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The Role of Organized Activities in Facilitating Social Adaptation Across the Transition to College

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This prospective study examined the relations between organized activity involvement, loneliness, and friendship quality across the transition to college. In all, 85 adolescents (54 females and 31 males) completed measures during the summer before their first year of college (Time 1) and 10 months later (Time 2). More intense involvement in activities during the first year of college promoted better Time 2 friendship quality and lower ratings of loneliness and social dissatisfaction for those individuals who had poor Time 1 social adaptation. Emerging adults who got involved in organized activities for social reasons were more likely to report having a different best friend following the transition to college. Findings from this study suggest that organized activity involvement provides certain emerging adults with contexts for exploration and development of friendships.

Keywords: *organized activity involvement; friendship quality; loneliness; social dissatisfaction; emerging adulthood; motivations*

The importance of organized extracurricular activities in promoting development during adolescence and emerging adulthood has been widely documented. Involvement in activities appears to protect against negative outcomes, such as delinquency (Mahoney, 2000), alcohol and drug use (Barber, Eccles, & Stone, 2001; Eccles & Barber, 1999; Elder, Leaver-Dunn, Wang, Nagy, & Green, 2000), and depressed mood (Mahoney, Schweder, & Stattin, 2002), and facilitate positive developmental outcomes, including higher self-esteem (Barber et al., 2001) and increased civic engagement (Youniss, Yates,

& Su, 1997; Zaff, Moore, Papillo, & Williams, 2003). To date however, very few studies have investigated social adaptation as an outcome of organized activity involvement. In this prospective study, we examined whether involvement in organized activities following the transition to college potentiates the development of high-quality friendships while buffering against loneliness and social dissatisfaction. Furthermore, we explored the relation between social motivations, prior history of social adaptation, and emerging adults' involvement in activities across the developmentally salient transition to college.

Organized Activities and Social Adaptation

Recent qualitative work suggests that activity involvement may facilitate positive social outcomes. Adolescents have indicated that they derive interpersonal gains, such as developing teamwork and social skills, from their activity involvement (Hansen, Larson, & Dworkin, 2003; Patrick et al., 1999). Adolescents also frequently mention that activity participation leads to acquisition of new peer relationships and provides a sense of belonging (Dworkin, Larson, & Hansen, 2003; Patrick et al., 1999). In addition, adolescents have suggested that they develop more intense friendships characterized by greater intimacy and fellowship through participation in activities (Patrick et al., 1999).

Involvement in organized activities also appears to influence others' perceptions of youth's social competence. For example, school-age children who participated in organized sports were rated by teachers as more socially competent than their uninvolved peers (Fletcher, Nickerson, & Wright, 2003). Similarly, teachers rated students as being more popular if they were consistently involved in school-based extracurricular activities during adolescence (Mahoney, Cairns, & Farmer, 2003). Collectively, these findings suggest that youth who are involved in activities are rated by others as having better experiences with peers than uninvolved youth.

Although these prior studies suggest that activity involvement may facilitate social adaptation, there are still several important gaps in the existing literature. First, many of the prior studies used interviews and other open-ended qualitative methods; thus, studies incorporating well-validated measures of social adaptation in demonstrating the importance of activities are still needed. Second, only one of these prior studies was longitudinal and could account for prior social adaptation when predicting outcomes (i.e., Mahoney et al., 2003). However, this study relied on teachers' rating of popularity, which has been found to be a somewhat insensitive measure of social adaptation and interper-

sonal functioning (Coie, Dodge, & Kupersmidt, 1990). Building on prior research, the current prospective study used longitudinal methods and well-validated measures as a means for better understanding the relation between activity involvement and social adaptation during emerging adulthood.

Social Adaptation During Emerging Adulthood

Developmental transitions have long been thought of as providing opportunities for growth as well as potential risks to adaptation (e.g., Bronfenbrenner, 1979; Dohrenwend & Dohrenwend, 1974). For an increasing number of youth in the United States, attending college represents an important transition. Approximately 60% of high school seniors go directly to college after graduation from high school each year (Hamilton & Hamilton, 2006), and many attend residential colleges, which often represents the first time they have left their parents' home. Thus, attending college has progressively become a more normative event that defines the transition to emerging adulthood for many (Greene, Wheatley, & Aldava, 1992).

Emerging adulthood, the time between 18 and 25 years of age, is marked by instability, a lack of adult responsibilities, and commitments that afford individuals the opportunity and time to explore prospective life courses related to identity, work, and worldviews (Arnett, 2000, 2006). Although emerging adulthood is posited to be a period of growth and exploration, very few studies have examined changes in close friendships and social adaptation during this period (Collins & van Dulmen, 2006). The few studies that have been conducted suggest that the transition to residential college simultaneously introduces dramatic changes and challenges, including the disruption of long-standing friendships.

Over the course of the first year of college, approximately half of high school best friendships diminish in closeness, satisfaction, and commitment (Jackson, Soderlind, & Weiss, 2000; Oswald & Clark, 2003). These changes often lead to increased feelings of loneliness as emerging adults cope with the absence of established social support networks as well as the challenge of forming a new one (Paul & Brier, 2001; Shaver, Furman, & Buhrmester, 1985). Emerging adults may seek involvement in organized activities as a means of forming new, high-quality friendships that meet their social needs and facilitate their transition to college. Involvement in organized activities also may provide emerging adults with a broader setting for feeling socially accepted and satisfied while buffering against feelings of loneliness. Despite the important role that activity involvement may play in facilitating better social adaptation during the transition to college, to our knowledge, there have been no studies that address this important issue.

In addition to serving as outcomes of activity involvement, friendship

quality, loneliness, and social dissatisfaction are associated with each other. Individuals with poor-quality friendships may experience loneliness because their friendships fail to meet their needs for intimacy, social support, and reliable alliance, which undermines their social comfort and satisfaction (Hoza, Bukowski, & Beery, 2000; Jackson et al., 2000; Parker & Asher, 1993; Pierce, Sarason, & Sarason, 1991). For individuals who have histories of negative friendship experiences and loneliness, getting involved in activities during the college transition may be a particularly important context of interpersonal development, providing them with a new opportunity to develop high-quality friendships and feelings of social acceptance and satisfaction. Thus, although participation in organized, extracurricular activities may provide social benefits for all emerging adults, the benefits may be magnified for individuals who (a) have been unsuccessful at establishing high-quality friendships in the past, (b) have previously experienced significant loneliness, or (c) have not been able to maintain their adolescent best friendship over the transition.

One final aim of this project was to explore the role of emerging adults' social motivations when deciding whether to participate in organized activities. Few studies have examined what factors predict involvement in activities. Eccles et al.'s (1983) expectancy-value model of activity involvement, however, theorizes that adolescents consider both their short- and long-term goals when deciding whether or not they want to participate in a given activity. For emerging adults who are transitioning to college, decisions about whether to participate in activities may depend on what they hope to accomplish through involvement. Some emerging adults may be motivated to participate in activities as a way of establishing new friendships and expanding social networks. Qualitative research with adolescents suggests that peer relationships are an important motivational force with respect to ongoing involvement in activities (Patrick et al., 1999). Although most emerging adults may be motivated to participate in activities for the potential social benefits, those individuals who have experienced poor social adaptation during adolescence and changes in best friendships over the transition to college may be especially motivated to participate in activities as a means of promoting their social adaptation.

In sum, this prospective study was designed to examine whether organized activity involvement across the transition to college potentiates the development of high-quality friendships and buffers against loneliness and social dissatisfaction. To address this question, two indices of activity involvement were used: intensity (i.e., number of hours per week involved in activities) and breadth (i.e., number of different types of activities). Many studies of activity

involvement during adolescence have treated involvement as an all-or-nothing phenomenon; however, researchers increasingly acknowledge the value of examining the effects of these distinct but overlapping indices as a way of more accurately capturing youth's involvement (Eccles, 2005; Fredricks & Eccles, 2006; Jacobs, Vernon, & Eccles, 2005). Prior studies suggest that both indices are associated with positive outcomes, including better academic and psychological adjustment (Fredricks & Eccles, 2006; Jacobs et al., 2005). Based on these findings, it was expected that both indices of involvement would be associated with better social adaptation. Specifically, we hypothesized the following:

Hypothesis 1: Greater intensity and breadth of involvement in organized activities would predict better friendship quality and less social dissatisfaction and loneliness following the transition to college.

Hypothesis 2: Greater intensity and breadth of involvement in organized activities during the transition to college would provide a particular advantage for individuals who have experienced high levels of adolescent loneliness and social dissatisfaction, poor adolescent friendship quality, or whose best friendship has changed during the transition to college.

Hypothesis 3: Greater intensity and breadth of activity involvement would be associated with more frequent endorsement of social motivations when deciding whether to participate in activities during the first year of college.

Hypothesis 4: Emerging adults with lower adolescent friendship quality, higher loneliness and social dissatisfaction during adolescence, and whose best friendship has changed would more frequently cite social motivations when deciding whether to participate in organized activities during their first year of college.

Method

Participants

Participants included 85 adolescents (54 females; 31 males) who ranged in age from 16 years and 7 months to 21 years and 1 month ($M = 18.00$, $SD = 5.98$) at the outset of the study. Participants were students matriculating to a large public university ($n = 25,011$ at year of matriculation). This university is considered competitive regarding entry criterion (i.e., only 29% of applicants accepted for admission, 97% of students in the top 10% of their high school graduating class, an average GPA of 4.1, and 63% and 79% of students receiving scores of 600 or above on their verbal and math SATs, respectively). In addition, 95% of students in the matriculating class were

from the state in which the university was located and lived in university-owned and operated residences on campus. All participants included in this study were from the state in which the university is located and resided on campus. The ethnic distribution of the sample was 29% White/Caucasian ($n = 25$), 22% African American ($n = 19$), 28% Asian American ($n = 24$), 5% Latin American ($n = 4$), 5% Middle Eastern ($n = 4$), 2% Indian ($n = 2$), and 9% mixed ethnicity ($n = 7$). Socioeconomic status of participants' families was largely middle class (Hollingshead for mother, $M = 5.17$, $SD = 3.32$; for father, $M = 6.63$, $SD = 2.58$), and 17% of participants were the first members of their families to attend college. At the Time 2 (T2) assessment, 2 participants chose not to participate, and 2 participants only completed some of the questionnaires, resulting in a follow-up sample of 81 participants (95% retention rate). No differences in adolescent friendship quality or loneliness and social dissatisfaction were found between the participants who completed assessments at both time points versus only the Time 1 (T1) assessment.

Procedures

During the spring of their senior year in high school, 120 adolescents who had indicated their intent to attend the university were contacted by letter and asked to participate in a study about the transition to college. Of these adolescents, 71% ($n = 85$) returned a postcard indicating their interest in the study. A research assistant then contacted the interested adolescents, all of whom consented to participate in the study. Questionnaires were mailed to participants' homes. Adolescents completed the questionnaires and returned them via mail prior to the start of college (T1). Approximately 10 months following the initial data collection, near the end of their first year in college, a research assistant contacted the participants via telephone and described the follow-up assessment (T2). A second set of questionnaires was then mailed to participants and returned via mail.

Measures

Organized activity involvement. This measure, which was created for the purposes of this study, assesses emerging adults' involvement in school- and community-based activities. At T2, participants listed all the activities they had participated in during the college academic year and indicated how many hours per week they were involved in each listed activity. Using this information, two indices of involvement were calculated. Intensity was cal-

culated using the total number of hours per week that the emerging adult was involved in all activities during their first year of college (range in this study was 0 to 40). Breadth of activity involvement was calculated by summing the number of activity categories in which emerging adults were involved during their first year of college (range in this study was 0 to 9). Similar to other measures of extracurricular participation (e.g., Eccles & Barber, 1999), activity involvement was grouped into nine predetermined, mutually exclusive, and exhaustive categories, including athletic (e.g., both individual and team), performance/fine arts (e.g., dance), social (e.g., sorority), community (e.g., volunteer organizations), academic clubs (e.g., debate), professional development (e.g., undergraduate business society), press (e.g., newspaper), leadership/political (e.g., student government), and religious (e.g., church). Participants received a score of 1 (participation) or 0 (no participation) with regard to their involvement in each category.

Social motivations for activity involvement. To assess social motivations regarding activity involvement, participants were asked at T2 to describe the factors that were most important in their decision to participate in an organized activity during their first year of college. Participants' responses were coded as 1 (reflecting) or 0 (not reflecting) regarding a desire for social/peer interaction (i.e., participant indicated that activities provided a way to meet new people). Two undergraduate research assistants who were blind to all study hypotheses coded the responses. A random subset of participants' responses (25%) was used to assess interrater reliability, which was excellent ($\kappa = 1.0$).

Friendship quality. The Friendship Quality Questionnaire (FQQ; Parker & Asher, 1993) was administered at T1 and T2 and included 40 items describing youth perceptions of the quality of their best friendship. Each item is rated on a 5-point scale, ranging from *not at all true* to *really true*. Subscales represent validation, intimacy, conflict, conflict resolution, help and guidance, and companionship within their best friendship. For the purpose of this study, an average of the subscale scores was used to reflect the overall quality of youth's best friendship with higher scores reflecting better quality friendship. In previous studies, the FQQ has been shown to demonstrate high internal consistency (Aikins, Bierman, & Parker, 2005) and was found to have similar internal consistency in this sample (Cronbach's $\alpha = .88$). In addition, participants were asked at both time points about which best friend they were completing the questionnaire. From this response, we were able to determine what percentage of adolescents cited different best

friends across the transition to college.

Loneliness and social dissatisfaction. Participants' loneliness and social dissatisfaction at T1 and T2 was assessed using the Loneliness and Social Dissatisfaction Questionnaire (Asher & Wheeler, 1985). This 24-item scale includes 16 primary items that assess youth's feelings of loneliness versus satisfaction with their current peer relationships and social support and 8 filler items. Each primary item was rated on a 5-point scale, ranging from *not true for me* to *very true for me*. Scores were derived from the sum of the 16 primary items with higher scores indicating more loneliness and social dissatisfaction. This questionnaire has been widely used to assess loneliness and social dissatisfaction and has proved to have high internal consistency (Cronbach's $\alpha = .90$) (see Asher, Parkhurst, Hymel, & Williams, 1990). The internal reliability for this sample was comparable (Cronbach's $\alpha = .92$).

Results

Descriptive Analyses

Means and standard deviations for primary study variables by gender are listed in Table 1. Females reported significantly higher levels of friendship quality than males at T1 and T2. At T1, males indicated higher levels of loneliness and social dissatisfaction as compared with females. No gender differences in either the intensity or breadth of activity involvement were found. Chi-square analyses indicated no significant gender differences in the frequency with which social motivations for activity involvement were cited. Correlational analyses indicated considerable stability in friendship quality and feelings of loneliness and social dissatisfaction from T1 to T2 (see Table 2). Paired *t* tests were used to examine whether there were significant changes over time in friendship quality and loneliness and social dissatisfaction. Friendship quality was significantly higher at T2 as compared to T1, $t(75) = -6.97, p < .001$, but there were no significant differences in loneliness and social dissatisfaction, $t(77) = .22, ns$. Intensity and breadth of activity involvement were strongly related ($r = .59$).

The majority of emerging adults (54%) named a different best friend following the transition to college (T2).¹ Emerging adults who reported the same versus a different best friend at T2 did not differ in terms of T1 or T2 friendship quality or T1 or T2 loneliness and social dissatisfaction and were no more likely to be the first member of their family to attend college. However, dif-

Table 1
Means and Standard Deviations for Main Study
Variables by Gender

	Total (<i>n</i> = 85)		Males (<i>n</i> = 31)		Females (<i>n</i> = 54)		<i>t</i> (83)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Adolescence (Time 1)							
Friendship quality	2.70	0.40	2.49	0.46	2.82	0.32	13.98**
Loneliness	36.39	8.71	39.30	9.98	34.78	7.56	5.47*
Emerging adulthood (Time 2)							
Friendship quality	3.10	0.48	2.84	0.57	3.21	0.38	11.31***
Loneliness	35.84	9.98	37.88	11.38	34.71	9.21	1.76
Activities: Intensity	8.09	8.27	10.00	10.19	7.18	7.18	0.98
Activities: Breadth	1.71	1.06	1.84	1.18	1.65	1.01	0.51

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

Table 2
Intercorrelations Among Primary Variables During
Adolescence and Emerging Adulthood

Variables	1	2	3	4	5	6
Adolescence (Time 1)						
1. Friendship quality	—					
2. Loneliness	-.38**	—				
Emerging adulthood (Time 2)						
3. Activities: Intensity	.05	-.13	—			
4. Activities: Breadth	.06	-.17	.59***	—		
5. Friendship quality	.45**	-.14	.27*	.06	—	
6. Loneliness	-.25*	.61***	-.27*	-.23*	-.29*	—

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

ferences were found in both the intensity and breadth of college activity involvement, $t(53) = 6.75$, $p < .05$ and $t(54) = 6.92$, $p < .05$, respectively, based on reporting a different best friend following the transition to college. Emerging adults who reported different best friends at T2 demonstrated greater intensity ($M = 11.08$, $SD = 8.45$) and breadth ($M = 2.16$, $SD = .90$) of activity involvement than participants who reported the same best friend at T1 and T2 (Intensity: $M = 5.65$, $SD = 6.58$; Breadth: $M = 1.44$, $SD = 1.05$).

Table 3
Hierarchical Multiple Regression Analysis of Intensity of Organized Activity Involvement and Loneliness and Social Dissatisfaction Predicting Time 2 Friendship Quality

	Statistics at Step		Final Statistics
	ΔR^2	β	β
Step 1	.18***		
Time 1 friendship quality		.43***	.40***
Step 2	.03		
Intensity of activity involvement (IAI)		.17	.07
Step 3	.00		
Time 1 loneliness and social dissatisfaction (ALSD)		.01	-.25
Step 4	.05*		
IAI \times ALSD		.97*	.97*
Total R^2	.28***		

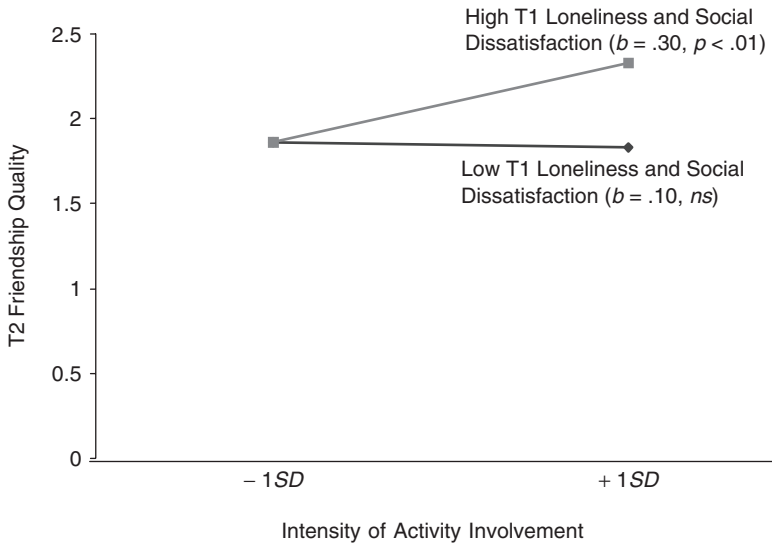
* $p < .05$. ** $p < .01$. *** $p < .001$.

Activity Involvement as a Predictor of Emerging Adults' Social Adaptation

Friendship quality. Hierarchical linear regression analyses were used to investigate whether activity involvement contributes to better friendship quality following the transition to college (T2). To account for continuity in friendship quality over time, T1 friendship quality was entered in the first step of the model. In the second step, intensity of activity involvement was entered followed by T1 loneliness and social dissatisfaction in the third step. To test whether involvement in activities might provide a particular advantage for emerging adults who had high levels of loneliness and social dissatisfaction during adolescence, the two-way interaction between T1 loneliness and social dissatisfaction and intensity of activity involvement was entered in the fourth step. Intensity of activity involvement did not significantly predict changes in best friendship quality across the transition to emerging adulthood; however, the interaction between T1 loneliness and social dissatisfaction and intensity of activity involvement was a significant predictor of T2 friendship quality (see Table 3).

To examine the nature of the interaction, Holmbeck's (2002) guidelines for post hoc probing of moderational effects were used. As shown in Figure 1, post hoc analyses of slopes indicated that for emerging adults who had

Figure 1
Regression Lines for Relations Between Intensity of Activity Involvement and Friendship Quality During Emerging Adulthood as Moderated by Adolescent Loneliness and Social Dissatisfaction



Note: b = unstandardized regression coefficient (i.e., simple slope); SD = standard deviation.

experienced high levels of T1 loneliness and social dissatisfaction, T2 intensity of activity involvement was significantly associated with T2 friendship quality ($b = .30, p < .01$). However, T2 intensity of activity involvement was not significantly related to T2 friendship quality for those emerging adults who had experienced low levels of loneliness and social dissatisfaction at T1 ($b = .10, ns$). In other words, activity involvement only contributed to friendship quality following the transition to college when emerging adults reported higher rates of loneliness and social dissatisfaction during adolescence.

Next, hierarchical linear regression analyses were used to examine whether activity involvement was of particular advantage for those emerging adults who named a different best friend following the transition to college (T2). This model was identical to the previous one except friendship change was entered in Step 3 followed by the interaction term of friendship

Table 4
Hierarchical Multiple Regression Analysis of Intensity of Organized Activity Involvement and Adolescent Friendship Quality Predicting Time 2 Loneliness and Social Dissatisfaction

	Statistics at Step		Final Statistics
	ΔR^2	β	β
Step 1	.38***		
Time 1 loneliness and social dissatisfaction		.61***	.56***
Step 2	.00		
Intensity of activity involvement (IAI)		-.01	.09
Step 3	.01		
Time 1 friendship quality (AFQ)		-.10	-.04
Step 4	.05*		
IAI \times AFQ		-.25*	-.25*
Total R^2	.43***		

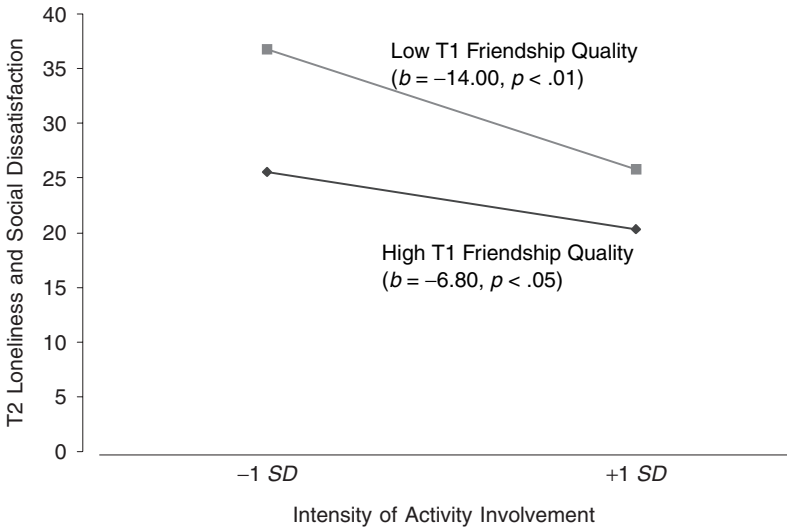
* $p < .05$. ** $p < .01$. *** $p < .001$.

change and intensity of activity involvement in Step 4. Results indicated that the relation between intensity of activity involvement and emerging adult friendship quality did not vary based on whether the emerging adult named a different best friend following the transition to college.

Both models predicting friendship quality were rerun substituting T2 breadth of activity involvement for T2 intensity of activity involvement in the second step. Notably, neither the main nor moderated effects (T1 Adolescent Loneliness \times Breadth of Activity Involvement and T2 Friendship Change \times Breadth of Activity Involvement) of breadth of activity involvement were significant predictors of T2 friendship quality.

Loneliness and social dissatisfaction. Hierarchical linear regression analyses were also used to investigate whether activity involvement contributes to less loneliness and social dissatisfaction following the transition to college. Again, T1 loneliness and social dissatisfaction was entered in the first step of the model to account for continuity in these variables over time. In the second step, intensity of activity involvement was entered followed by T1 friendship quality in the third step. The interaction term of adolescent friendship quality and intensity of involvement were entered on the fourth step. Intensity of activity involvement was not significantly predictive of change in loneliness and social dissatisfaction across the transition to

Figure 2
Regression Lines for Relations Between Intensity of Activity Involvement and Loneliness and Social Dissatisfaction During Emerging Adulthood as Moderated by Adolescent Friendship Quality



Note: b = unstandardized regression coefficient (i.e., simple slope); SD = standard deviation.

college. However, the interaction between T1 friendship quality and intensity of activity involvement was predictive of T2 loneliness and social dissatisfaction even after controlling for T1 levels of loneliness (see Table 4).

Post hoc analyses of moderational effects revealed significant support for T1 friendship quality as a moderator of the association between intensity of organized activity involvement and T2 loneliness and social dissatisfaction (see Figure 2). Specifically, for emerging adults who had low-quality adolescent friendships, intensity of activity involvement was more strongly related to loneliness and social dissatisfaction during emerging adulthood ($b = -14.00, p < .01$) than it was for emerging adults who had experienced higher levels of adolescent friendship quality ($b = -6.80, p < .05$).

In the second model, hierarchical linear regression analyses were used to examine whether activity involvement was of particular advantage in the prediction of T2 loneliness and social dissatisfaction to those emerging adults who reported a different best friend at T2. Results indicated that nei-

ther friendship change nor the interaction between friendship change and intensity of activity involvement were significant.

The two models predicting loneliness and social dissatisfaction during emerging adulthood were rerun substituting breadth of activity involvement for intensity of involvement. Results indicated that neither the main nor moderated effects (T1 Friendship Quality \times Breadth of Activity Involvement and Friendship Change \times Breadth of Activity Involvement) were significant predictors of T2 loneliness and social dissatisfaction after controlling for T1 loneliness and social dissatisfaction.

Social Motivations for Activity Involvement and Social Adaptation

To examine questions about the relations between activity involvement, social motivations, and social adaptation, groups were created based on whether or not emerging adults had endorsed social motivations related to activity involvement. Of the emerging adults, 51% cited social motivations as an important consideration when deciding whether or not to participate in an activity following the transition to college. Using endorsement of social motivations as the grouping criteria, ANOVAs were run to determine whether endorsement of social motivations were associated with differing levels of activity involvement as well as prior and concurrent indices of social adaptation. Emerging adults who cited social motivations got involved in a greater breadth of activities following the transition to college, $F(1, 73) = 3.91, p < .05$, but were not more intensely involved in these activities. Endorsement of social motivations was not related to either friendship quality or loneliness and social dissatisfaction at T1 or T2; however, emerging adults who reported a different best friend at T2 were more likely to cite social motivations when deciding whether to participate in organized activities, $\chi^2(1, N = 50) = 9.64, p < .01$.

Discussion

The primary aim of this prospective study was to examine whether involvement in organized extracurricular activities appears to facilitate better social adaptation across the transition to emerging adulthood. Social adaptation was assessed in terms of the quality of best friendships and ratings of loneliness and social dissatisfaction. It was anticipated that more intense and varied activity involvement would predict better social adaptation across the transition to college for all emerging adults. Findings indicated however that more intense

involvement in activities facilitated better friendship quality for only those individuals who had histories of loneliness and social dissatisfaction during adolescence. Intensity of activity involvement was also more influential in predicting loneliness and social dissatisfaction for those emerging adults with poor-quality friendships during adolescence than those with high-quality friendships. In this manner, more time spent in activities appears to benefit emerging adults who have poorer adolescent social adaptation. Notably, despite these benefits, the emerging adults in this study did not appear to recognize or value the potential social benefits of activity involvement as evidenced by the fact that they were no more likely to cite social motivations for involvement than those with a more positive social adaptation history.

This examination of the social adaptation benefits of organized activity involvement expands on the existing literature in several important ways. First, the findings are partially consistent with results reported in previous qualitative research that suggests activity involvement provides a sense of belonging and an opportunity to initiate friendships characterized by greater intimacy (Dworkin et al., 2003; Patrick et al., 1999). Emerging adults making the transition to residential college often experience feelings of loneliness as they cope with the challenge of forming new friendships (Paul & Brier, 2001; Shaver et al., 1985). The current findings suggest that the benefits of activity involvement were stronger or isolated to emerging adults at risk for poor social adaptation outcomes.

Why might the social benefits of activity involvement have more impact among emerging adults with a history of poor social adaptation? The notion that activity involvement may benefit some youth more than others has been documented in research examining behavioral and educational outcomes. Adolescents at risk for negative outcomes, including early school dropout and criminal behavior, benefited more from involvement than their low-risk peers (Mahoney, 2000; Mahoney & Cairns, 1997). Regarding social adaptation, the transition to college may provide opportunities to build new friendships while also presenting challenges for individuals who have not had positive peer experiences prior to the transition. Emerging adults with a poor history of social adaptation may carry forward social information processing biases or social skills deficits that make the transition to college particularly difficult. For those individuals, involvement in organized activities may provide a smaller, structured social context within the larger college setting. This in turn may enhance their comfort due to their competencies in this domain and/or the likelihood of increased similarity among potential partners, which facilitates the creation of high-quality friendships and feelings of social acceptance.

A second contribution of this work is the role of activity involvement as a means for establishing friendships across the transition to college. Prior qual-

itative research suggests that relationships with peers serve as an important motivational force with respect to adolescents' ongoing involvement in activities (Patrick et al., 1999). Consistent with prior findings (i.e., Oswald & Clark, 2003), more than half of the participants in this study reported a different best friend following the transition to college. Emerging adults who reported a different best friend were involved in not only greater breadth and intensity of activities but also were especially motivated to participate in activities for social reasons, such as the development of new friendships.

These findings also suggest that the relation between change in best friendships and activity involvement in emerging adulthood may be mediated by social motivations. Specifically, emerging adults who experience a change in best friendship may become more motivated to seek out experiences that will provide a high degree of social contact. Emerging adults who are socially motivated then become more involved in a variety of activities to enhance their social contacts and networks. Alternatively, it may be that emerging adults who are more outgoing not only seek out activities to fulfill social needs but also develop new friendships quickly following the transition to college. Due to limitations in the design of this study, we were unable to examine these two possibilities.

It is important to highlight that all findings related to change in best friendships must be interpreted with caution given that the questionnaire that was used in this study did not allow for us to determine whether this change truly reflects a disrupted best friendship. Utilization of other methods to more carefully assess changes and disruptions in friendship status as well as motivations for activity participation, including in-depth qualitative approaches, will be instrumental in developing a theory on activity involvement and social adaptation (Larson, Hansen, & Walker, 2005).

One additional contribution of this study is the relevance of considering multiple indices of activity participation when examining outcomes. A failure to consider activity involvement in this more complex manner has limited previous research (for exceptions, see Fredricks & Eccles, 2006; Jacobs et al., 2005), and increasingly, researchers are recognizing the value of distinguishing between different indices of involvement (e.g., Eccles, 2005). These findings further support this notion. Although breadth and intensity of activity involvement were highly related, each was associated with different outcomes. For example, only intensity of involvement (i.e., number of hours per week) was a significant predictor of social adaptation across the transition to college. In contrast, greater breadth but not intensity of involvement was associated with social motivations for activity involvement. Based on these findings, it appears that different types of activity involvement may provide unique social benefits. More intense involvement may facilitate the develop-

ment of more intimate friendships, whereas greater breadth of involvement may lead to broader social networks, although not necessarily diminishing feelings of loneliness and social dissatisfaction.

Limitations and Future Directions

Several factors should be considered when interpreting the findings from this study. First, the size of the sample was relatively small, which could raise concerns regarding generalizability of these findings. Second, participants in this study were a diverse group of emerging adults enrolled in a large residential university. The specific nature of this sample may contribute to some of the patterns that were found and may not apply to emerging adults who commute to campus or choose smaller residential colleges or alternate life paths (e.g., employment). In this manner, future studies might examine whether the influence of activity involvement on social adaptation is similar for emerging adults across a variety of college, occupational, or academic choices. The examination of these processes in a college sample however is an important first step given the significant social challenges that may accompany this transition (e.g., Paul & Brier, 2001).

Future studies would benefit from including larger sample sizes that would allow for examination of whether activity involvement provided the same social adaptation benefits for males and females. Given the agency-related needs of males, they might experience greater social benefits from involvement in activities that promote feelings of accomplishment or friendship formation through joint activity and competition (e.g., club sports), whereas females' heightened needs for intimacy might contribute to their benefiting more from activities that provide opportunities for personal exchange, self-disclosure, and support (e.g., prosocial organizations). In this manner, not only might the intensity of involvement impact social adaptation, but the type of involvement may also have an effect.

In addition to considering gender-specific effects, future research with a larger sample should consider whether ethnicity moderates the relation between activities and social adaptation. Given the nature and course of friendships during emerging adulthood is to date somewhat understudied (Collins & van Dulmen, 2006), future research might also profit from following participants longitudinally for a longer period of time as a means for examining the role of activity involvement in promoting adaptation across the college years. It is possible that activity involvement provides particular and immediate benefits for youth with poor adolescent social adaptation but that the role of involvement may change as students become adjusted to college and form social networks in multiple contexts.

In sum, findings of this study suggest that organized activity involvement plays an important role in facilitating social adaptation during the transition to college, particularly for adolescents who were at risk for poor outcomes. These findings do not appear to be explained by selection factors. That is, it does not appear that individuals with a history of positive social adaptation during adolescence get more involved in activities that in turn lead to better social outcomes during emerging adulthood. Rather, involvement in organized activities appears to be a protective and promotive context of friendship development that is associated with fewer feelings of loneliness and social dissatisfaction. Given the importance of friendships across the life span, future work should consider how to identify emerging adults who are high risk for poor social outcomes so they can be encouraged to get involved in activities that reflect their unique needs in making a successful transition.

Note

1. Due to the incomplete questionnaire data, information regarding change in participants' best friendships across the transition to college was only available for 70% of the sample.

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