

2015

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Lisa A. Kort-Butler

University of Nebraska-Lincoln, lkortbutler2@unl.edu

David D. Martin

Pennsylvania State University

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The Influence of High School Activity Portfolios on Risky Behaviors in Emerging Adulthood

Lisa A. Kort-Butler and David D. Martin

Abstract

Extracurricular participation in adolescence is often linked to the development of a prosocial identity and social relationships. Through these social psychological mechanisms, participation is thought to prevent risky behavior in adolescence and into emerging adulthood. This study examined the relationship between high school activity portfolios and risky behaviors (i.e. binge drinking, drug use, and law violation) among a college sample. Five activity portfolios were identified, including sports-focused, low involvement, highly engaged, and two combination portfolios. There were significant differences between portfolios on social psychological measures (e.g. prosocial beliefs and social responsibility), current extracurricular involvement, and risky behaviors. Regression models indicated that social psychological factors and current involvement partially mediated the association between portfolios and risky behaviors, but portfolio type retained direct effects. Portfolios associated with involvement across several activity domains were more protective for emerging adults, in part by shaping their beliefs, sense of social responsibility, and continuing involvement.

Keywords: extracurricular activities, law violation, binge drinking, emerging adulthood

Extracurricular activities are a key arena for exploring the processes and outcomes of adolescent development. After-school programs have also been touted for their potential impact in reducing delinquency (Soulé, Gottfredson, & Bauer, 2008). The majority of adolescents report some level of school-based extracurricular involvement

Lisa A. Kort-Butler is an Assistant Professor of Sociology at the University of Nebraska-Lincoln. Her research focuses on adolescent and emerging adult well-being, including law violation and mental health. She also studies media representations of crime and justice. **David D. Martin** is a graduate student in sociology and demography at the Pennsylvania State University. His research interests include the sociology of family and the sociology of crime. Correspondence: Lisa A. Kort-Butler, Department of Sociology, University of Nebraska-Lincoln, 736 Oldfather Hall, Lincoln, NE 68588-0324, USA. E-mail: lkort-butler2@unl.edu

(Feldman & Matjasko, 2005). Research demonstrates that an adolescent's participation in extracurricular activities has a positive effect on well-being (Busseri, Rose-Krasnor, Willoughby, & Chalmers, 2006; Gilman, Myers, & Perez, 2004). The development of prosocial skills, values, and social networks through extracurricular participation is thought to promote prosocial behavior and mental health (Eccles, Barber, Stone, & Hunt, 2003; Marsh & Kleitman, 2002). Research also indicates that these relationships may be dependent on the types of activities in which adolescents participate (Bartko & Eccles, 2003; Larson, Hansen, & Moneta, 2006).

Presumably, the effects of high school participation last beyond an adolescent's active involvement, in part due to their influence on development. Although researchers have taken longitudinal approaches to examine these relationships during adolescence, more research is needed to understand whether these effects extend into emerging adulthood. Two factors may be central. The first is tied to how participation is measured. Research has considered how breadth and intensity of participation may affect emerging adults. However, different patterns of activity participation, termed "activity portfolios," may also exert unique influences on outcomes (Feldman & Matjasko, 2007, p. 315). The second is tied to the mechanisms by which high school participation contributes to later outcomes. For example, the social psychological factors described in previous research may act as mediators, as may current levels of participation.

By identifying activity portfolios, this study explored how patterns of adolescents' extracurricular participation affected risky behaviors measured in emerging adulthood. Compared to count variables or analyses separated by activity type, activity portfolios describe the combinations of extracurricular activities in which adolescents participate. Portfolios provide a person-centered approach, which takes into consideration the reality that young people may engage multiple extracurricular environments, each with its own experiences (Feldman & Matjasko, 2007). Additionally, although a variety of concepts have been posited as mediators of the relationship between participation and behavioral outcomes, few have tested these ideas (Feldman & Matjasko, 2005; Rose-Krasnor, 2009). To address these two issues, this study modeled the effects of factors thought to mediate the relationship between activity portfolios and outcomes, such as prosocial beliefs, a sense of social responsibility, and current involvement. The article proceeds as follows: first, we discuss how patterns of extracurricular participation may be related to risky behavior, emphasizing the use of cluster analysis for a person-centered approach to describing participation. Second, we review research that addresses the relationship between extracurricular participation in adolescence and behaviors in emerging adulthood. Third, we discuss the theoretical underpinnings of research on extracurricular involvement. Fourth, we empirically explore the relationship between high school participation and risky behavioral outcomes in a sample of college students. Finally, we discuss the implication of our results for future research on extracurricular activities.

Literature Review

Patterns of Extracurricular Participation

In general, participation in organized activities during adolescence is linked to less delinquency and substance use (Mahoney, Vandell, Simpkins, & Zarrett, 2009). The total number of activities in which an adolescent participates may also be related to fewer externalizing behaviors (Bonhert & Garber, 2007; Palen & Coatsworth, 2007). However, the literature also reveals a great deal of variability when examining particular measures of participation. The research suggests that sports involvement is tied to risky behaviors like alcohol use (Hoffman, 2006; Mays & Thompson, 2009), delinquency (Gardner, Roth, & Brooks-Gunn, 2008; Miller, Melnick, Barnes, Sabo, & Farrellet, 2007), and aggression (Burton & Marshall, 2005; Kreager, 2007). The relationship between involvement in other types of activities and risky behaviors is less understood. Relative to sports, adolescents involved in prosocial activities (e.g. volunteering) or the performing arts may engage in fewer substance use behaviors (Eccles et al., 2003). One challenge to drawing conclusions is the use of composite scales of risky behaviors, which may combine alcohol use, drug use, delinquency, and/or sexual behaviors, rather than providing separate indices (Denault, Poulin, & Pedersen, 2009; Farb & Matjasko, 2012). Thus, although we can broadly say there is a relationship between extracurricular participation and risky behaviors, the nuances of this relationship have yet to be fully understood.

As one way to address such nuances, scholars have recommended improving how participation is measured (Busseri & Rose-Krasnor, 2010; Mahoney, Harris, & Eccles, 2006). There are several approaches to operationalizing activity participation, including frequency of participation in a single activity, intensity of involvement in an activity (e.g. time commitment), participation within a particular domain of activity (e.g. sports), and breadth or variety of involvement in several activities (Bohnert, Fredricks, & Randall, 2010). Measures of breadth attempt to reflect the reality that adolescents may participate in more than one type of activity. Breadth of extracurricular involvement may have greater benefits compared to involvement in a single domain of activity (Busseri et al., 2006). Breadth provides more opportunities to experience factors that contribute to successful development (Fredricks & Eccles, 2006a). Research indicates that students involved across domains, such as involvement in sports, academics, and school clubs, have lower levels of internalizing and externalizing problems, particularly compared to those students who do not participate (Busseri et al., 2006; Fredricks & Eccles, 2006a; Rose-Krasnor, Busseri, Willoughby, & Chalmers, 2006).

However, measures of breadth may still fail to capture the complexity of adolescents' activity participation. For example, imagine two students who have a breadth score of three. Student A is involved in sports, student government, and

volunteering; Student B is involved in scouting, band, and the school newspaper. Given the variation among these activities, the students are likely to have different experiences (Larson et al., 2006). The concept of *activity portfolio* is used to describe the combinations of extracurricular activities in which adolescents may participate (Feldman & Matjasko, 2007). For example, participation can be categorized as sport-only involvement, activities-only involvement, mixed involvement, or involvement in neither (Bloomfield & Barber, 2009; Kort-Butler & Hagenwien, 2011). Research using this approach demonstrates that adolescents with mixed portfolios report less risky behavior, whereas those with "empty" portfolios report higher levels (Harrison & Narayan, 2003).

To create more refined measures, researchers have turned to cluster analytic techniques to define activity portfolios. Such an approach is considered to be person-centered, focusing on patterns of youth involvement instead of creating count or frequency variables (Busseri & Rose-Krasnor, 2009). Advocates of a person-centered approach argue that portfolios constructed in this way better reflect young people's lived experiences (Linver, Roth, & Brooks-Gunn, 2009). Empirically, the portfolios that are derived from a cluster analysis depend on the sample, the number and types of activities included in a particular study, and the unit of measurement for those activities. Nonetheless, studies that have relied on cluster analytic techniques report similarities in cluster composition, such as clusters that are sports focused, sports in combination with another domain, school club or community group focused, high involvement in several domains, and low involvement (Bartko & Eccles, 2003; Linver et al., 2009; Metzger, Crean, & Forbes-Jones, 2009; Peck, Roeser, Zarrett, & Eccles, 2008; Pedersen, 2005; Zarrett et al. 2009). A more nuanced measurement of extracurricular participation poses a challenge when making a direct comparison to research focused on singular activity types. Even when it comes to sports, where there is the most consistent evidence that focusing on sports may be linked to risky behaviors, how students incorporate sports into their portfolios (or not) may vary. Research on breadth, which may be more comparable to the portfolio approach, suggests combination portfolios should be beneficial. In their study, Bartko and Eccles (2003) found that school- and high-involved portfolios had the lowest self-reported problem behavior, while sports and low involvement portfolios had the highest. In contrast, Metzger et al. (2009) found that certain portfolios that combined school and community activities or community and sports activities were associated with higher levels of delinquency and substance use. Zarrett et al. (2009) observed no differences across portfolios on a composite measure of substance use and delinquency. Given the relatively few number of studies utilizing the approach and differences in how they assess risky behaviors, whether a particular portfolio has a distinct relationship with indicators of risky behavior remains unresolved. Furthermore, none of these studies tested beyond adolescence, so more research is needed to determine if any associations persist into emerging adulthood.

Outcomes in Emerging Adulthood

If activity participation benefits adolescent development, then its effects should extend into young adulthood (Denault & Poulin, 2009). In general, research supports the notion that the benefits of activity participation in high school extend to a variety of outcomes, although benefits are painted in broad strokes. First, there appears to be some consensus that breadth, intensity, and/or duration of extracurricular involvement promotes later educational and occupational attainment and civic engagement, although there is variability in the effects of specific activities (Busseri et al., 2010; Fredricks & Eccles, 2006b; Gardner et al., 2008; Marsh & Kleitman, 2002; Peck et al., 2008; Zaff, Moore, Papillo, & Williams, 2003).

Second, of the studies that examine risk behaviors, findings are inconsistent. Whereas Mahoney (2000) found that those who were involved in extracurricular activities were less likely to be arrested and Fredricks and Eccles (2006b) noted that breadth lead to less drug use, Busseri et al. (2010) observed no relationship between breadth of participation and alcohol use. Results for specific activities also yield inconsistencies. For example, Hartmann and Massoglia (2007) found that high school sports participation was unrelated to general deviance measured at age 30, negatively associated with shoplifting but positively associated with drunk driving. Barber, Eccles, and Stone (2001) also observed that sports participants, compared to nonathletes, drank more as young adults but used drugs less. They noted that youth in prosocial activities drank and used drugs less than nonparticipants, but that youth in performing arts experienced increasing levels of substance use. In contrast, Fredricks and Eccles (2006b) found no relationship between participation in school clubs, sports, or prosocial activities and later risk behaviors. Similarly, with the exception of sports, Fauth, Roth, and Brooks-Gunn (2007), found no consistent link between specific activity types and risk behaviors. Finally, using a portfolio approach, Mays, DePadilla, Thompson, Kushner, and Windle (2010) observed that sports-only and music-only involvement were tied to accelerated increases in alcohol use during young adulthood, but that sports-academics portfolios were tied to slower increases. In sum, other than the potential link between sports involvement and risky alcohol use, more research is needed to understand how high school participation impacts emerging adults.

Theoretical Considerations

There is no ascendant theoretical model that is applied to understanding the relationship between extracurricular involvement and behavioral outcomes (Hoffman, 2006). Rather, explanations focus on a combination of ecological, developmental, and social psychological processes. The ecological approach emphasizes how the context of extracurricular participation interacts with adolescents' developmental

experiences (Farb & Matjasko, 2012). Beyond their specific activities, the atmosphere and characteristics of the club, team, or organization influence youth well-being (Roth & Brooks-Gunn, 2003), and each setting may do so in substantively different ways (Fredricks & Eccles, 2008). Thus, the ecological approach points the importance of considering all extracurricular settings in which an individual participates. Activity portfolios are one method of capturing these varied settings.

Extracurricular activities provide space to process the developmental tasks of adolescence and build social networks (Darling, 2005; Feldman & Matjasko, 2005; Hansen, Larson, and Dworkin, 2003; Larson et al., 2006). For example, they provide adolescents opportunities to learn and practice personal and interpersonal skills useful across a variety of social settings (Eccles et al., 2003). These skills and social networks are theorized to enhance school and community involvement, and promote well-being and prosocial behavior (Eccles et al., 2003; Marsh & Kleitman, 2002). Extracurricular activities also serve as place to explore and form a sense of identity (Hansen et al., 2003). Involvement in extracurricular activities provides adolescents a context for self-assessment outside the more restricted expectations of school and family settings (Barber et al., 2001). Because adolescents have a degree of choice over what activities they do, extracurricular participation can be personally expressive, allowing an adolescent to communicate to the social world "this is who I am" (Barber et al., 2001, p. 431).

In fact, one's subjective identity and sense of self, though built around objective participation, may become more relevant for understanding later outcomes than participation itself. When the activities in which an adolescent participates support an identity, participation validates a sense of self (Feldman & Matjasko, 2005), which can further promote well-being and social attachment (Mahoney, 2000). On the other hand, the identity developed around a set of activities can also be associated with beliefs and social expectations that promote risky behavior (Barber et al., 2001; Miller et al., 2007). Activities thus can foster not only a sense of "who I am," but also "what I believe" and "how I am supposed to act."

In addition to personal development, activities may foster social bonds (Miller et al., 2007). Hirschi's (1969) social control theory characterizes attachment and commitment to, and involvement with prosocial people and institutions as central to the social bond. Participation in extracurricular activities entails involvement in prosocial institutions like school and community, and attachment to prosocial groups (Eccles et al., 2003). Research demonstrates that participation in school-based activities, even those of a nonacademic nature, promotes identification and commitment to school values (Marsh & Kleitman, 2002). Moreover, these connections promote commitment to social norms (Mahoney, 2000). Participation as an adolescent is linked to civic engagement and community involvement in adulthood (Fredricks & Eccles, 2006b; Gardner et al., 2008; Marsh & Kleitman, 2002).

Explanations centered on personal development and social bonds are also

reflected in the positive youth development (PYD) model. Proponents argue that student activities should seek to be proactive in guiding youths' personal and social growth rather than reactive to specific problems (Damon, 2004; Eccles & Gootman, 2002). PYD can be described by the "Five C's:" confidence in one's self and abilities; competence in intellectual, social, and behavioral skills; a character marked by integrity and a moral center; connection to others, the community, and social institutions; and a sense of caring/compassion marked by a sense of empathy and social justice (Lerner, Fisher, & Weinberg, 2000). Research has generally been supportive of the PYD model, most notably in the 4-H Study (Bowers et al., 2010; Lerner et al., 2005).

Whereas the ecological approach to understanding the effects of extracurricular participation points to the utility of defining activity portfolios, the developmental and social psychological approaches point to several mechanisms that link portfolios to behavioral outcomes. Certainly, as the Five C's typology suggests, a sense of self, prosocial personal values and attitudes, and positive social relationships can be treated as outcomes in their own right, as well as social psychological factors that put an adolescent on the path to a well-adjusted and socially integrated adulthood (Lerner, Von Eye, Lerner, Lewin-Bizan, & Bowers, 2010). In this sense, these can also be viewed as factors that affect behavior choices, thus acting as mediators between activity involvement and behavioral outcomes (Park, 2004). Furthermore, if activity portfolios differentially promote such factors, then modeling such social psychological factors as mediators may help us to understand how portfolios lead to different outcomes.

The Current Study

If participation in extracurricular activities during high school "builds character" by promoting positive adolescent social psychological development and social bonds, then those effects should extend into emerging adulthood. However, the research to this point only allows a broad "yes" to the question of whether extracurricular participation in high school contributes to behavioral outcomes in emerging adulthood. Less is known about what activity portfolios are ideal and about how the relationship between participation and behavioral outcomes operates. Additionally, research has yet to fully examine the potential mediating effects of social psychological factors thought to be associated with participation (Feldman & Matjasko, 2005; Rose-Krasnor, 2009). Theoretical models and research on extracurricular participation more generally point to the mediating role of social psychological factors on behavioral outcomes, whether conceptualized as the Five C's (Lerner et al., 2010) or more broadly as a sense of self, prosocial values and skills, and social connectedness (Eccles et al., 2003).

This study extends the existing literature in two key ways. First, it extends research regarding activity portfolios by assessing whether there are meaningful, lasting

effects of high activity portfolios into emerging adulthood, and whether those with certain portfolios are at more or less risk of negative behaviors. Second, the analysis explicitly examines the mediating mechanisms that have been theoretically addressed but infrequently tested in prior research.

To address these issues, the current study explored a series of research questions regarding extracurricular activity portfolios in high school and risky behaviors in emerging adulthood. One method of deriving portfolios, consistent with prior studies, is cluster analysis. These studies led to the expectation that the analysis would reveal clusters that were sports focused, sports in combination with another domain, school club or community group focused, high involvement in several domains, and low involvement. The first set of research questions asked whether activity portfolios are differentially associated with key social psychological factors and current extracurricular involvement, as well as with risky behavioral outcomes. Based on prior research, we anticipated that portfolios characterized by greater breadth (i.e. combination portfolios) would be associated with positive social psychological characteristics, greater involvement, and less risky behavior. A second set of research questions asked whether social psychological characteristics and current involvement mediate the relationship between activity portfolios and risky behavior. In other words, we expected that variation among portfolios in levels of social psychological characteristics and current involvement would account for observed differences in behavioral outcomes between portfolios.

Methods

Data and Participants

The data were part of a secure web-based survey administered to undergraduate students at a large Midwestern university. Researchers visited several introductory-level sociology classes that enrolled students from a variety of majors, ranging in class size from 70 to 250 people. The researchers introduced the survey and provided a handout with the weblink. The students also received emails with an embedded link to the survey. In exchange for completing the survey, students received extra credit. The response rate neared 80%, totaling 719 respondents. The full sample was 62% female, 87% white, and the average age was 19.5 years. On average, respondents had participated in four activities during high school. These data allowed us to identify (retrospectively) the activities in which respondents participated in high school, ask about the social psychological mediators posited in prior research, and measure risky behaviors among emerging adults.

Of the full sample, 716 had nonmissing activity data, which were used in the cluster analysis. One issue with the data was that for most first-year students, there was potential overlap between activity participation in their senior year

of high school and the time frame captured by the outcome measures. Because our interest was in emerging adulthood, the remaining analyses focused on the 415 respondents who were sophomores or above, or who were 20 years or older at the time of the survey. After list wise deletion for missing cases, the final analytical sample size was 401. This subsample was 58% female, 84% white, and the average age was 20.7 years. Table 1 presents the descriptive statistics for this subsample.

Measures

Extracurricular activities

Respondents were presented with a list of 12 different activities that crossed several domains and instructed to mark the activities in which they participated during high school. The list of activities was akin to the 1988 NELS (Marsh & Kleitman, 2002). The activities were: Boy/Girl Scouts; attending religious services; faith-based youth group; volunteer or community service organization; civic group (e.g. Junior Achievement or ROTC); sports team or activity; cheerleading and dance; performance group (e.g. choir, drama, debate); school groups (e.g. yearbook, newspaper,

Table 1. Descriptive statistics ($N = 401$)

Variables	Mean/proportion	SD	Range
Male	0.42	0.49	0/1
Age	20.66	1.57	19/25
Nonwhite	0.16	0.36	0/1
Parents' not married	0.23	0.42	0/1
Parents' education	0.68	0.47	0/1
High school peer law violation	1.75	0.99	0/3
Current peer law violation	1.64	1.00	0/3
Sports-focused portfolio	0.24	0.43	0/1
Low involvement portfolio	0.24	0.43	0/1
Highly engaged portfolio	0.16	0.36	0/1
Civic-sports portfolio	0.17	0.38	0/1
Performance-faith portfolio	0.19	0.39	0/1
Self-esteem	4.80	1.04	0/6.99
Problem-solving	3.63	0.99	0.68/6.24
Prosocial beliefs	4.48	0.99	0.43/7.72
Social responsibility	4.01	1.05	0/6.85
Close to community	4.38	0.98	0.76/6.60
Social support	13.60	2.39	0/16
Current involvement	6.20	2.17	2/10
Binge drinking	0.57	0.50	0/1
Drug use	0.37	0.48	0/1
Law violation	0.53	0.50	0/1

and student government); other school clubs (e.g. Spanish club); FFA or 4-H; and political group (e.g. Young Republicans). If respondents indicated they had ever participated in an activity, they were then asked to indicate during which of grades 9 through 12 they participated. The activity variables used in the analysis were coded so that categories ranged from 0 (never participated to the activity) to 4 (participated 4 years). As opposed to using the dichotomous indicators, the number of years participated better represents continuity or duration of involvement in a particular activity.

Risky behaviors

Three measures of risky behavior were used. *Binge drinking* was measured with one item that asked, "In the past 12 months, how often did you drink five or more alcoholic drinks in one sitting?" *Drug use* was measured with one item that asked, "In the past 12 months, how often did you use pot or other drugs?" For both of these items, the response categories range from 0 (never) to 3 (5 or more times). Using the same response categories, *law violation* was measured with a mean scale of 10 items that asked about a variety of behaviors including vandalism, theft, assault, and driving under the influence in the past 12 months ($\alpha = 0.75$). As with much research on substance use and law violation, the variables were not normally distributed. Both drug use and law violation were positively skewed, with about half reporting no drug use and law violation. Both of these were recoded so that 0 = *never* and 1 = *at least once*. Binge drinking had a mean of 1.00 but was bimodally distributed, with about one-third reporting never and one-third reporting five or more incidents. The variable was recoded so that 0 = *never to once or twice* and 1 = *three or more times*.

Social psychological characteristics

As noted above, several theoretical paradigms point to the role of extracurricular activities in helping youth develop a positive sense of self, prosocial values and skills, and social connectedness. A series of questions on the survey corresponded to these social psychological characteristics. Each question was based on a five-point Likert scale ranging from strongly disagree to strongly agree. Using principal components analysis with varimax rotation, five factors were identified, which were used in the analysis. *Self-esteem*, included six items that reflect the Rosenberg (1989) self-esteem scale, plus a seventh item ("You consider yourself a leader.") that loaded onto the factor. *Problem-solving* included five items, such as "When making decisions, you generally use a systematic method for judging and comparing alternatives," and "You can put off present desires to meet future goals." *Prosocial beliefs* included four items, such as "You consider yourself a moral person," and "Education is important to you." *Social responsibility* consisted of five items, such as "Helping your community is important to you," and "It is everyone's responsibility to make

their community a better place." The final factor, *close to community* consisted of two items about how close the respondent feels to the community and feeling valued by the community. In addition to these five factors, a separate measure *social support* was included, consisting of a mean scale of four items asking respondents how much they felt friends, parents, other family members, and other people their parents' age care about them. Items were rated on a five-point scale ranging from 1 (not at all) to 5 (very much) ($\alpha = 0.73$). Each of the six social psychological variables was rescaled so that zero represented the lowest value.

Current extracurricular involvement

In addition to social psychological characteristics, the literature also suggests that high school participation promotes later involvement, which itself may be protective. Thus, a measure of *current involvement* was included. This was measured with an additive scale of two items, each based on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), in response to the statements, "You are currently active in campus groups" (alternately, community groups) ($\alpha = 0.74$).

Control variables

Control variables were demographic characteristics and peer relationships. Sex was coded so that female was the reference group and *male* was the category. *Age* was a continuous variable. Race was a dummy variable where white was the reference group and *nonwhite* was the category. Two variables represented family factors that may have restricted adolescents' opportunities to participate. *Parents' marital status* while the respondent was in high school was a dummy variable where married was the reference group and divorced or not married was the category. *Parents' education* was a dummy variable where two parents with a college education served as the category.

Although not the substantive focus of this study, peer relationships are related in complex ways to activity participation and its effects, such as influencing selection into high school activities and moderating the relationship between activities and risky behaviors (Feldman & Matjasko, 2005; Gardner et al., 2009; Simpkins, Eccles, & Becnel, 2008). Students with deviant peers may be less likely to join activities or more likely to be socially excluded from activities. As many studies of delinquency indicate, the delinquency of peers may exert an independent influence on one's own risky behavior. To address the former issue, *high school peer law violation* was measured as a response to the question, "When you were in high school, how often did your best friends do things that probably violated the law?" on a scale of 0 (never) to 3 (often). To address the latter, *current peer law violation* was measured as a response to the question, "Right now, how often do your best friends do things that probably violate the law?" on the same scale.

Analysis Plan

The analysis was conducted in four stages. First, cluster analysis was utilized to identify activity portfolios for the entire sample. Second, general linear modeling (GLM) was used to test differences across portfolios on social psychological characteristics, current involvement, and risky behaviors. Third, logistic regressions were utilized to test for differences between portfolio groups on the risky behaviors, controlling for demographic factors and peer relationships. Fourth, the social psychological and involvement measures were entered into the models to determine if they mediated the effect of portfolio type on the outcome measures. Because the study was based on a convenience sample that may involve selection effects, the results should be considered exploratory in nature.

Results

Cluster Analysis

Portfolios of extracurricular activity participation were derived using cluster analysis (Aldenderfer & Blashfield, 1984). Because few respondents marked Scouting, civic groups, FFA or 4-H, or political groups, and because only females marked cheerleading, these categories were excluded from the cluster analysis. After standardizing the remaining seven activity participation variables, the cluster analysis proceeded in two stages (Linver et al., 2009; Metzger et al., 2009). First, the standardized variables were submitted to a hierarchical cluster analysis using a squared Euclidian distance measure with Ward's method, which applies an algorithm to identify homogenous groups. An examination of the dendrogram produced by the hierarchical analysis indicated four to six potential clusters within the data.

Second, to confirm this clustering, the data were submitted to a *K*-means cluster analysis. *K*-means analysis also attempts to identify homogenous groups based on a predetermined number of clusters. In the first pass through the data, the procedure assigns the data randomly to the specified number of clusters and calculates a centroid. The procedure then goes through several iterations of assigning and reassigning cases to clusters until no further changes are required to minimize differences within groups but maximize differences among groups. At the end of the iteration sequence, each case is assigned to a cluster. Because the hierarchical analysis indicated four to six potential clusters, several cluster solutions were alternately tested. A five-cluster solution had the most parsimony, yielding distinct categories with the most even distribution of cases across clusters, as well as yielding clusters that were consistent with prior research (Bartko & Eccles, 2003; Linver et al., 2009; Metzger et al., 2009).

Figure 1 displays the clusters. Because the analysis utilized standardized variables, values greater than zero indicate above average participation compared to the sample, and values less than zero indicate below average participation. The

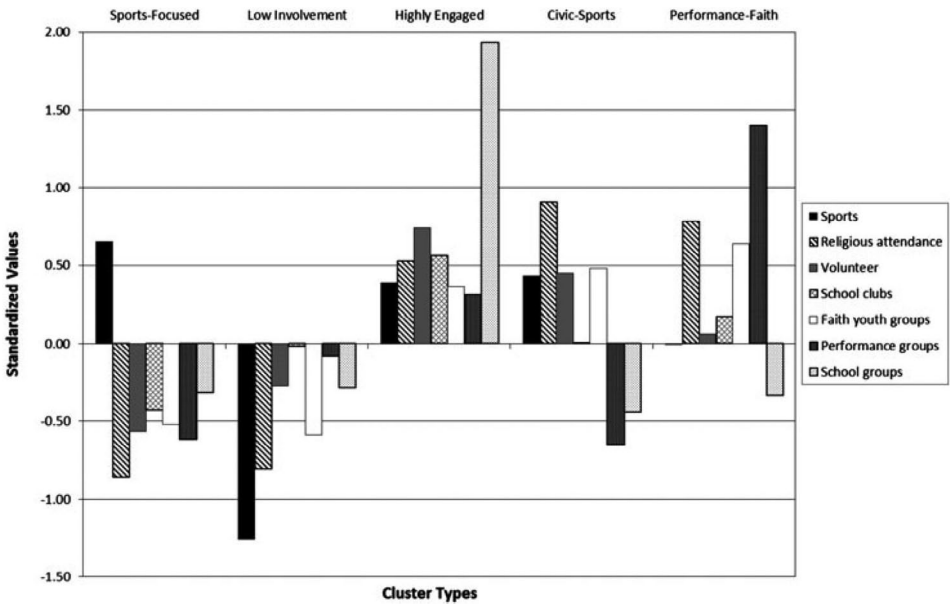


Figure 1. Extracurricular activity portfolios.

sports-focused portfolio was characterized by above average participation in sports but below average participation in all other activities. The *low involvement portfolio* was characterized by below average participation in all activities, particularly sports- and faith-related activities. The small number of respondents who reported no activity involvement was also placed in this cluster. In contrast, the other three portfolios could be considered “combination” portfolios. The *highly engaged portfolio* was characterized by above average participation in all activities, particularly school groups and volunteer organizations. The *civic-sports portfolio* was characterized by above average church attendance and sports participation, as well as involvement in faith-based youth groups and volunteer groups, but below average participation in performance and school groups. Finally, the *performance- faith portfolio* was characterized by above average participation in performance groups, religious attendance, and faith-based youth groups.¹

As indicated above, the cluster analysis was based on the entire sample ($n = 716$), but the remaining analyses focused on a subsample identified as emerging adults ($n = 401$). To verify that this subsample had similar clustering, a separate analysis was conducted, which yielded the same patterns. Table 2 displays mean differences

1. Because research indicates that boys are more likely than girls to participate in sports exclusively, whereas girls participate in more total activities and have greater breadth of participation (Eccles et al., 2003), cluster analyses were also performed separately by sex. The resulting portfolios were much the same (Author, 2012). Both males and females had sports-focused, low involvement, and engaged portfolios. Females also had performance-faith portfolios. The fewer number of males compared to females in this sample may have made it more difficult to detect such a combination portfolio for males.

Table 2. Mean years of activity participation by portfolio

	Sample (<i>N</i> = 401)	Sports-focused portfolio (<i>n</i> = 95)	Low involvement portfolio (<i>n</i> = 96)	Highly engaged portfolio (<i>n</i> = 63)	Civic-sports portfolio (<i>n</i> = 70)	Performance-faith portfolio (<i>n</i> = 77)	<i>F</i>
Sports	2.63	3.73	0.57	3.31	3.46	2.60	122.94***
Religious attendance	2.04	0.42	0.56	3.02	3.85	3.58	178.79***
Volunteer organization	1.47	0.45	0.92	2.81	2.32	1.60	36.83***
School clubs	1.11	0.46	1.00	2.13	1.12	1.25	13.28***
Faith-based youth groups	1.25	0.38	0.18	1.94	2.15	2.38	49.70***
Performance groups	1.31	0.25	1.07	1.78	0.22	3.66	124.68***
School groups	0.86	0.46	0.43	3.44	0.26	0.42	203.81***

****p* ≤ 0.001

in participation in the seven activities by portfolio type. As expected, *F*-tests indicated significant differences across portfolio for each activity. (Appendix A displays a similar table for the full sample).

Portfolio Comparisons

GLM procedures were used to determine whether mean levels of the variables of interest differed across portfolios. For comparisons between portfolio means, *t*-tests were conducted. The *p*-values were adjusted with the Bonferroni correction to account for multiple comparisons. The results are displayed in Table 3. In terms of risky behaviors, the performance-faith portfolio had the smallest proportion of respondents who engaged in all three behaviors, the sports-focused portfolio had the largest proportion of respondents who engaged in binge drinking and law violation, and the low involvement portfolio had the most people who reported drug use. There were several significant differences. In terms of binge drinking, both the sports-focused group (73% binged) and the highly engaged group (62% binged) were significantly different from the performance-faith group (36% binged). In terms of drug use, both the low involvement group (50% used) and the sports-focused group (46% used) were significantly different from the performance-faith group (22% used). The low involvement group was also significantly different from the highly engaged (27% used). Finally, in terms of law violation, the sports-focused group (71% violated) was significantly different from the low involvement group (50% violated), the highly engaged (46% violated), and the performance-faith group (43% violated).

In terms of the social psychological characteristics, there were significant differences across portfolios on four of the six variables. Generally speaking, respondents with sports-focused or low involvement portfolios had the lowest levels of prosocial values, social responsibility, closeness to community, and social support. There were several significant differences. Respondents with a sports-focused portfolio reported significantly lower levels of prosocial beliefs compared to the highly engaged and civic-sports portfolios. Those with sports-focused or low involvement portfolios reported significantly lower levels of social responsibility compared to the combination portfolios. People with a low involvement portfolio felt less close to the community compared to the highly engaged, and felt less social support than all the other portfolios. There were also significant differences across portfolios in current involvement. People with a sports-focused portfolio reported significantly less involvement compared to the highly engaged and civic-sports portfolios. Those with low involvement portfolios reported less current involvement compared to the highly engaged.

In addition to these analyses, each of the social psychological variables and the current involvement variables were regressed using ordinary least squares models on the control variables and dummy variables representing the portfolios. Given

Table 3. General linear models comparing portfolios across variables of interest

	Sports portfolio (n = 95)		Low involvement portfolio (n = 96)		Highly engaged portfolio (n = 63)		Civic-sports portfolio (n = 70)		Performance-faith portfolio (n = 46)		F
	Mean		Mean		Mean		Mean		Mean		
Self-esteem	4.92		4.68		4.74		4.91		4.77		0.88
Problem-solving	3.54		3.69		3.79		3.60		3.55		0.85
Prosocial beliefs	4.16 _{ab}		4.40		4.72 _a		4.75 _b		4.52		5.04***
Social responsibility	3.77 _{abc}		3.65 _{def}		4.32 _{ad}		4.26 _{be}		4.31 _{cf}		8.57***
Close to community	4.34		4.16 _a		4.68 _a		4.48		4.39		2.96*
Social support	13.84 _a		12.55 _{abcd}		13.95 _b		14.23 _c		13.75 _d		6.87***
Current involvement	5.44 _{ab}		5.83 _c		7.14 _{ac}		6.71 _b		6.32		8.15***
Binge drinking	0.73 _a		0.54		0.62 _b		0.59		0.36 _{ab}		6.26***
Drug use	0.46 _a		0.50 _{bc}		0.27 _b		0.30		0.22 _{ac}		5.77***
Law violation	0.71 _{abc}		0.50 _a		0.52		0.46 _b		0.43 _c		4.31**

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$
Coefficients with the same subscript are significantly different at $p < 0.05$, Bonferroni correction applied.

the significant contrasts with the sports-focused and low involvement portfolios, a series of models were performed where each alternately served as the reference group. The results of these models (available on request) largely mirrored the GLM results. Notably, the highly engaged and civic-sports portfolios had significantly greater levels of prosocial beliefs than both reference groups. The highly engaged, civic-sports, and performance-faith portfolios had higher levels of social responsibility and current involvement compared to both reference groups. The highly engaged were also significantly closer to the community than both reference groups. In contrast, the low involvement portfolio had significantly less social support compared to the other four portfolios.

Regression Models

The next stage in the analysis used logistic regression to determine if portfolio type in high school predicted risky behaviors in emerging adulthood, controlling for relevant variables. In the analyses, the risky behavior outcomes were first regressed on the control and portfolio dummy variables. Then, to determine if social psychological factors mediated the relationship between portfolio type and outcomes, the four variables shown to be significantly different across portfolios were entered into the regression models. If entering the social psychological variables into the models reduced the effect of the portfolio variables, it was considered evidence for mediation; that is, group differences in social psychological factors explained the difference between portfolios. The final models also included current extracurricular involvement as potential mediator.

Following previous literature, the sports-focused group served as the reference group (Linver et al., 2009). Prior research suggests that sports involvement, particularly exclusive sports involvement, may be linked to more risky behavior. Furthermore, in this sample, the sport-focused group generally had the highest levels of binge drinking and law violation, as well as significant contrasts on drug use. Additional analyses were also conducted using the other portfolio types as the excluded group; results of interest are discussed below.

Table 4 displays the regression results. For ease of presentation, the control variables are not included in the table. However, across models, being male was consistently related to greater likelihood of bingeing and law violation, high school peer law violation was related to greater likelihood of bingeing and drug use, and current peer law violation was related to all three risky behaviors.

Model 1 for binge drinking indicates that compared to those with a sports-focused portfolio, people with performance-faith portfolio were 67% less likely to have engaged in binge drinking. Model 2 introduced the social psychological variables. Both prosocial beliefs and social responsibility predict less binge drinking, and attenuate the differences between the performance-faith and the sports-focused portfolios.

Table 4. Logistic regressions on risky behaviors, sports portfolio as reference group

Variables	Binge drinking			Drug use			Law violation		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Low involvement portfolio	0.59	0.58	0.67	1.85+	1.85+	1.86+	0.43*	0.38**	0.39*
Highly engaged portfolio	0.77	1.06	1.38	0.45*	0.55	0.56	0.53	0.66	0.71
Civic-sports portfolio	0.70	0.94	1.14	0.56	0.71	0.71	0.43*	0.53+	0.55
Performance-faith portfolio	0.33**	0.42*	0.46+	0.56	0.63	0.63	0.50+	0.59	0.61
Prosocial beliefs		0.76*	0.74*		0.66**	0.66**		0.89	0.89
Social responsibility		0.70**	0.81		0.89	0.89		0.71**	0.73*
Close to community		0.90	1.07		0.95	0.96		0.89	0.93
Social support		1.05	1.06		0.97	0.97		0.97	0.97
Current involvement			0.78***			0.99			0.94
Model χ^2	111.21***	123.64***	136.53***	108.89***	121.20***	121.21***	103.32***	113.78***	114.64***
Block χ^2		12.43*	12.89***	1	0.01	10.46*	0.86		
Nagelkerke R^2	0.33	0.36	0.39	0.33	0.36	0.36	0.31	0.33	0.34

+ $p < 0.10$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$
Standardized coefficients reported. All models include the control variables.

Model 3 included current involvement, which is associated with less binge drinking. Including this variable further mediated the difference between the sports-focused and performance-faith portfolios, although those with a performance-faith portfolio were still 58% less likely to have engaged in binge drinking.

Model 1 for drug use indicates that compared to the sports-focused portfolio, those with a low involvement portfolio were 85% more likely to have used drugs, whereas those with a highly engaged portfolio were 55% less likely to have used. Model 2 introduced the social psychological variables, with prosocial beliefs predicting less drug use. Although it does not appear to affect the relationship between the sports-focused and low involvement portfolios, the difference between the sports-focused and the highly engaged portfolio is reduced to nonsignificance. In other words, prosocial beliefs appear to mediate the difference in drug use between these two portfolios. Current involvement, included in Model 3, is not significant.

Model 1 for law violation indicates that compared to the sports-focused portfolio, those with low involvement and civic-sports portfolios were 57% less likely to have violated the law, and those with a performance-faith portfolio were 50% less likely to have violated. Model 2 introduced the social psychological variables, with social responsibility predicting less law violation. Although it does not appear to affect the relationship between the sports-focused and low involvement portfolios, the effect of the civic-sports portfolio is attenuated, and the effect of the performance-faith portfolio is reduced to nonsignificance. Here, social responsibility appears to have a mediating effect. In Model 3, although current involvement is nonsignificant, the contrasts with the sports-focused and civic-sports portfolios are reduced to nonsignificance, suggesting that current involvement also plays some mediating role. However, there remains a significant contrast between the low involvement and sports-focused portfolios.

Additional models

Additional logistic regressions were conducted in which each portfolio was alternately excluded. Table 5 presents the models that had significant contrasts among the portfolios and did not duplicate contrasts already presented. When the performance-faith portfolio acts as the reference group, in addition to the noted difference with the sports-focused portfolio, there are significant contrasts in binge drinking with the highly engaged and civic-sports portfolios. The highly engaged were 130% more likely and the civic-sports group 110% more likely to have binged. As indicated above, introducing the mediating variables substantially reduces the contrast with the sports-focused portfolio. However, even in the full model, in which prosocial beliefs and current involvement predict lower likelihood of bingeing, there remain significant differences with the highly engaged and civic-sports portfolios. In this case, given that these groups had similar levels of prosocial beliefs and current

Table 5. Additional logistic regression models

Variables	Binge drinking			Drug use		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Sports-focused portfolio	2.99**	2.40*	2.16+	0.54+	0.54+	0.54+
Low involvement portfolio	1.76	1.40	1.44	–	–	–
Highly engaged portfolio	2.30*	2.54*	2.98*	0.24***	0.30**	0.30**
Civic-sports portfolio	2.10+	2.27*	2.45*	0.30**	0.38*	0.38*
Performance-faith portfolio	–	–	–	0.30**	0.34*	0.34*
Prosocial beliefs		0.76*	0.74*		0.66**	0.66**
Social responsibility		0.70**	0.81		0.89	0.89
Close to community		0.90	1.07		0.95	0.96
Social support		1.05	1.06		0.97	0.97
Current involvement			0.78***			0.99
Model χ^2	111.21***	123.64***	136.53***	108.89***	121.20***	121.21***
Block χ^2		12.43*	12.89***		12.32*	.010
Nagelkerke R^2	0.33	0.36	0.39	0.33	0.36	0.36

+ $p < 0.10$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$
Standardized coefficients reported. All models include the control variables.

involvement to the performance-faith group, these variables may have a suppressing rather than mediating effect. Examining drug use, when the low involvement portfolio serves as the reference group, there are significant contrasts with the other four portfolios, all of which were less likely to have used drugs. Although prosocial beliefs are related to decreased likelihood of drug use, it did not appreciably affect these contrasts. Rather, in the full model, compared to the low involvement group, the sports focused were 46% less likely to have used, the highly engaged 70% less likely, the civic-sports group 62% less likely, and the performance-faith group 66% less likely to have used drugs.²

Discussion

Extracurricular participation is thought to build social bonds and contribute to PYD, thereby promoting prosocial behavior in adolescence and beyond (Eccles & Gootman, 2002; Mahoney, 2000; Marsh & Kleitman, 2002). Furthermore, these relationships may in part be dependent on the activities in which adolescents participate (Bartko & Eccles, 2003; Linver et al., 2009; Metzger et al., 2009). Based on prior theoretical and empirical work, this study focused on: identifying extracurricular activity portfolios that respondents had in high school; determining if activity portfolios were differentially associated with key social psychological factors and current extracurricular involvement, as well as with risky behaviors assessed in emerging adulthood; and testing whether social psychological characteristics and current involvement mediated the relationship between activity portfolios and risky behavior.

The current study identified five activity portfolios that were consistent with prior research: a sports-focused portfolio, a portfolio marked by low involvement in all activities, a portfolio characterized by involvement in all activities, and two other combination portfolios, one focused largely on church, sports, and volunteer groups, and one focused on performance and faith-based activities (Bartko & Eccles, 2003; Linver et al., 2009; Metzger et al., 2009). People with below average involvement fared worse than those with combination portfolios on several social psychological indicators, including prosocial beliefs, social responsibility, and social support, and were currently less involved in community and campus groups. They were also more likely to use drugs. Research on the advantages and disadvantages of sports is equivocal (Mays et al., 2010; Miller et al., 2007), but by utilizing a portfolio approach, this

2. In a supplemental analysis, rather than using portfolios, a measure of breadth (the total number of activities the respondent marked) was used as a regressor. As would be expected from prior research, greater breadth was associated with lower likelihood of risky behaviors. The advantage of the portfolio approach is that it provides a more refined picture of differences among individuals who share similar levels of participation (Bartko & Eccles, 2003), rather than simply saying three activities is better than two. For example, the portfolio approach revealed Student X, whose three primary activities were performance groups, religious attendance, and youth groups (the performance-faith portfolio) is less likely to binge drink than Student Z, whose three primary activities were sports, religious attendance, and volunteering (the civic-sports portfolio).

study clearly demonstrated participation in sports was not necessarily detrimental. Rather, people with a sports-focused portfolio were largely similar to or had even poorer outcomes than the low involvement group. They also reported lower levels of prosocial beliefs, social responsibility, and current involvement compared to the compared to the combination portfolios. They were more involved in binge drinking and law violation. In contrast, those who were highly engaged or had combination portfolios fared better on the social psychological measures, and reported more participation and less risky behavior. In short, involvement across a variety of activities during high school was more beneficial for emerging adults than a narrow focus in sports or limited involvement.

Scholars investigating extracurricular participation maintain that participation contributes to personal development and social bonding, thereby promoting positive outcomes (Mahoney, 2000), and the current study explored possible mediating effects between portfolios and risky behaviors. Using the sports-focused portfolio as the reference group, results indicated that factors described by theory and research did act to mediate the differences between this group and the other portfolio types. In particular, prosocial beliefs, social responsibility, and current involvement substantially reduced the difference in binge drinking between the sports-focused and performance-faith portfolios. Prosocial beliefs also accounted for the difference in drug use between the sports-focused and highly engaged portfolios, whereas social responsibility accounted for the difference in law violation between the sports-focused portfolio and both the civic-sports and performance-faith portfolios. In other words, compared to sports-focused people, people who had portfolios that combined several activity domains were less involved in risky behaviors as emerging adults, in part because they espoused prosocial beliefs, had a greater sense of social responsibility, and were currently more involved in campus and community groups.

Nonetheless, it is also important to note that some significant differences remained even when the mediating variables were taken into consideration. First, the low involvement group was more likely to have used drugs compared to all other groups. Several other factors not examined in this study may be relevant for understanding these differences. For instance, adult leaders or skill-building within activities may play a key preventative role when it comes to drug use, so that young people who are not involved do not receive the same level of support against drug use (Gottfredson, Gerstenblith, Soulé, Worner, & Lu, 2004). Similarly, students who participate in activities may receive more monitoring, particularly when it comes to drug tests, contributing to less experimentation with drugs during the adolescent years and less use in young adulthood. Second, those with a low involvement portfolio remained less likely to have violated the law than those with a sports-focused portfolio, controlling for deviant peer relationships. However, peer relationships not directly tied to illegal behavior may explain this difference, such as support for attitudes and beliefs that encourage risk-taking, and low involved people may have less exposure to such peer attitudes (Mahoney & Stattin, 2000).

Third, people with a performance-faith portfolio were less likely to binge compared to the people with other combination portfolios. Other factors not assessed in this study may help account for this distinction. For example, performance and faith-based activities may be differentially associated with certain adult relationships, interpersonal skills, and attitudes than discourage risky behaviors like binge drinking. In short, to better understand how portfolios are related to risky behaviors and other outcomes, more research is needed to uncover how individuals experience participation, such as their relationships with adults, with peers in the activity, and role modeling and support for prosocial behaviors.

Limitations and Directions for Future Research

The data were limited in several ways. First, the study relied on a college-based convenience sample at one institution, which may limit generalizability. Second, the data regarding participation were retrospective, which may subject them to error. However, most respondents in the sample had graduated in recent years, so their ability to recall in what activities they participated may not have been hampered. Third, a college-based sample may involve selection effects; that is, college students, compared to other young adults who did not enroll in a four-year college, may have had higher rates of activity participation in high school. In the current study, only 2% of respondents reported no involvement of any kind in four years of high school. By comparison, a national sample reported 24% of respondents were non-participants, but that study only included school-based activities in one school year and did not include religious or civic activities (Feldman & Matjasko, 2007).

Fourth, we were also unable to determine how selection into high school activities may have been influenced by earlier social psychological or social structural factors. Indeed, selection effects are problematic for many studies of extracurricular activities (Darling, 2005; Mahoney et al., 2009). The voluntary nature of participation means that factors related to demographic characteristics like race/ethnicity and social class may limit participation. Students who are more invested in school or who are more oriented to their futures, and who are supported in doing so, may intentionally build diverse portfolios (Guest & Schneider, 2003). In contrast, students who are less well integrated into school or their communities, or who are more inclined to antisocial behavior, may also shy away from participation. Although we attempted to control for some of these factors with demographic, family, and peer variables, our inability to account for earlier social psychological characteristics prohibits strong causal arguments.

Given these limitations, this study should be considered exploratory and a starting point for additional research. First, the current study suggests that the effects of activity portfolios extend into emerging adulthood, but research would benefit from a prospective longitudinal study tracking several antisocial outcomes across a more representative population of emerging adults both in and out of college,

while also accounting for the many factors that affect selection into activities. Second, although the results of this study add to our understanding of the association between portfolios and behavioral outcomes, continued research on extracurricular activities using the portfolio approach is warranted to establish which portfolios are most protective. Researchers should also consider variations in activity portfolios by gender, race/ethnicity, socioeconomic status, urban/rural location, and school size, all of which may be associated with structured opportunities and support for participation.

Third, this study supports the idea that social psychological factors and current involvement may be avenues by which high school participation influences later behavior, so researchers should continue to investigate the mechanisms by which extracurricular participation influences later behavior. In addition to these mechanisms, researchers should consider how adolescents may ground their identities in a portfolio. For instance, as Miller and her co-authors (2007) have demonstrated, there may be qualitative differences in being focused on sports and claiming a "jock" identity, with the identity having greater relevance for risky behaviors and other outcomes. How adolescents identify themselves vis-à-vis their portfolios (or lack thereof) may also have implications for how they interact with their social worlds as they mature (Barber et al., 2001).

A further consideration is whether a person's portfolio (and related identity) is associated with social status and social value. Activity-based identities are given meaning by the specific school or community context, and the benefits of activity participation are likely dependent on the reward structure of the social environment in which they are situated (Gilman et al., 2004; Sutor, Minyard, & Carter, 2001; Videon, 2002). For example, athletics are an important means of status enhancement and a route to high school prestige (Videon, 2002) but may also shield participants from some of the consequences of risky behaviors. In this study, we were unable to examine these contextual factors but future research should consider such effects.

Researchers should also explore the means by which key social psychological factors like prosocial beliefs, social responsibility, and social connection are transmitted within activities (e.g. hands-on activities, adult role modeling, and community support) to improve programming targeting adolescents (Hansen et al., 2003). Even within portfolios, there is room for variation in how individuals experience different activities and how those activities contribute to personal development and social connectedness (Feldman & Matjasko, 2007). Well-structured activities that emphasize building social skills and developing character tend to have the strongest impact on young people's deviant behaviors (Gottfredson et al., 2004; Mahoney & Stattin, 2000), and the degree to which a young person experiences several such extracurricular environments may provide a "tool kit" that leads to prosocial behavior in emerging adulthood. However, a given portfolio type may take on different meanings across socioeconomic and cultural contexts (Guest & Schneider, 2003). Thus, a family, school, or community environment that encourages trying new things, provides access to a variety of activities regardless of individual financial barriers,

places equal social value on those activities, and coordinates among activities may promote positive behavior in adolescence and beyond (Kort-Butler, 2012).

In conclusion, activity portfolios are a constructive way to describe the complexity of adolescents' extracurricular involvement, yielding meaningful distinctions. Notably, keeping the sample limitations in mind, the results indicated that activity portfolios in high school can have effects on risky behavior that extend into emerging adulthood. High school activity portfolios that combine several domains appear to be more advantageous than narrowly focused or limited involvement, in part by shaping the beliefs, sense of social responsibility, and continuing involvement of the young people who participated.

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Appendix A. Mean years of activity participation by portfolio, full sample

	Sample (<i>N</i> = 716)	Sports-focused portfolio (<i>n</i> = 171)	Low involvement portfolio (<i>n</i> = 167)	Highly engaged portfolio (<i>n</i> = 109)	Civic-sports portfolio (<i>n</i> = 138)	Performance-faith portfolio (<i>n</i> = 131)	<i>F</i>
Sports	2.61	3.73	0.44	3.28	3.35	2.61	213.69***
Religious attendance	2.06	0.40	0.46	3.08	3.81	3.57	329.82***
Volunteer organization	1.58	0.63	1.03	2.84	2.35	1.69	51.12***
School clubs	1.16	0.51	1.05	2.03	1.17	1.43	19.30***
Faith-based youth groups	1.34	0.44	0.31	1.96	2.17	2.44	72.43***
Performance groups	1.34	0.29	1.11	1.87	0.22	3.75	217.22***
School groups	0.85	0.43	0.43	3.43	0.26	0.40	369.52

*** *p* ≤ 0.001