

Longitudinal Patterns of Urban Early Adolescent Organized Activity Involvement

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Introduction

- Adolescent involvement in extracurricular, community, and civic activities is linked to higher levels of academic achievement, self-esteem, and more positive relationships with parents and other adults (Mahoney, Harris, & Eccles, 2006).
- These positive benefits may be more significant for poor, urban youth, at greater risk for delinquency and school drop out.
- Less is known about developmental impacts of organized activity involvement in early adolescence.
- Researchers indicate a need for studies measuring adolescent activity involvement and its positive developmental correlates at multiple time points.
- Attention is gaining for the unique benefits of different types of adolescent activities (Larson, Hansen, & Moneta, 2006).
- Researchers note that adolescents are often involved in multiple activities at one time, calling for person-centered empirical approaches, allowing the examination of patterns of adolescent activity involvement (Bartko & Eccles, 2003; Morris & Kalil, 2006).
- A few studies have utilized such an approach, finding associations between different patterns of adolescent activity involvement and different developmental outcomes.
- It is unclear whether such profiles stem from idiosyncratic or cohort effects.
- Research examining whether similar profiles of adolescent activity involvement occur in different samples is needed.
- Additionally, it is unclear whether adolescents remain in similar profiles of involvement over time, and whether movement or stability in the array of activities in which adolescents are involved are differentially related to positive youth development.

Study Aims

- 1: Utilize cluster analyses to investigate whether similar profiles of adolescent activity involvement can be derived in two cohorts of urban early adolescents
- 2: Measure longitudinal changes in organized activity involvement profile membership
- 3: Examine whether change in adolescent involvement status is associated with positive developmental outcomes

Sample

-2 cohorts (2 years apart) of students from four urban middle-schools (6th, 7th, and 8th grades); 90% of students receive government-subsidized lunches at these schools
 -Sub-sample of students with data from both time points

Procedures

Surveys were administered to all students at four urban 3-year middle-schools. Two years later, the surveys were administered to students at the same schools. A sub-sample of adolescents (N = 489) completed the survey at both time points.

Measures

Activity Involvement: Weekly hours spent in 6 activities:
 -Sports
 -Arts & Music
 -School Clubs/Groups
 -Community Groups
 -Religious Activities
 -Volunteering in the Community

(Scoring scale: 1 = 0 hours; 5 = 10+ hours)

Delinquent Activities (6 items): Self-reported delinquency in (Likert scale, 1-5)

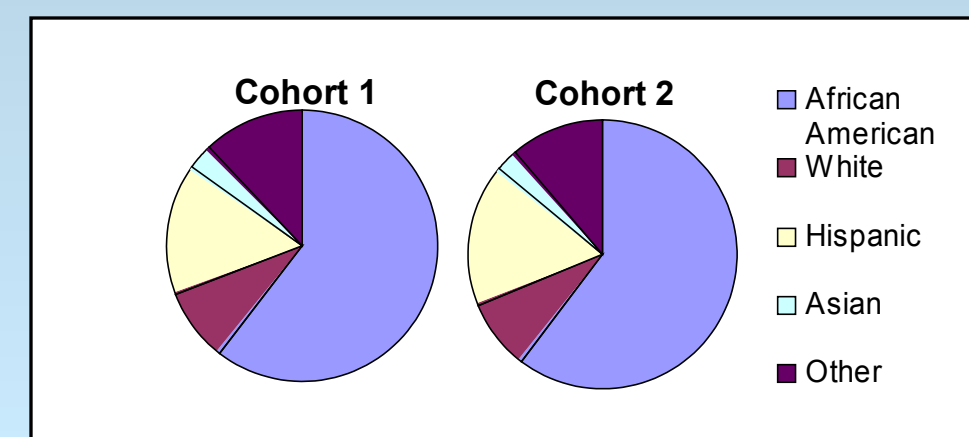
Attitudes Toward School (5 items): Self-reported positive attitudes toward future and current education (Likert scale, 1-4)

Self Worth (5 items): Positive beliefs about the self and self-agency (Likert scale, 1-4)

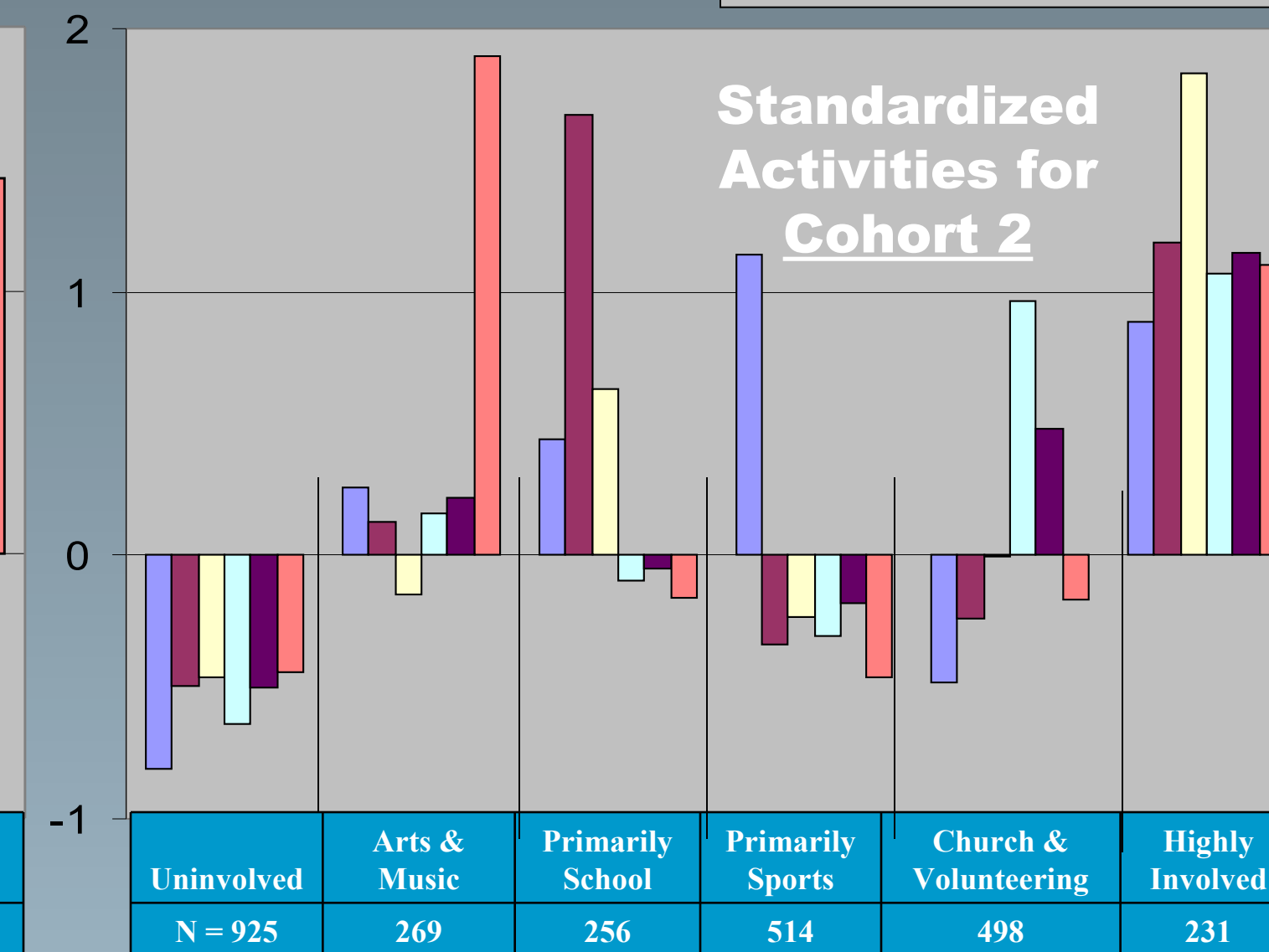
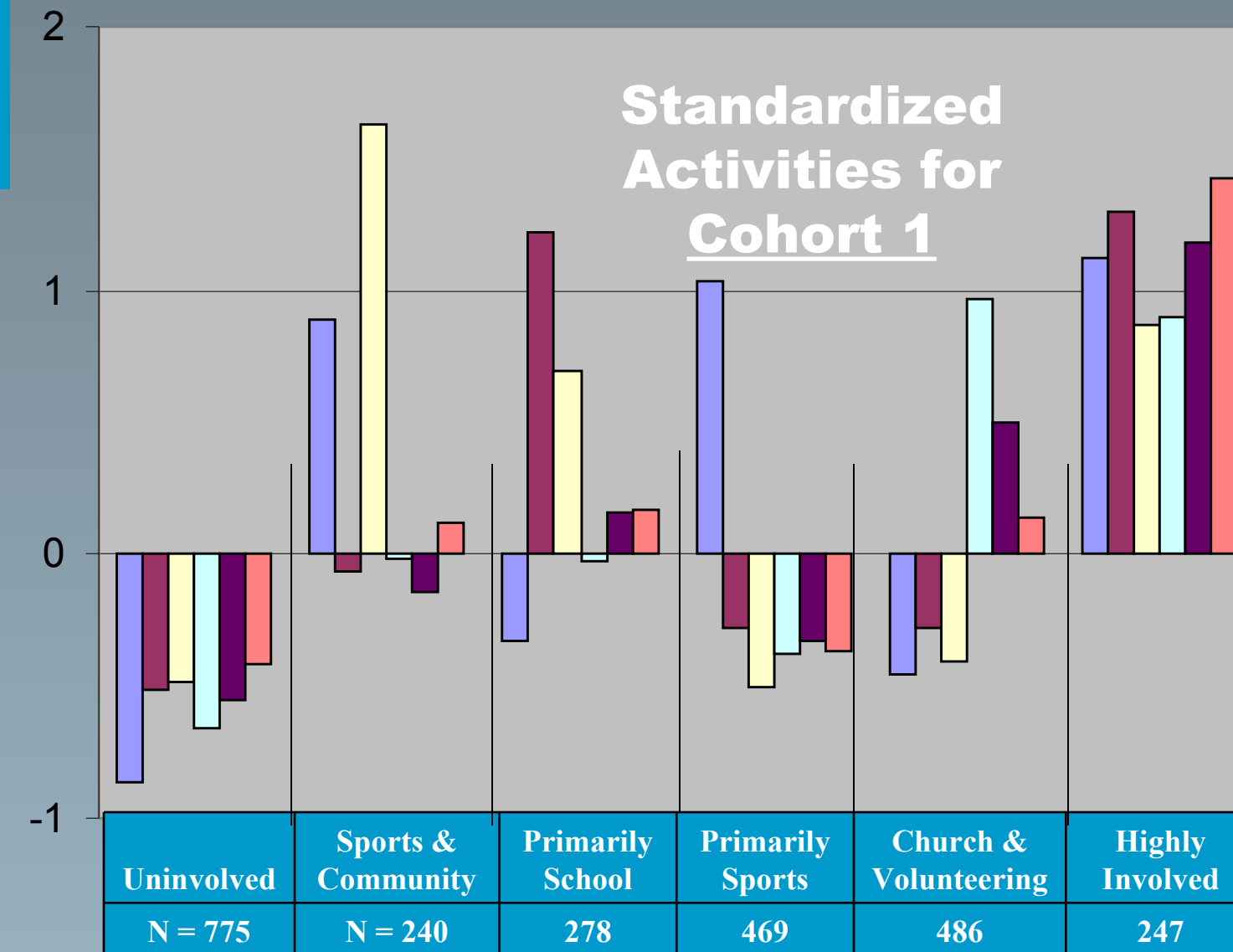
Adult Support (3 items): Perceived support from adults in adolescents' community (Likert scale, 1-4)

Demographics

	N	% Girls	Age
Cohort 1	2495	51	13.0
Cohort 2	2693	53	13.1
Longitudinal Sub-group (Time 1 & Time 2)	489	52	14.0



Results



Cluster Analyses

Two steps (Henry Tolan, & Gorman-Smith, (2005):

- Ward's Hierarchical
- K-means, using cluster centers from step one

Cluster analyses yielded a similar array of 6 activity profiles for both cohorts, and only 1 cluster profile was unique to each cohort (Cohort 1=sports/community; Cohort 2=arts & music). Means for the common cluster solutions were nearly identical and the clusters comprised similar proportions of each cohort. In all, 90% of the adolescents at in both cohorts fell into clusters present in both cohorts. Additional analyses determined that removing the sub-sample common to each profile did not affect the structure of the profiles for either cohort.

References

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Concordant Developmental Outcomes

Replicating previous research (Bartko & Eccles, 2003; Metzger, Crean, & Forbes-Jones), at both time points, activity profiles were differentially associated with developmental outcomes including delinquency, negative affect, school grades, and adult support. While involvement was generally better than noninvolvement, different patterns were associated with different outcomes, which replicates previous research and indicates the utility of a person-centered approach (See Metzger, Crean, & Forbes-Jones for details).

Longitudinal Consistency in Profile Membership

The sub-sample (N = 489) of early adolescents with data at both time points allowed for an examination of longitudinal changes in adolescent activity profile membership.

Percent of adolescents from each profile who were in the same profile 2 years later

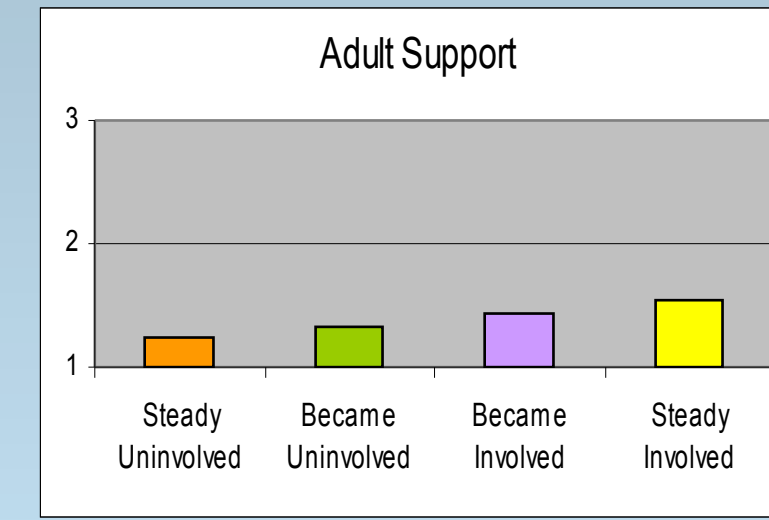
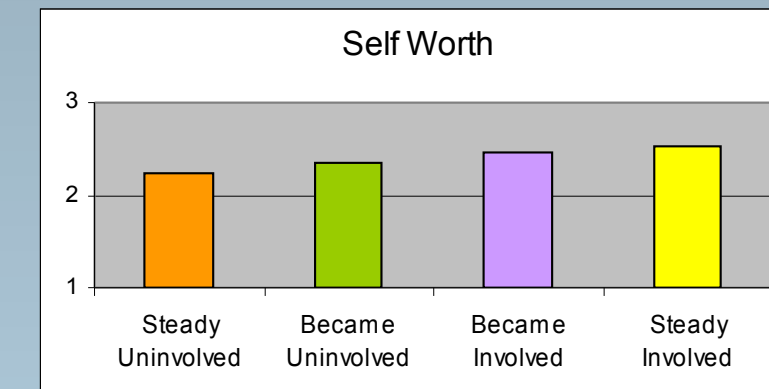
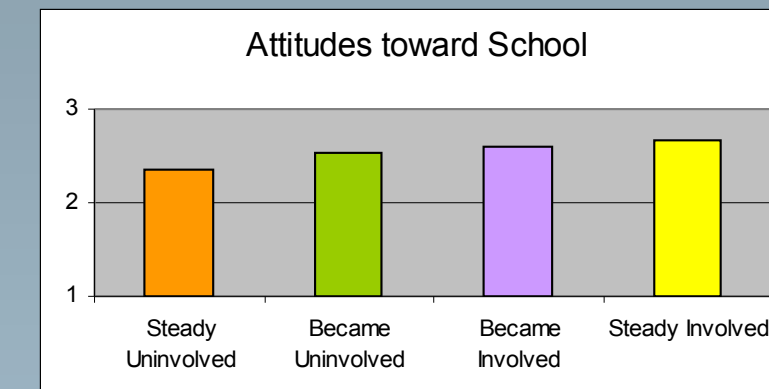
Profile	School	Sports	Church & Volunteering	Highly Involved
Uninvolved	10%	26%	31%	17%

In all, 30% (N=148) of the sub-sample of early adolescents were in the same activity profile at both time points. 20% (N=100) moved from one of the actively involved profiles at Time 1 to the uninvolved profile at Time 2, and 14% (N=69) moved from the uninvolved group at Time 1 to some form of involved group at Time 2. There was no discernible pattern among adolescents who moved from one activity profile at Time 1 to another at Time 2. Such movement was random and idiosyncratic, which could point to heterogeneity in the types of activities in which individual urban adolescents are involved as they move across early adolescence.

Longitudinal Outcomes

Longitudinal patterns of involvement were examined to determine if movement between profiles of activity involvement was associated with developmental outcomes. Since there was very little stability in patterns across time points, multiple idiosyncratic patterns were present. In order to allow for adequate cell sizes, four groups representing longitudinal patterns of involvement were created:

- **STEADILY INVOLVED in any activity (N = 244)**
- **BECAME INVOLVED (N = 89)**
- **BECAME UNINVOLVED (N = 100)**
- **STEADILY UNINVOLVED (N = 76)**



NOTE: No significant differences found for delinquency

Discussion

Cluster analyses yielded similar activity profiles in two different cohorts of urban early adolescents. To our knowledge, this represents the only attempt to replicate clusters of adolescent activities in two different cohorts. Rather than idiosyncratic cohort effects, the present findings point to consistency in the structure of adolescent activities at different time points. In addition, both cohorts contained profiles such as "sports heavy", "religious", "uninvolved", and "highly involved", which are similar to those found in middle childhood (Morris & Kalil, 2006) and late adolescence (Bartko & Eccles, 2003). Also similar to these studies, adolescent activity clusters in both cohorts were found to differ on a variety of developmental outcomes. There appears to be utility in adopting a person-centered approach to capture the distinct array of activities in which adolescents are engaged. The present findings suggest that there may be some consistency in the shape of such profiles at different time points within the same context.

Our findings, however, also suggest that while different cohorts may look similar in terms of their activity profiles, there is only a small amount of stability in profile status at the individual level as adolescents move through the middle school years. Only a fraction of our sub-sample remained in the same activity profile at both time points and there was no consistent pattern to adolescents' movement between profiles. It could be that such volatility in involvement is normative as early adolescents try out new activities and seek out new experiences. However, if such change in activity status is the norm, it could make it empirically difficult to examine the developmental impact of activity profiles across adolescence. Future research should investigate whether there is more or less stability in activity involvement in other populations of adolescents.

Finally, this study examined the effects of adolescents' longitudinal involvement across adolescence. As expected, adolescents who were either uninvolved throughout middle adolescence or became uninvolved fared more poorly on a number of developmental outcomes, though not in terms of delinquency.

Limitations: The 2 cohorts were not entirely independent (longitudinal sub-sample), though follow-up analyses indicated that their inclusion did not effect the cluster formation of either cohort. The sub-sample was a sample of convenience and there could be a number of unmeasured factors that lead to their presence at both time points.