sports profiles were found in both previous studies and the current study. Also similar to the present study, Morris and Kalil (2006) found a profile high in both sports and community group involvement, and Bartko and Eccles (2003) found a primarily school activities cluster. Despite using different age groups, samples, and activity measures, the cluster solutions were found to be quite similar across studies. Overall, these similarities could point to a certain amount of stability in the formation of youth activity participation across contexts and ages, and future research should examine stability and change in patterns of youth activity from early to late adolescence.

It is important to note that the current sample was recruited from urban middle schools in which a large proportion of students received federally subsidized lunches. Previous research has demonstrated that poorer, urban communities often lack the social capital (i.e., few financial resources, less adult role models, fewer community agencies, etc.) necessary to provide adolescents with opportunities for such structured activities (Hart, Atkins,

**Figure 1**  
**Standardized Organized Activity Means for the Six Activity Profiles**



& Ford, 1998; O'Brien & Rollefson, 1995). Though a large percentage of adolescents in this study were categorized as being uninvolved, many more of the students reported participating in some form of organized activity(ies) in early adolescence.

*Cluster demographic differences.* The activity profiles were found to significantly differ in their gender distributions ( $\chi^2 = 102.03, p < .001$ ); the church group and the uninvolved group were comprised of significantly more girls, whereas significantly more boys participated in the sports, school and community, and community and sports groups. No gender differences were noted in the multiply involved group. Significant differences between activity profiles emerged for ethnicity ( $\chi^2 = 100.43, p < .001$ ). Fewer African American participants were in the uninvolved profile, and more African American adolescents were in the church and school and community groups. More White participants were in the sports and uninvolved group, whereas fewer Whites were in the multiply involved and

church groups. More Hispanic adolescents were in the uninvolved group, and fewer were in the sports and school and community groups. Finally, the profiles were also found to significantly differ by student grade ( $\chi^2 = 25.07$ ,  $p < .01$ ). Compared to 6th and 7th grade students, more 8th graders were in the sports profile, and less 8th graders were in the church profile. The clusters did not differ significantly by reported family or household configurations.

These demographic differences are both similar to and depart from previous findings on youth involvement. For instance, previous research has found that relative to girls, boys tend to be more involved in sports (Berk, 1992). However, research investigating ethnic differences in participation has been more mixed. Earlier research found African American adolescents to be slightly more involved than Whites (Berk, 1992), but more recent research has found African Americans to be less involved than White adolescents (Wimer et al., 2006). At the urban schools and in the urban neighborhoods used in the present study, African American students were the majority ethnic group, which could indicate that level of involvement may depend more on the relative minority status of adolescents' ethnic group within a given school. Consistent with previous research, however, Hispanic adolescents were less involved than their White or African American peers (Wimer et al., 2006). These demographic differences are especially important for urban school and community youth practitioners, who should be sure to provide multiple opportunities for involvement to both girls and students from underrepresented ethnic groups.

*Cluster psychosocial indicators differences.* To examine whether different patterns of activity were associated with adolescents' academic success (GPA, change in GPA, attendance, and suspensions), level of problem behaviors (delinquency, illicit substance use, negative affect), and feelings of adult support (parental, teacher, and other adult support), a series of activity profile (6) analyses of covariance were run, statistically controlling for the gender,<sup>1</sup> age, and ethnicity of the student. Table 2 presents the results. Significant differences between activity profiles were found for each of the outcome measures except attendance. For many of the outcomes, some form of participation was associated with more positive outcomes than was membership in the uninvolved group. For instance, after controlling for gender, age, and reported ethnicity, the uninvolved group had the lowest grade point average, more negative affect, and lower levels of support from adults.

However, not all participation was associated with positive outcomes. In the current sample, the community and sports and school and community

**Table 2**  
**ANCOVA Results for the Academic Achievement, Problem behaviors,**  
**and Adult Support for the Six Activity Profiles**

	Adolescent Organized Activity Profiles						Significance Test	
	Total	Uninvolved	Community and Sports	School and Community	Sports	Church		Multiply Involved
GPA	2.43	2.35 <sup>ab</sup>	2.41	2.37	2.54 <sup>a</sup>	2.51 <sup>b</sup>	2.46	$F(5, 2166) = 4.33^{***}$
Change in GPA	-0.115	-0.170 <sup>a</sup>	-0.118	-0.108	-0.075	-0.139	0.010 <sup>a</sup>	$F(5, 2159) = 2.17^*$
Suspension	0.64	0.592 <sup>a</sup>	0.827	0.870 <sup>abc</sup>	0.623	0.540 <sup>b</sup>	0.536 <sup>c</sup>	$F(5, 2289) = 4.00^{***}$
Delinquency	0.42	0.389 <sup>a</sup>	0.560 <sup>abc</sup>	0.473	0.413 <sup>b</sup>	0.363 <sup>c</sup>	0.440	$F(5, 2483) = 3.99^{***}$
Drug use	0.131	0.114 <sup>ab</sup>	0.191 <sup>ac</sup>	0.209 <sup>bcd</sup>	0.117 <sup>d</sup>	0.100 <sup>ce</sup>	0.130	$F(5, 2489) = 5.37^{***}$
Negative affect	2.08	2.20 <sup>ab</sup>	2.07 <sup>c</sup>	2.14 <sup>de</sup>	1.93 <sup>adf</sup>	2.10 <sup>fg</sup>	1.89 <sup>bceg</sup>	$F(5, 2469) = 12.87^{***}$
Parent support	3.38	3.29 <sup>abc</sup>	3.46 <sup>a</sup>	3.37	3.41 <sup>b</sup>	3.40	3.46 <sup>c</sup>	$F(5, 2487) = 4.46^{***}$
Teacher support	3.03	2.92 <sup>abc</sup>	3.06	3.11 <sup>a</sup>	3.03	3.11 <sup>b</sup>	3.15 <sup>c</sup>	$F(5, 2474) = 7.47^{***}$
Other adult support	2.39	2.27 <sup>abcde</sup>	2.44 <sup>a</sup>	2.50 <sup>b</sup>	2.39 <sup>ef</sup>	2.42 <sup>fg</sup>	2.57 <sup>efg</sup>	$F(5, 2478) = 13.87^{***}$

Note: Means are marginal means after controlling for adolescent gender, age, and ethnicity. Means with similar superscripts are significantly different at the .05 level.

\* $p < .01$ . \*\* $p < .001$ .

profiles were associated with more problem behaviors including school suspensions, delinquency, and drug use, though these two groups did report less negative affect and more adult support than did the uninvolved group. A limitation of the present study was that adolescents' motivations for engaging in different activities were not measured (it is conceivable that adolescents are referred to school or after school programs/clubs for preexisting academic difficulties issues or other problem behaviors). In addition, the type and quality of the community programs were not measured in this study. Previous research has found that unstructured youth centers, which lacked skill-building activities, served to augment antisocial behavior by aggregating multiple high-risk, antisocial peers in one place (Mahoney, Stattin, & Lord, 2004).

This study adds to the utility of a person-centered approach for studying youth activity involvement. Such a person-centered approach is useful for elucidating the sometimes complex relationships between adolescent involvement and indices of youth thriving. For instance, the multiply involved group, the community and sports group, and the sports group all reported similar levels of sports involvement, but these profiles were differentially associated with various outcome variables such as delinquency—the community group reported more delinquency than did the sports or multiply involved group. In addition, although the church and multiply involved groups were similar in their church involvement, the church group was significantly less delinquent than was the multiply involved group, but church adolescents reported more negative affect and had a significant decrease in GPA across the school year when compared to the multiply involved adolescents.

Thus, positive adolescent outcomes were not associated with individual activities or the sum total of adolescent involvement regardless of activity, but rather both positive and negative outcomes were associated with unique patterns of involvement. Such complexity may be missed in research which only examines linear relationships between adolescent outcomes and adolescents' total organized activity involvement. In addition, although recent discussions in youth activity research has focused on distinguishing between "breadth" and "intensity" of involvement (Roth, Linver, Gardner, Brooks-Gunn, 2007), using cluster analyses on continuous activity involvement measures, which account for the amount of time an adolescent spends in an activity (rather than checklists), provides a way of parsimoniously measuring both involvement metrics.

This study noted that even early in adolescence, outcomes such as support from various adults and reduced negative affect were differentially

associated with patterns of organized activity involvement. Research which solely examines academic achievement or problem behavior may overlook these additional benefits of adolescent activity. Such an exclusive focus on academic and problem outcomes may be especially prevalent in research that includes poorer, urban adolescents. Future research should continue to consider the multiple and wide-ranging developmental implications of adolescents' engagement in organized activities.

*Limitations and future directions.* There were a number of limitations to this study, some of which have already been discussed. One important limitation of the study concerns the use of cross-sectional data. Such designs seldom allow for strong causal conclusions to be drawn. Thus, it is difficult to judge the direction of effects. For instance, organized activity involvement could enhance adolescents' feelings of adult support, or it could be that such support is what leads to and facilitates such youth activity participation. A further limitation concerns the reliance on self-report measures, the implication being that common method variance (i.e., self-report) across measures could have contributed to the findings. The current study used a wide array of activity items, but the activity categories were still fairly broad, and future research should further disaggregate different types of organizations and activities in which adolescents are involved—more thoroughly assessing the specific arts, music, or sports activity in which youth are involved or the specific school or community groups which they frequent. Whereas the current study demonstrates that unique patterns of youth activity are evident in early adolescence and that such participation is associated with youth development more generally, future research should assess patterns of youth involvement longitudinally into middle and late adolescence.

Despite these limitations, there are several implications of this data for youth practitioners. A large percentage of urban early adolescents in the present study were uninvolved, larger than in studies which used wealthier samples. Schools, community service providers, and policy makers should renew efforts to increase the opportunities for underprivileged youth to take part in organized activities. However, such efforts should account for the fact that youth are often referred to after-school and community programs for preexisting academic or behavioral issues. Coupled with previous research findings (Mahoney, Stattin, & Lord, 2004), care should be taken in designing activity programs for urban youth at schools or through community centers, so that organized activities do not merely become a means for facilitating the socialization of delinquent peer groups. In addition, youth practitioners should be aware that the benefits of youth involvement might

vary for different adolescents and such positive (or possibly, negative) outcomes may be a product of the wider pattern of activities in which adolescents are involved.

## Note

1. It is important to note that previous research has found that gender may moderate the positive benefits of youth activity (Eccles, Barber, Stone, & Hunt, 2003). However, in the present study sample, there were very large gender differences on all outcome variables. In addition, boys and girls were not distributed equally among the activity profiles. Because the present study's primary goal was to examine the influence of early adolescent activity involvement and because gender, activity profile, and the outcomes of interest were confounded, we chose to control for gender to investigate whether profiles of adolescent activity involvement would differentially predict adolescent outcomes over and above the significant gender differences. This strategy is consistent with other researchers who have examined the differential positive impacts of profiles of adolescent activity involvement (Bartko & Eccles, 2003).

However, we did run exploratory analyses, which examined whether adolescent gender moderated the impact of adolescents' activity profile membership. Gender significantly interacted with activity profile membership in predicting only one outcome. Adolescent girls who were in the uninvolved, community and sports, and school and community profiles reported higher levels of negative affect than boys who were in these activity profiles. Boys and girls in the other three profiles did not differ in their reported negative affect. However, the same general pattern (uninvolved adolescents reporting more negative affect than all other groups) was the same for both boys and girls.

## References

- Barber, B. L., Stone, M., & Eccles, J. S. (2005). Adolescent participation in organized activities. In K. Moore & L. Lippman (Eds.), *What do children need to flourish: Conceptualization and measuring indicators of positive development*. (pp. 133-146). New York: Springer Science and Business Media.
- Bartko, W. T., & Eccles, J. (2003). Adolescent participation in structured and unstructured activities: A person-oriented analysis. *Journal of Youth and Adolescence*, 32, 233-241.
- Berk, L. (1992). The extracurriculum. In P. Jackson (Ed.), *Handbook of research on curriculum* (pp. 1002-1044). New York: Macmillan.
- Black, M., & Krishnakumar, A. (1998). Children in low-income, urban settings. *American Psychologist*, 53, 635-646.
- Brener, N. D., Collins, J. L., Kahn, L., Warren, C. W., & Williams, B. I. (1995). Reliability of the Youth Risk Behavior Questionnaire. *American Journal of Epidemiology*, 141, 575-580.
- Crean, H. F., & Hildreth, M. R. (2001). *The Children's Institute Middle School Student Questionnaire: 2001 item frequencies, between school analyses, and changes from 1999 to 2001* (Report submitted to the United Way of Greater Rochester and the Rochester City School District). Rochester, NY: University of Rochester.
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59, 865-889.

- Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research, 75*, 159-210.
- Flanagan, C. (2004). Institutional support for morality: Community-based and neighborhood organizations. In T. Thorkildsen & H. Walberg (Eds.), *Nurturing morality* (pp. 173-183). New York: Kluwer Academic/Plenum.
- Flanagan, C., Gill, S., & Galloway, L. (2005). Social participation and social trust in adolescence: The importance of heterogeneous encounters. In A. M. Omoto (Ed.), *Processes of community change and social action* (pp. 149-166). Mahwah, NJ: Erlbaum.
- Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a context for the development of moral identity in adolescence. *Journal of Social Issues, 34*, 513-530.
- Henry, D. B., Tolan, P. H., & Gorman-Smith, D. (2005). Cluster analysis in family psychology research. *Journal of Family Psychology, 19*, 121-132.
- Larson, R., Hansen, D., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology, 42*, 849-863.
- Leffert, N., Benson, P. L., Scales, P. C., Sharma, A. R., Drake, D. R., & Blyth, D. A. (1998). Developmental assets: Measurement and prediction of risk behaviors among adolescents. *Applied Developmental Science, 2*, 209-230.
- Lorr, M. (1994). Cluster analysis: Aims, methods, and problems. In S. Stack & M. Lorr (Eds.), *Differentiating normal and abnormal personality* (pp. 179-195). New York: Springer.
- Luthar, S. S., & Latendresse, S. J. (2005). Children of the affluent: Challenges to well-being. *Current Directions in Psychological Science, 14*, 49-53.
- Mahoney, J. L., Harris, A. L., & Eccles, J. S. (2006). Organized activity participation, positive youth development, and the over-scheduling hypothesis. *Social Policy Report, 20*, 1-30.
- Mahoney, J., Larson, R. W., & Eccles, J. S. (Eds.). (2005). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Lawrence Erlbaum.
- Mahoney, J., Stattin, H., & Lord, H. (2004). Unstructured youth recreation centre participation and antisocial behavior development: Selection influences and the moderating role of antisocial peers. *International Journal of Behavioral Development, 28*, 553-560.
- Marsh, H. W., & Kleitman, S. (2003). School athletic participation: Mostly gain with little gain. *Journal of Sports & Exercise Psychology, 25*, 205-228.
- Morris, P., & Kalil, A. (2006). Out of school time use during middle childhood in a low-income sample: Do combinations of activities affect achievement and behavior? In A. Huston & M. Ripke (Eds.), *Developmental contexts in middle childhood: Bridges to adolescence and adulthood* (pp. 237-259). New York: Cambridge University Press.
- O'Brien, E., & Rollefson, M. (1995). *Extracurricular participation and student engagement*. Washington, DC: U.S. Department of Education.
- Pedersen, S. (2005). Urban adolescents' out-of-school activity profiles: Associations with youth, family, and school transition characteristics. *Applied Developmental Science, 9*, 107-124.
- Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science, 7*, 94-111.
- Roth, J. L., Linver, M. R., Gardner, M. M., & Brooks-Gunn, J. (April, 2007). Intensity of participation in organized activities and adolescent development: The role of peer and school processes. In L. Feinstein (Chair), *Do peer and school processes mediate the relation between adolescents' participation in organized activities and development?* Symposium conducted at the meeting for the Society of Research on Child Development, Boston, MA.

- Sagawa, S. (1998). Ten years of youth in service in America. In S. Halperin (Ed.), *The forgotten half revisited: American youth and young families, 1988-2008*. Washington, DC: American Youth Policy Forum.
- Warren, C., Feist, M., & Nevarez, N. (2002). *A place to grow: Evaluation of the New York City Beacons* (Final Report). New York: Academy for Educational Development.
- Wimer, C., Bouffard, S. M., Caronangan, P., Dearing, E., Simpkins, S., Little, P. M. D., et al. (2006). *What are kids getting into these days?: Demographic differences in youth out-of-school time participation*. Cambridge, MA: Harvard Family Research Project, Harvard Graduate School of Education.
- Youniss, J., McLellan, J. A., & Yates, M. (1999). Religion, community service, and identity in American youth. *Journal of Adolescence*, 22, 243-253.

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