

**Whatever Happened to the Jock,
the Brain, and the Princess?
Young Adult Pathways Linked to Adolescent
Activity Involvement and Social Identity**

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This study examined young adult sequelae of participation in high school activities and identity group for 900 participants from the Michigan Study of Life Transitions. Participation at Grade 10 in high school activities predicted later substance use, psychological adjustment, and educational and occupational outcomes. Prosocial activity participation predicted lower substance use and higher self-esteem and an increased likelihood of college graduation. Performing arts participation predicted more years of education as well as increases in drinking between ages 18 and 21 and higher rates of suicide attempts and psychologist visits by the age of 24. Sports participation predicted positive educational and occupational outcomes and lower levels of social isolation but also higher rates of drinking. Breakfast Club identity categories were predictive of both levels and longitudinal patterns in substance use, education and work outcomes, and psychological adjustment. In general, Jocks and Brains showed the most positive adjustment and Criminals the least.

There is growing evidence that participation in constructive leisure activities facilitates positive development (e.g., Eccles & Barber, 1999; Holland & Andre, 1987; Larson, 2000; Mahoney & Cairns, 1997; Otto, 1975, 1976;

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Youniss & Yates, 1997). For example, activity participation is linked to better school achievement, educational attainment, occupational status, and income (Barber & Eccles, 1997; Otto, 1975, 1976) and to reduced chances of school dropout and criminal offenses, especially for high-risk youth (Mahoney & Cairns, 1997). Furthermore, Eccles and Barber (1999) documented a protective link between specific types of activities (e.g., sports, performing arts, student government, or prosocial activities) and both positive and risky mid- and late-adolescent outcomes. We also linked activity involvement to social identities, arguing that activities provide a forum for social identity formation and consolidation. In this article, we extend this work into the years of young adulthood. More specifically, we assess the link of high school activity involvement and social identities to young adult pathways of substance use, educational and occupational attainment, and psychological adjustment.

There has been far less developmental research on constructive leisure activities than on other contexts, such as family and school (Kleiber, 1999). But there is good reason to believe that structured leisure activities are also important for development. First, constructive organized activities provide a developmental forum for initiative and engagement in challenging tasks and allow participants to express their talents (Csikszentmihalyi, 1990; Kleiber, Larson, & Csikszentmihalyi, 1986; Larson, 2000). Second, activities can stimulate youth to evaluate their social beliefs (Youniss & Yates, 1997). Third, constructive activities help adolescents meet their need for social relatedness. Structured activities represent an enormous investment by adults; this investment provides adolescents with a range of social developmental opportunities, allows the participants to serve as a resource in their community, establishes supportive networks of adults and adolescents, integrates adolescents into adult-sponsored culture, and allows them to achieve positive recognition (Fletcher & Shaw, 2000; Youniss, Yates, & Su, 1997).

Activity Participation, Peer Group, and Social Identity

To explain the connection between activities and positive development, Eccles and Barber (1999) proposed a synergistic system connecting activity involvement with peer group composition and identity exploration. Activities 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. This confluence of peers and activity participation has also been described as a "leisure culture" (Eckert, 1989).

Together, peer group membership and activity involvement are linked to identity exploration and to a sense of belonging to a particular type of peer group and having a particular activity-based persona (e.g., being a Jock or a Brain). Participation in voluntary activities stimulates assessment of one's talents, values, interests, and place in the social structure (Erikson, 1963). More rigidly structured arenas of participation such as school, work, and church provide less freedom to explore and express identity options than voluntary activities. Therefore, participation in voluntary extracurricular activities may be personally expressive, allowing an adolescent to communicate "This is who I am" or "This is what I believe I am meant to do." The peer crowd prototype associated with one's activity is potentially a powerful influence on the content of one's emerging personal identity. For example, athletes are more likely than those who do not play sports to consider themselves to be Jocks (Eccles & Barber, 1999). Involvement in a sport also provides the opportunity to become integrated into the cultural milieu connected to being an athlete (Fine, 1987), thus increasing the likelihood of engaging in other behaviors associated with this leisure culture.

Youniss and Smollar (1985) argued that adolescents develop a social sense of self as well as an individual and autonomous sense of self during adolescence. In addition, Brown and colleagues have suggested that adolescents develop socially construed representations of their peers' identities, or "crowd" identities, which serve not only as pre-existing, symbolic categories through which they can recognize potential friend or foe, tormenter, collaborator, or competitor (Brown, Mory, & Kinney, 1994) but also as public identities for themselves that are recognized and accepted by peers (Stone & Brown, 1998). Thus, adolescents themselves began cognitively organizing and navigating their social world through reference to crowds before social scientists began measuring crowd identification and before Hollywood began reflecting and exploiting it in such classic movies as *The Outsiders*, *Pretty in Pink*, and *Heathers*. Our analyses use one such movie, *The Breakfast Club*, which caught the imagination of adolescents even as it reflected the darker realities and anxieties of adolescent life.

Evidence That Specific Types of Activities and Social Identities Matter

Eccles and Barber (1999) showed different patterns of outcomes, depending on the type of activity adolescents were involved in and their social identity group¹: Both involvement in prosocial activities and having a Brain identity were associated with low alcohol and drug use and positive academic outcomes. These adolescents had the most academically oriented peers. The Jocks were most involved in sports, and the Princesses reported high rates of

school involvement. Both involvement in sports and school spirit activities and having a Jock or a Princess social identity were associated with a mixed pattern of outcomes—positive academic outcomes and high alcohol use. Not surprisingly, these adolescents also had more academically oriented peers and more friends who regularly drank alcohol. The Criminals were not generally engaged in organized extracurricular activities, were involved in risky behaviors such as alcohol and drug use, and had the highest proportion of friends who drank and used drugs.

Do these differences in risk behavior and academic performance carry forward into young adulthood? The focus of this article is on the long-term risk and adjustment patterns associated with activity and identity choices in adolescence. We examine substance use, instrumental behavior related to education and work roles, and psychological adjustment across the transition from adolescence to young adulthood for those with different activity participation histories and adolescent social identities.

METHOD

Study Design and Sample

The data come from the Michigan Study of Adolescent Life Transitions (MSALT), a longitudinal study that began with 6th graders drawn from 10 school districts in southeastern Michigan in 1983. The majority of the sample come from White, working- or middle-class families. Longitudinal survey and school record data from approximately 900 MSALT participants were used for this report. These data were collected at 10th grade (Wave 5), 12th grade (Wave 6), and 2 (Wave 7) and 6 years (Wave 8) after high school.

Measures

Identity group. *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 Basket Case, or the Criminal) was most like them. We told them to ignore the gender of the character and base their selection on the type of person each character was. Twenty-eight percent selected the Jock identity, 40% the Princess, 12% the Brain, 11% the Basket Case, and 9% the Criminal.

Activity involvement. At 10th 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. We grouped the extracurricular activities into four categories: *prosocial activities*, such as church attendance and/or participation in volunteer and community-service-type activities; *team sports*, defined as participation on one or more school teams; *performing arts*, such as participation in school band, drama, and/or dance; and *school involvement*, including participation in student government, pep club, and/or cheerleading (see Eccles & Barber, 1999, for details).

Substance use. We collected information on drinking and using drugs at Waves 5, 6, 7, and 8 for the previous 6 months with the following scale: 1 = none, 2 = once, 3 = 2-3 times, 4 = 4-6 times, 5 = 7-10 times, 6 = 11-20 times, and 7 = 21 or more times.

Academic outcomes. At Wave 8, participants indicated the number of years of education they had completed and whether they had been awarded any certificates or degrees.

Job characteristics. Job characteristics in young adulthood were measured at Wave 8. The Job with a Future scale (two items) assessed the extent to which the participants considered themselves in a career path job ($\alpha = .61$); the Job Autonomy scale (five items) assessed the degree to which participants could make important decisions about what they did at work, had the opportunity to use their ideas and imagination in their job, and were their own boss ($\alpha = .69$).

Psychological adjustment. Psychological adjustment was measured at Waves 5, 6, 7, and 8 using four scales with responses ranging from 1 = never to 7 = daily. Depressed Mood had three items such as "How often do you feel unhappy, sad, or depressed?" and alpha reliabilities ranged from .71 to .75. Worry had three items concerning worries about family finances and finding a job in the future as well as feeling discouraged about the future (alphas ranged from .63 to .76). Social Isolation had two items about how often the participant felt lonely and had trouble fitting in with others (alphas ranged from .51 to .54). Self-Esteem had three items such as "How often do you feel satisfied with yourself the way you are?" (alphas ranged from .78 to .82). Three additional single-item indicators of adjustment were measured at Wave 8: whether participants had ever tried to commit suicide, whether they had ever received treatment from a psychiatrist or psychologist, and whether they had been in drug or alcohol treatment or rehab.

Family demographics. We included mother's education as a measure of family socioeconomic status. This variable was collected from mothers at the first wave when the adolescents were in the sixth grade. Mothers indicated on a 9-point ordinal scale their highest level of education, with 1 = *grade school*, 3 = *high school diploma*, 6 = *college degree*, and 9 = *Ph.D. or other advanced professional degree like an M.D.* We collapsed this scale into a 3-point ordinal scale with 1 = *no more than high school diploma* (47%), 2 = *some college* (37.2%), and 3 = *bachelor's degree or more* (15.8%).

Academic aptitude. We collected the verbal and numerical ability subscores (percentile rankings) on the Differential Aptitude Test (DAT) (The Psychological Corporation, 1981) from ninth-grade school records.

PROCEDURE

The data were collected via self-administered questionnaires. For the 10th- and 12th-grade waves, the adolescents filled out the questionnaire in a large common room—usually the lunchroom—during normal school hours. The young adult surveys were mailed to the participants' homes and returned via postage-paid envelopes.

RESULTS, PART I—ACTIVITY INVOLVEMENT

A 2 (gender) \times 2 (activity participation) \times 4 (time) repeated-measure MANOVA was performed for each dependent variable, nesting the 4-level "time" component within subjects. Table 1 summarizes between- and within-subjects effects revealed by these analyses.

Normative Patterns of Substance Use Across Time

Significant upward linear and quadratic effects of time indicate that drinking increased across time but that the rate of increase attenuated as participants got older. Females reported drinking less frequently than males overall. However, the gender difference was not significant at Time 1 (age 16), and the linear time component was steeper for males than females. For marijuana use, both linear and quadratic effects of time were significant. Though marijuana use increased across time, the rate of increase attenuated with each successive wave.

TABLE 1: Longitudinal Relations Between Substance Use and Adjustment Outcomes and Participation in Extracurricular Activities. Multiple Analysis of Variance Summary: F Values and Significance Levels for Main Effects and Interactions Assessed Through Repeated Measures Tests of Between-Subjects Effects and Within-Subjects Contrasts With Time Nested Within Subjects

	<i>Between-Subjects Effects</i>			<i>Within-Subjects Contrasts with Time Nested Within Subjects</i>					
	<i>Gender</i>	<i>Activity</i>	<i>Gender by Activity</i>	<i>Time: Linear</i>	<i>Time: Quadratic</i>	<i>Time: Cubic</i>	<i>Time by Gender</i>	<i>Time by Activity</i>	<i>Time by Gender by Activity</i>
Prosocial activities									
Drinking	4.216*	12.51***	0.00	402.19***	23.04***	13.78***	7.67** lin	5.74* lin 5.42* qu 13.00*** cu	
Marijuana use		13.85***		16.24***	6.84**				
Depression				61.79***	16.98***	14.03***	12.50*** lin		
Worry	5.38*			36.96***		76.63***			
Social isolation				92.03***		3.90*			
Self-esteem	5.69*	5.13*		16.05***				4.00* lin	
Sports teams									
Drinking	4.22*	11.76**		467.62***	48.86***	5.70*	12.37** lin		4.73* lin
Marijuana use				30.04***	10.21**			5.71* cu	
Depression	7.91**			85.10***	20.90***	17.27***	24.72*** lin		
Worry	9.30**			42.12***		109.93***			
Social isolation		7.37**		110.51***	6.53*	4.66*	5.79* lin		
Self-esteem	10.04**			34.17***					
Performing arts									
Drinking				445.77***	41.99***	9.66**	15.73*** lin	10.10** lin 5.13* cu	4.22* cu

(continued)

TABLE 1 Continued

	<i>Between-Subjects Effects</i>			<i>Within-Subjects Contrasts with Time Nested Within Subjects</i>					
	<i>Gender</i>	<i>Activity</i>	<i>Gender by Activity</i>	<i>Time: Linear</i>	<i>Time: Quadratic</i>	<i>Time: Cubic</i>	<i>Time by Gender</i>	<i>Time by Activity</i>	<i>Time by Gender by Activity</i>
Marijuana use				25.31***	9.35**				4.79* cu
Depression	5.35*			77.41***	17.16***	17.12***	16.19***		
Worry	6.21*			28.54***		87.51***			5.05* qu
Social isolation				100.78***	4.95*				
Self-esteem	7.97**			32.59***					
School involvement									
Drinking				214.84***	27.33***	4.47*	6.16* lin		
Marijuana use			5.07*	10.91**	4.40*				
Depression				56.92***	8.20**	16.57***	7.36** lin		
Worry	4.71*			7.90**		57.58***		5.87* lin	
Social isolation				74.70***					
Self-esteem	7.12**			16.87***					

NOTE: lin = linear effect; qu = quadratic effect; cu = cubic effect.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Activity Involvement and Substance Use

Prosocial Activities Participation

Drinking. The significant main effect for participation revealed that those who had participated in prosocial activities at Grade 10 drank significantly less frequently than did those who had not participated (see Table 1). In addition, the interaction of participation with the linear and cubic effects of time on drinking showed that participation in prosocial activities was associated with a delay in the timing of the increase in drinking (participants' means: $M_{16} = 1.8$, $M_{18} = 2.7$, $M_{21} = 4.8$, $M_{24} = 4.9$; nonparticipant means: $M_{16} = 2.6$, $M_{18} = 4.2$, $M_{21} = 5.1$, $M_{24} = 5.2$). The rate of drinking rose more between ages 16 and 18 for nonparticipants than for participants and rose more for participants than for nonparticipants between ages 18 and 21.

Marijuana use. A significant main effect for participation indicated that participants used marijuana ($M = 1.3$) less than nonparticipants ($M = 1.8$). Rate of change did not differ.

Sports Team Participation

Drinking. A between-subjects main effect for sports participation revealed that athletes report drinking ($M = 4.5$) more often than nonathletes ($M = 3.8$). The significant Gender \times Sports \times Time interaction indicated that female athletes increased their frequency of drinking at a faster rate than nonathlete females, and thus, the difference between these two groups increased between age 16 and 21 (see Figure 1). Conversely, male athletes increased their drinking at a lower rate than nonathlete males during this time period, and thus, the gap between male athletes and nonathletes declined across time.

Marijuana use. The significant participation by cubic trend interaction reflected the fact that athletes had only one inflexion point ($M_{16} = 1.2$, $M_{18} = 1.7$, $M_{21} = 1.7$, $M_{24} = 1.8$), whereas nonathletes had two ($M_{16} = 1.4$, $M_{18} = 1.7$, $M_{21} = 2.0$, $M_{24} = 1.7$).

Performing Arts Participation

Drinking. Both the linear and cubic trends in drinking were influenced by participation in performing arts. As Figure 2 illustrates, the rate of increase in drinking was greater for those in performing arts. The cubic component in the

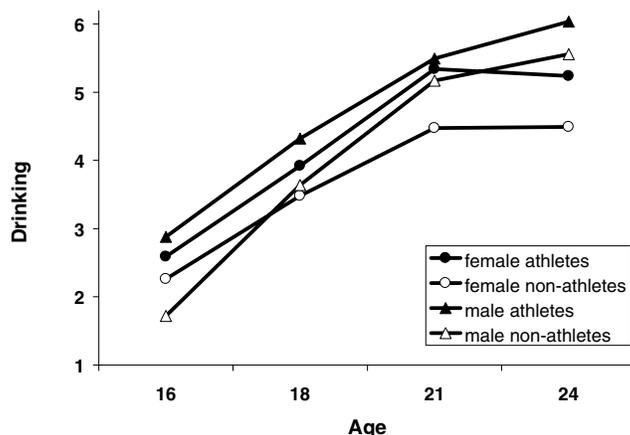


Figure 1. Frequency of drinking by sports participation and gender across time.

data was also moderated by an interaction of gender and performing arts (see Figure 2). These patterns reflect the fact that the rate of increase between 18 and 21 was much greater for male performing artists than any of the other three Gender \times Performing Arts participation groups.

Marijuana use. The Gender \times Performing Arts \times Cubic Time trend interaction was significant. The female performing arts participants showed an upward linear trend that leveled off at age 21 ($M_{16} = 1.3$, $M_{18} = 1.6$, $M_{21} = 1.7$, $M_{24} = 1.7$). The female nonperformers peaked at age 21 and then declined between ages 21 and 24 ($M_{16} = 1.3$, $M_{18} = 1.6$, $M_{21} = 1.8$, $M_{24} = 1.6$). The male performers increased dramatically between 18 and 21 and then declined ($M_{16} = 1.1$, $M_{18} = 1.3$, $M_{21} = 2.0$, $M_{24} = 1.7$). In contrast, the male nonperformers increased dramatically from 16 to 18 and then remained stable to 24 ($M_{16} = 1.4$, $M_{18} = 2.0$, $M_{21} = 2.0$, $M_{24} = 2.1$).

School Involvement

Drinking. Participation in student government, cheerleading, or pep club at Grade 10 was not related to either mean levels or patterns of change in drinking frequency.

Marijuana use. Marijuana use was moderated by a Gender \times School Involvement interaction. Females who participated in school-related clubs used marijuana more often ($M = 1.7$) than females who did not participate

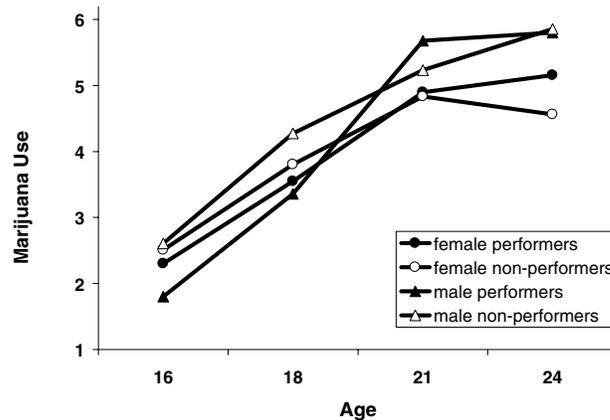


Figure 2. Frequency of marijuana use by performing arts participation and gender across time.

($M = 1.2$). Male participants used marijuana less often ($M = 1.5$) than male nonparticipants ($M = 1.9$).

Activity Involvement and Educational/Occupational Outcomes

We examined the association between Grade 10 activity involvement and the following Wave 8 young adult outcomes: the number of years of education completed by Wave 8 (age 24), college graduation rates, whether they perceived their jobs to be long term (have a future) versus short term (plan to do something different in the future), and the amount of autonomy the participants reported in their jobs. Analyses of covariance (ANCOVAs) were used with activity involvement and gender as predictors and with high school math and verbal ability (DAT scores) and mother's education as covariates. All means reported in the text are adjusted for these covariates.

Participation in any 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 DAT score covariates were added. Those who had participated in team sports had completed significantly more years of schooling than nonparticipants, $F(1, 426) = 20.50, p < .001, Ms = 15.3$ and 14.6 , respectively. Those who had participated in performing arts had completed significantly more years of schooling than nonparticipants, $F(1, 426) = 4.27, p < .05, Ms = 15.2$ and 14.9 , respectively. There was also a significant Gender \times Performing Arts Partici-

pation interaction, $F(1, 426) = 3.96, p < .05$; the effect of participation was absent for females, ($M_s = 15.1$ for both performers and nonperformers) but significant for males ($M_s = 15.4$ and 14.7 years for performers and nonperformers). Those who had participated in school-involvement activities had completed significantly more years of schooling than nonparticipants, $F(1, 426) = 5.18, p < .05, M_s = 15.3$ and 14.9 , respectively.

Rates of college graduation were significantly related to participation in all activity types: prosocial activities level ($\chi^2 = 16.39, p < .001$), team sports ($\chi^2 = 6.09, p < .05$), performing arts ($\chi^2 = 5.52, p < .05$), and school involvement ($\chi^2 = 11.27, p < .01$). Rates for college completion were consistently higher for participants than for nonparticipants: for prosocial activities, 46% versus 31%; for team sports, 39% versus 30%; for performing arts, 40% versus 32%; and for school involvement, 47% versus 32%.

Sports participation was positively related to reporting having a job with a future at age 24 at the trend level, $F(1, 319) = 3.27, p < .10; M_s = 4.7$ for sports participants and 4.3 for nonparticipants. Similarly, sports predicted having more job autonomy at age 24, $F(1, 319) = 4.20, p < .05; M_s = 4.4$ for athletes and 4.1 for nonathletes).

Activity Involvement and Psychological Adjustment

Depressed mood. Significant linear, quadratic, and cubic effects revealed that depressed mood levels initially decreased over time and then stabilized (see Table 1). This downward linear effect was more marked for females (see Gender \times Linear Time interaction). Activity involvement was unrelated to level or changes in depressed mood.

Worry. There were significant linear and cubic effects (see Table 1). Worry declined somewhat from 16 to 18, rose to a peak at 21, and then declined by 24. This cubic effect occurred for all activity groups and for both genders, except for male performing artists. There was a significant interaction of performing arts and gender with the quadratic effect of time: Male performing artists did not experience the decline in worry between 16 and 18 that was characteristic of all other groups. In addition, the linear increase in worry was moderated by school involvement. Those who were involved started higher at 16 but increased less than those who were not involved.

Social isolation. Social isolation decreased across time (see linear main effect, Table 1). In addition, athletes reported lower isolation ($M = 3.0$) than nonathletes ($M = 3.2$) (see participation main effect, Table 1).

Self-esteem. A significant linear increase was found for self-esteem. In addition, participants in prosocial activities reported higher self-esteem ($M = 5.0$) than did nonparticipants ($M = 4.8$).

Wave 8 adjustment indicators. Suicide attempts at Wave 8 were associated with participation in performing arts ($\chi^2 = 3.89, p < .05$): 11% for participants, 6% for nonparticipants. Performing arts participants were also significantly more likely to report having visited a psychologist ($\chi^2 = 15.16, p < .001$): 22% for participants versus 11% for nonparticipants.

SUMMARY

Participation at Grade 10 in high school activities is an important predictor of later substance use, psychological adjustment, and both educational and occupational outcomes. Specifically, participating in prosocial activities in 10th grade predicts lower substance use and higher self-esteem up to 8 years later. In contrast, with the exception of an increased likelihood of graduation from college, prosocial activities do not predict educational or occupational outcomes. On one hand, participation in the performing arts predicts increases in alcohol consumption between the ages of 18 and 21 and higher rates of suicide attempts and psychologist visits by the age of 24. On the other, it also predicts more years of education and a greater likelihood of college graduation. Similarly, on one hand, participation in sports predicts positive educational and occupational outcomes 8 years later and lower levels of social isolation. On the other, it also predicts higher rates of drinking. Interestingly, athletes use marijuana less frequently than nonathletes do.

RESULTS, PART II—IDENTITY GROUP

Our interest in the mechanisms by which activity involvement might influence these differences in young adulthood leads us to consider the meaning attached to participation through its link to identity formation. At Grade 10, activity participation was clearly linked to the *Breakfast Club* identity categories for our participants (Eccles & Barber, 1999). Jocks were most strongly represented in team sports, Brains in prosocial activities, Princesses in school involvement activities and performing arts, Basket Cases in performing arts, and Criminals in sports. Do these identities also predict to young adult outcomes?

We use 2 (gender) \times 5 (*Breakfast Club* identity) \times 4 (time) repeated-measure MANOVAs to address this question. Table 2 summarizes between- and within-subjects effects revealed by these analyses. In this section, we summarize the identity group main effects and interactions.

Substance Use Pathways

Drinking. Overall drinking levels differed by identity group, with Jocks ($M = 4.7$) and Criminals ($M = 4.4$) drinking most often and Brains ($M = 3.7$) and Basket Cases ($M = 3.7$) least often. Both the linear increase and the “leveling off” of the rate of alcohol usage were moderated by an interactive effect of time, gender, and identity (see Table 2 for statistics and Table 3 for means). The linear increase was steepest for Brains of both genders, female Criminals and male Basket Cases and Princesses, and the quadratic effect of time was not significant for Brains (i.e., their rate of increase did not slow). The slowing of the rate of increase in drinking was greatest for female Princesses, Basket Cases, and Jocks and male Princesses and Criminals.

Marijuana use. Identity group was significantly related to marijuana use: Criminals ($M = 3.1$) used marijuana the most often, and Brains ($M = 1.5$) used it the least often. Gender moderated this relation, with male Criminals reporting dramatically higher rates than other males, whereas female Criminals reported only slightly higher rates than other females. The linear and cubic time trends were moderated by identity group: Jocks increased linearly across waves; Basket Cases increased their frequency of marijuana usage curvilinearly, with the greatest increase between age 20 and 24; and Princesses increased sharply in usage between 18 and 21 and then dropped to their lowest levels at 24. Gender moderated these patterns. For females, Basket Cases, Jocks, and Princesses all increased linearly from 16 through 21, then the Princesses decreased slightly whereas the Basket Cases and Jocks stabilized. In strong contrast to these general, upward trends, female Criminals’ use declined steadily from 16 to 24. Female Brains reported consistently low rates through age 21 and then reported a slight increase. For males, Criminals, Jocks, and Brains increased their use between 16 and 18; the Jocks then decreased slightly from 18 to 21, whereas Brains and Princesses increased. From 21 to 24, male Brains and Princesses decreased; the Basket Cases increased sharply.

TABLE 2: Longitudinal Relations Between Outcomes and *Breakfast Club* Identity. Multiple Analysis of Variance Summary: *F* Values and Significance Levels for Main Effects and Interactions Assessed Through Repeated-Measures Tests of Between-Subjects Effects and Within-Subjects Contrasts With Time Nested Within Subjects

	<i>Between-Subjects Effects</i>			<i>Within-Subjects Contrasts with Time Nested Within Subjects</i>					
	<i>Gender</i>	<i>Identity</i>	<i>Gender by Identity</i>	<i>Time: Linear</i>	<i>Time: Quadratic</i>	<i>Time: Cubic</i>	<i>Time by Gender</i>	<i>Time by Identity</i>	<i>Time by Gender by Identity</i>
Drinking		4.14**		212.76***	13.54***				2.72* lin 2.50* qu
Marijuana use	5.08*	4.16**	3.14*	12.26**			5.87* lin	2.47* lin 2.67* cu	2.47* lin 2.78* cu
Depression		5.41***		31.95***	8.14**	7.89**	7.75** lin		
Worry		2.75*		16.36***		42.81***			
Social isolation		4.59**		48.00***				2.50* lin 2.72* cu	
Self-esteem		3.20*		6.03*	7.91**				

NOTE: lin = linear effect; qu = quadratic effect; cu = cubic effect.

* $p < .05$; ** $p < .01$; *** $p < .001$.

TABLE 3: Means for Drinking and Marijuana Use Frequency by *Breakfast Club* Identity and Gender

<i>Identity</i>	<i>Wave 5</i>	<i>Wave 6</i>	<i>Wave 7</i>	<i>Wave 8</i>
Drinking				
Females				
Princesses	2.8	4.4	5.0	4.7
Jocks	2.2	3.8	5.8	5.4
Brains	1.6	2.5	4.0	5.0
Basket cases	2.2	3.6	4.8	4.7
Criminals	2.3	3.0	5.7	6.7
Total	2.5	3.9	5.0	4.9
Males				
Princesses	1.5	3.0	5.8	5.8
Jocks	3.4	4.9	5.7	6.3
Brains	1.9	3.6	5.2	5.8
Basket cases	1.8	2.7	4.0	5.5
Criminals	2.2	5.2	5.3	5.2
Total	2.7	4.3	5.4	6.0
Marijuana use				
Females				
Princesses	1.3	1.7	2.0	1.5
Jocks	1.1	1.7	2.2	2.3
Brains	1.0	1.1	1.1	1.4
Basket cases	1.5	1.8	2.3	2.5
Criminals	3.0	2.0	1.7	1.0
Total	1.3	1.7	1.9	1.8
Males				
Princesses	1.3	1.0	3.3	1.5
Jocks	1.2	1.9	1.7	1.9
Brains	1.1	1.8	2.2	1.8
Basket cases	1.0	1.0	1.3	3.3
Criminals	3.5	4.5	4.5	4.7
Total	1.3	2.0	2.1	2.2

Educational and Occupational Outcomes

Rates of college graduation differed significantly by identity ($\chi^2 = 18.61$, $p < .01$), Brains were the most likely to have graduated from college by age 24 (49%), followed by Princesses (36%), Jocks (30%), Basket Cases (29%), and then Criminals (17%). Interestingly, in contrast to the data we reported on sports participation and more years of school completed, Jocks were well below the Brains, suggesting that although the activity itself may offer some benefit related to college attendance, the identity of being a Jock does not.

Years of schooling completed by age 24 differed by identity, $F(4, 360) = 2.72, p < .05$ and by the interaction of identity and gender, $F(4, 360) = 2.95, p < .05$. Basket cases completed significantly fewer years of schooling (adjusted $M = 14.3$) than Princesses ($M = 15.2$), Brains ($M = 15.2$), and Jocks ($M = 15.1$) but not Criminals ($M = 14.5$). Female Brains ($M = 15.8$) and Jocks ($M = 15.3$) completed more years of schooling than their male counterparts ($M_s = 14.5$ and 14.9). Male Princesses ($M = 15.4$), Basket Cases ($M = 14.4$), and Criminals ($M = 15.0$) completed more schooling than their female counterparts ($M_s = 15.1, 14.3,$ and 14.0). There were no main effects of identity on either job autonomy or having a job with a future.

Patterns of Psychological Adjustment

Depressed mood. Mean levels of depressed mood differed by identity group (see Table 2). Criminals ($M = 4.0$), Princesses ($M = 4.0$), and Basket Cases ($M = 3.9$) reported higher levels of depressed mood than Jocks ($M = 3.3$) and Brains ($M = 3.6$).

Worry. Mean levels of worry differed among identity groups. Brains ($M = 3.5$) and Jocks ($M = 3.5$) reported the lowest levels of worry. Basket Cases ($M = 4.1$) and Criminals ($M = 4.1$) reported the highest levels. Interestingly, the cubic effect described earlier occurred for all identity and gender groups.

Social isolation. Social isolation differed by identity group. Jocks ($M = 2.9$) reported the least isolation, followed by Criminals ($M = 3.3$), Brains ($M = 3.3$), Princesses ($M = 3.4$), and Basket Cases ($M = 3.5$). Though a significant linear effect marked a downward trend in sense of isolation, identity group was associated with some pattern differences related to linear and cubic effects. In contrast to the general linear decrease in isolation, Criminals increased but not at a stable rate. They began low, reporting the lowest social isolation of all groups at 16 ($M = 3.2$), increased to become the highest group by 18 ($M = 3.7$), decreased by 21 ($M = 3.0$), and increased to the highest group again by 24 ($M = 3.3$). In contrast, Basket Cases, who started very high at 16 ($M = 4.3$) and declined by 18 ($M = 3.4$), were the only group that did not decrease in isolation from 18 to 21 ($M = 3.4$).

Self-esteem. Self-esteem levels differed by identity group: Basket Cases ($M = 4.4$) and Criminals ($M = 4.6$) reported the lowest levels; Jocks ($M = 5.0$) and Brains ($M = 4.9$) the highest.

Wave 8 adjustment indicators. Basket Cases were the most likely to report having tried suicide by age 24 (14%), with Criminals and Princesses close behind (12% and 11%, respectively). Brains (3%) and Jocks (6%) reported the lowest rates. These differences approached significance ($\chi^2 = 8.82, p < .10$). Jocks (6%) were also the least likely to report a psychologist visit by age 24. Basket Cases were most likely to report having seen a psychologist (25%), followed by Princesses (21%), Criminals (20%), and Brains (18%). Differences were significant ($\chi^2 = 18.22, p < .01$). Finally, identity group was significantly related to having been in drug or alcohol rehab by age 24 ($\chi^2 = 14.99, p < .01$). Eleven percent of Criminals and 5% of Jocks had been in rehab, compared to 3% of Basket Cases, 2% of Princesses, and 0% of Brains.

SUMMARY AND CONCLUSIONS FOR IDENTITY ANALYSES

Breakfast Club identity choices were predictive of both levels and longitudinal patterns in substance use, instrumental role outcomes, and psychological adjustment. In general, Jocks and Brains showed the most positive adjustment and Criminals the least. Interestingly, Jocks and Criminals were similar in their high frequency of drinking. Identity group differences in developmental trajectories likely reflected lifestyle changes associated with the identities—for example, Brains leaving home and going to college, where drinking is prevalent.

GENERAL DISCUSSION

So what happened to the Jock, the Brain, and the Princess? Analyses of the links between activity involvement, social identity, and young adult pathways suggest several conclusions. First, there are long-term benefits of high school activities and identities, particularly for sports participation. Second, taken together, the two sets of analyses allow for a richer understanding of high school involvement, as they reveal common patterns across identities and activities, as well as some interesting inconsistencies. Third, the longitudinal patterns that emerged make sense if they are considered with respect to the likely contexts of other life changes, such as the transition to college. Each of these areas is considered in the following discussion.

Parallels Between Activities and Identities

Some common patterns emerged across the activity and identity analyses. First, both participation in prosocial activities and having a Brain identity were related to lower rates of substance use and higher self-esteem, particularly in high school. The similarity of these relations may be due in part to the overlapping membership in the activity and identity constructs—Brains were more likely than any other identity group to be involved in prosocial activities. In addition, both those in prosocial activities and those with a Brain identity reported having the fewest friends who drank or used drugs, resulting in a congruence between their identity, peer group, and activity participation (Eccles & Barber, 1999).

Second, both sports participation and the Jock identity predicted higher rates of drinking and more years of schooling. Such similar links are not surprising, given the high correspondence between the Jock identity and playing sports. The social network of Jocks, like those who participate in school sports, supports both alcohol use and schooling, with athletes having more friends who drink regularly and who plan to go to college (Eccles & Barber, 1999).

A third connection is evident in the patterns of performing artists and Basket Cases. Both participation in performing arts and having a Basket Case identity predict psychologist visits and suicide attempts. It is useful to note that Basket Cases were more likely to be involved in performing arts than any other activity (44%). Perhaps performing arts is considered a more nonconformist activity, and marginalized youth may find a place for themselves in a performance art that would not be open to them in the more traditional activities of sports, cheerleading, or student government. Certainly, in most schools, being a member of the marching band does not confer the same social status as playing on the football team. Alternately, performing arts may be seen as an opportunity for the ultimate expression of individuality, and those students who select the basket-case identity may be recognizing that their individuality is seen negatively by many of their more conventional peers and that their individuality has, in fact, resulted in minimal conventional social attachments.

In contrast, parallels to activities were less clear for Princesses, perhaps because they had no dominant activity affiliation and were involved in all these types of activities. Consistent with the defining characteristics of their social identity, Princesses participated in school involvement activities at the highest rate of any identity group (28%), but they were also very likely to par-

ticipate in sports (45%) and performing arts (50%). For educational and occupational outcomes, the findings for Princesses parallel the school involvement findings, in terms of maximal education completed by Wave 8. However, their substance use patterns resembled those of performing arts participants, who, like Princesses, at age 24 reported the lowest rates of getting drunk (Barber, Stone, & Eccles, 1999). This substance use parallel was stronger for male Princesses, who, like male performers, used marijuana less often than any other groups at age 24.

The moderating influence of gender on the relation between school involvement and marijuana use may be related to the gendered nature of particular activities that we assigned to the school involvement activity category. Student government and pep club both reflect a student's attachment to and promotion of the school culture or mission. However, we may be contrasting the effect of being a student body leader for a boy with being in pep club and hanging around with partying football players for a girl.

Inconsistencies

There were some noteworthy inconsistencies in the pairs just described. First, consider Brains and prosocial activities. Even though a high percentage of Brains were involved in prosocial activities, having a Brain identity was related to more positive adjustment for almost all psychological indicators as well as to higher educational attainment, although being involved in prosocial activities was relatively unrelated to psychological adjustment and positive instrumental outcomes. About one fourth of Basket Cases and Princesses participated in prosocial activities (Eccles & Barber, 1999). Unlike Brains, these social identity groups rated themselves higher on the indicators of maladjustment, counterbalancing the positive association for Brains involved in prosocial activities. In addition, because prosocial activities were linked to community and church settings, these activities might not be expected to have the same benefits for educational outcomes as more school-based activities.

The educational and occupational advantages of sport participation were less consistent for those with a Jock identity than for those who simply reported playing sports. Conversely, psychological adjustment advantages were more evident for those who considered themselves Jocks than for those who played sports. One explanation for these discrepancies is that not all athletes see themselves as Jocks. There was some sports team participation in all identity groups, including a high rate among the Criminals (47%), who reported the most negative psychological adjustment. This heterogeneity of athletes' identities may explain why the identity of Jock, and not the partici-

pation in sports itself, is more consistently linked to positive psychological adjustment, with self-identified Jocks reporting the lowest depression, worry, isolation, suicide attempts, and psychologist visits, and the highest self-esteem.

In contrast, however, with respect to educational and occupational success, sports play itself was more predictive of advantages than reporting a Jock identity. This advantage of the activity itself may reflect the characteristics of athletic competition, where participants must practice, learn to negotiate rules and resolve disputes, compete, recover from defeat, earn a sense of self-worth, and win gracefully on the playing field. In addition, sports participation may increase athletes' social (and perhaps economic) capital through supportive relationships with adults, such as coaches and school counselors who act as advisors and advocates for college admission and scholarships. These skills and social networks likely extend to school and the workplace and endow athletes with an educational and occupational advantage, regardless of their social identity. In support of this idea, we have found that for Princesses, Jocks, and Basket Cases, college attendance was more likely among those who played sports (Barber & Eccles, 1998).

Longitudinal Patterns Linked to Context

Alcohol use. There is previous evidence that going to college and/or living in campus housing is linked to increased rates of drinking during early adulthood (Bachman, Wadsworth, O'Malley, Johnston, & Schulenberg, 1997; Schulenberg, O'Malley, Bachman, Wadsworth, & Johnston, 1996; Schulenberg, Wadsworth, O'Malley, Bachman, & Johnston, 1996). This is also true in our sample. This connection of college attendance and drinking could explain some of the patterns we see in alcohol use, such as the strong linear increase for the Brains. Perhaps Brains' drinking does not attenuate between ages 21 and 24 because they continue their education beyond college and delay the assumption of adult roles linked to marriage, parenting, or labor market participation.

Longitudinal outcomes linked to alcohol use. The Criminals and Jocks reported the highest rates of having been in rehab, with Criminals being more than twice as likely to report rehab experience than all other groups. Both of these groups drank at high rates in high school, but in young adulthood they were likely to have different lifestyles. The differences between these two groups in rehab experience may reflect the likelihood of arrest and conviction for substance-related offenses. Jocks were more likely to be living on college campuses and to be part of a system that may reduce the likelihood of driving

drunk and may shelter them from being caught or prosecuted for drinking or drug use. Criminals are unlikely to put themselves in rehab, so their high rates could be linked to being remanded by courts after arrests for driving under the influence or drug possession or dealing.

Worry. In terms of the normative trends identified by the repeated-measures analyses, we are particularly interested in the developmental pattern that emerged in Worry. The increasing concerns about the future reported by our participants when they were 21 years old (Wave 7) cut across college status, gender, partnership status, and parenthood. There were mean level differences between groups but not differences in their patterns of change over time. Perhaps 21 is a benchmark age at which one reflects on decisions about education and career that one should have made. College students, after three years of school, may have felt pressure at 21 to commit to an academic major and to know what they would do with it. For those young adults who were not in college, the years between 18 and 21 in the labor market may not have met their aspirations, resulting in financial concerns. Their occupational plans may have been met with frustrated expectations as they encountered a floundering period of alternately low-paid work and unemployment resulting from employers' reluctance to hire recent high school graduates for career-ladder positions (The William T. Grant Foundation, 1988). This cohort was 21 years of age in 1993, and at that point, the economy in southeastern Michigan had not turned around. Downsizing had affected all of the communities, and after three years in the labor market, our noncollege participants may have begun to grasp the reality of the 1992 election slogan "It's the economy, stupid." To examine whether the strong cubic effect for Worry was an age or a cohort effect, other cohorts are needed, as well as studies in other settings.

CONCLUSIONS

Why do 10th-grade activities have such lasting predictive effects? Previous theory and research have suggested that crowd identities may reflect personality dispositions and values that predate the adolescent years and that adolescents *choose* crowds to a certain extent but that they also are to some extent *assigned* to crowds by peers in recognition of their behavioral choices and personalities (Brown, 1989, 1990). Perhaps adolescents make use of the formal activities and the informal social organization of the high school to negotiate and formalize their identities. The patterns of behavior expressed, solidified, and formalized first in high school organizations may carry forward, providing continuity in connection to others with similar values and

backgrounds as well as ongoing validation of the social identity established in adolescence. We have found in this sample that those who are active in high school in clubs and organizations and who do volunteer work are likely to continue their active participation patterns in young adulthood (Raymore, Barber, Eccles, & Godbey, 1999). Therefore, our results may reflect not only the benefits of participation during adolescence but also the enduring impact of a continuing synergistic relationship between activity involvement and social identity across the transition to adulthood.

We must also acknowledge that self-selection may play a role in these results. Something propelled these adolescents into their high school activities. Indeed, we find that those who maintain their participation in sports in 10th grade can be predicted from 7th-grade motivation and parental attitudes (Barber, Jacobson, Eccles, & Horn, 1997). This does not invalidate the potential importance of activity involvement itself. These personal and family characteristics, as well as the experiences one has while participating in activities, are likely to operate synergistically in four ways: (a) the honing and development of these psychological characteristics; (b) skill acquisition; (c) social capital, which increases the array of adults who add on to what the parents contributed; and (d) consolidation of identity, as described in the previous paragraph. All of these are important processes that have not been adequately studied.

Limitations

Some of our analyses include small cell sizes, so we need to be careful in interpreting results, particularly regarding female Criminals and male Princesses. Consistent with other research, the numbers of males and females with nontraditional identities were not proportional to their opposite-sex counterparts in the original sample. In this longitudinal sample, the cell sizes are understandably diminished further. This limitation does not invalidate the importance of these key groups, who are meaningful to follow because of their uniqueness.

A second limitation is that we examine only one cohort, thus our findings will be important to replicate in other cohorts as well as other macro-level settings. The cohort, although heterogeneous for social class, was predominantly white, limiting our ability to generalize. In addition, the examination of these patterns in other countries that provide broad support for young adults during the transition to work will be important.

Finally, although the design is longitudinal, our data do not allow for examination of causal pathways. The clearest case for the beneficial effects of activity involvement will come from applied research using intervention or

prevention research designs. Partnerships between traditional researchers and youth development program coordinators may prove especially fruitful for this line of inquiry.

Implications

If we had not used a person-centered approach, we would not have identified well-functioning drinkers—Jocks, Brains, athletes. Through various person-centered approaches examining these participants, we have found three types of drinkers: (a) drinkers who are also involved in problem behaviors at high rates (Meschke, Barber, & Eccles, 1994), (b) highly anxious adolescents who report performance anxiety but no problem behavior (Eccles, Lord, Roeser, Barber, & Jozefowicz, 1997), and (c) popular, well-functioning adolescents, like Jocks and Princesses, who drink at relatively high rates (Eccles & Barber, 1999). We suggest that drinking may need to be examined with a more differential view—considering the context in which one is drinking as well as the psychological well-being of the drinker. This view is consistent with the perspectives of several researchers in the field of alcohol use (Jessor, Donovan, & Costa, 1991; Zucker, 1994).

These different typologies suggest that there are different routes to drinking: (a) through failing in school and problematic family and peer relationships, (b) psychological difficulty and anxiety resulting in self-medication, (c) high school popular crowd culture, and (d) college culture. We need to think about interventions differently for these four routes. For the multiple problem drinkers, we need to intervene early and consider the role of early school failure. For those with psychological difficulties who can be identified by Grade 6, we may need to provide psychological treatment, such as emotional support and coping skills. This group is likely to go undetected, as internalizing problems may be more difficult for teachers to identify. The two remaining groups experience normative increases in drinking, but because it can have short- and long-term consequences, educational risk-management and harm-reduction strategies may be most appropriate to encourage drinking wisely.

Our study also demonstrates the importance of social context for identity formation. Through norms generated within crowds, adolescents gain the advantage of asserting preferred identity and lifestyle options that have been socially constructed and “consensually validated” in the context of relationships rather than in individual rumination (Stone & Brown, 1999; Youniss & Smollar, 1985). Our findings regarding the extension of patterns into adulthood suggest that the formation of crowd-based identities may be functional in the process of identity formation. It would seem that through both identity

and participation in the activities associated with the crowd, adolescents may consolidate specific skills, attitudes, values, and social networks that have a far-ranging impact on the transition to adulthood.

NOTES

1. See the Method section for how these identity groups are measured.

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