EMPIRICAL RESEARCH

Beyond Participation: The Association Between School Extracurricular Activities and Involvement in Violence Across Generations of Immigration

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Abstract Participation in extracurricular activities is purported to protect the broad spectrum of youth from a host of behavioral risks. Yet, empirical research on the extent to which this assumption holds for involvement in violence by immigrant youth is limited. Thus, using data for 13,236 (51.8% female) adolescents from the National Longitudinal Study of Adolescent Health, this study explores how the relationship between extracurricular activities and youth violence varies by type of extracurricular activity profile (sports alone, non-sports alone, and a combination of sports and non-sports) and by generations of immigration (first, second, and third-plus). The sample is composed of 9.3% (n = 1,233) first-generation youth, 15.7% (n = 2,080)second generation, and 74.9% (n = 9,923) third-plus generation. The results reveal that adolescents from the thirdplus generation (i.e., non-immigrant youth) who participate in non-sports alone or sports plus non-sports have lower odds of involvement in violence than adolescents from the same generation who do not participate in extracurricular activities. However, for first- and second-generation adolescents, participation in extracurricular activities is associated with higher rather than lower odds of violence compared to their non-participating counterparts. These findings challenge the viewpoint that participation in mainstream extracurricular activities as afforded by US schools is equally beneficial for all youth. They also call for additional research that explores why immigrant youth are less likely than non-immigrant youth to gain violencereducing benefits when they participate in extracurricular activities.

Keywords Extracurricular activities · Violence · Adolescents · Generations of immigration

Introduction

School extracurricular activities such as athletics, fine arts, and vocational and academic subject clubs have been identified as a vital developmental context for American youth, with participation in such activities often viewed as an important strategy to protect youth from engaging in a variety of risk behaviors (e.g., Eccles et al. 2003; Feldman and Matjasko 2005). Consistent with this viewpoint, approximately 75% of youth in grades seven through 12 participate in at least one such activity during the school year (McRee and Cote 2002). Importantly, the anticipated benefits of participation in extracurricular activities are assumed to apply broadly for all youth. Yet, findings from studies that have explored the association between participation in extracurricular activities and risk behaviors are mixed. Some research has linked youths' participation in structured extracurricular activities to a lower likelihood of risk behaviors such as internalized behavior problems, depressive symptoms, dropping out of school, substance use, and delinquent and anti-social behaviors (Bohnert and Garber 2007; Darling 2005; Dotterer et al. 2007; Mahoney 2000). Other studies fail to demonstrate consistent beneficial effects of participation in extracurricular activities in reducing risk behaviors (e.g., Eccles and Barber 1999; Kreager 2007). And still others demonstrate a protective effect of participation, but also indicate that differences in

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outcomes between participants and non-participants are relatively small (Darling et al. 2005). In brief, despite widely held assumptions of uniformly beneficial effects, research indicates that participation in school extracurricular activities has a variable, and sometimes detrimental, influence on youths' behavior.

There are a variety of possible explanations of the mixed results. Studies explore different outcomes, consider different aspects of participation in extracurricular activities, and examine different school or regional settings. Further, much research considers student populations as a whole without regard to differences across youth (e.g., their immigrant status) that might result in a variable influence of participation in extracurricular activities on a given risk behavior. The purpose of this investigation is to further explore the role of participation in extracurricular activities in problematic youth behavior, while taking into account some of the influences that may explain the differential effects observed in prior research. Specifically, we explore the influence of several extracurricular activity profiles on involvement in violence for a nationally representative sample of youth, while also giving attention to the potential variable influence of participation in extracurricular activities for youth across generations of immigration. Our analyses address three specific questions. What is the relationship between different profiles of extracurricular activities (i.e., sports alone, non-sports alone, combination of sports and nonsports) and adolescent violence? Does the generation of immigration of a youth influence his/her likelihood of participation in violence? And, does the generation of immigration moderate the relationship between participation in extracurricular activity and youthful involvement in violence? In addressing these questions, we hope to provide a clearer picture than heretofore available of what types of school activities reduce the likelihood of youthful involvement in violence, and for youth from what groups (recent immigrant/non-immigrant) is participation more or less beneficial. We first lay the conceptual groundwork for the analyses that follow.

Youth Violence and Participation in Extracurricular Activities

Youthful involvement in violence and its prevention has garnered considerable national attention in recent years from both academics (e.g., Haynie and Payne 2006; Linville and Huebner 2005; Resnick et al. 2004) and policy organizations (e.g., Centers for Disease Control; Office of Juvenile Justice and Delinquency Prevention). Notably, citing evidence from a host of sources, the Centers for Disease Control (CDC) has called attention to a variety of forms of youth violence, including rates of

homicide, non-fatal injuries, violence-related behaviors, school violence, school-associated violent deaths, and juvenile arrests for violent crime (Centers for Disease Control 2010; see also Billiteri 2010). The reported data highlights the fact that homicide is the second leading cause of death among young people between 10 and 24; that, nationwide, 39% of males and 23% of females among youth in grades nine through 12 report being in a physical fight in the past 12 months; and that juveniles account for approximately 16% of those arrested for violent crime. Related to its concern about youth violence, the CDC funds a number of "National Academic Centers of Excellence on Youth Violence Prevention," related collaboratives, and research projects (Centers for Disease Control 2011a). Of note, high levels of youth violence prevail in the contemporary period despite declines in violence from the mid-1990s through the mid-2000s (Centers for Disease Control 2011b).

Despite the national emphasis on youth violence and its prevention, prior research has seldom investigated the links between participation in school extracurricular activities and youthful involvement in this form of delinquency. One exception is Linville and Huebner's (2005) analysis of the role of extracurricular activities in physical fighting and weapons carrying for rural boys versus girls. They found that participation in school extracurricular activities does not significantly influence boys' fighting or weapons carrying or girls' weapons carrying. However, such activities contribute to less fighting by girls. While the comparative structure (gender differences) of this study is helpful, its focus on rural youth in a single community means that it is unclear to what extent the findings apply broadly to the larger population of youth in US schools. Although he focuses on victimization rather than offending, Peguero (2009) has conducted a study of the links between extracurricular activities and violence victimization for a national sample of school youth. He demonstrates that involvement in classroom-related extracurricular activities and clubs is associated with a greater likelihood of violent victimization, while involvement in interscholastic sports is related to a lower likelihood of such victimization. These findings are interesting, but they raise the question of whether these same or reverse patterns would prevail for the relationship between participation in school extracurricular activities and the perpetration of violence. This is the type of question that we take up in the analyses below.

Patterns of Participation in Extracurricular Activities and Delinquency

There are a variety of mechanisms through which participation in extracurricular activities may reduce the likelihood of problematic youthful behavior such as



involvement in violence. For example, school extracurricular activities serve as organized and constructive contexts where youth are supervised by adults and have less time available for involvement in unstructured and unsupervised contexts (Osgood et al. 2005). Also, participation in extracurricular activities may promote connections to conventional others and activities and thereby curtail involvement with delinquent peers or others whose activities and sentiments might promote problematic behavior. For example, such participation may promote youths' attachment to school (Dotterer et al. 2007; Fredricks and Eccles 2005), offer opportunities for the intensification of social ties between parents and children (Broh 2002), or increase the likelihood that youth will associate with nondeviant peers who value academics and conventional activities (Barber et al. 2001; Fredricks and Eccles 2005; Mahoney 2000). To the extent that school extracurricular activities serve the above functions, participation in them should serve as a protective factor that prevents youth from getting involved in risk behaviors like violence.

As noted, some research confirms that participation in extracurricular activities has this type of beneficial outcome (Darling et al. 2005; Dotterer et al. 2007; Fredricks and Eccles 2008; Mahoney and Stattin 2000; Rose-Krasnor et al. 2006), while other studies provide evidence that such participation has negligible or even detrimental effects for youth (e.g., Eccles and Barber 1999; Kreager 2007). Differences in the conceptualization and operationalization of participation is one possible reason for such mixed findings. Research on the role of participation in school sports provides an illustration. Here too, variable findings are observed with some studies supporting the expectation that involvement in sports is associated with less delinquency (McNeal 1995; Schmidt 2003), other studies indicating little or no relationship between participation in sports and delinquency (Heights and Jenkins 1996; Spreitzer 1994), and still others demonstrating that youth who engage in extracurricular sports activities are more likely to be involved in delinquency than their counterparts who do not (Kreager 2007; Melnick et al. 2001). In this body of work, participation in extracurricular activities is often operationalized as a dichotomous variable distinguishing between youth who participate in sports and those who do not. This type of participation versus non-participation definition is problematic in that it may fail in two ways to differentiate between meaningful types or combinations of types of participation in extracurricular activities and their corresponding differential links to developmental outcomes (Bartko and Eccles 2003). First, youth in US schools often simultaneously participate in two or more types of extracurricular activities (Feldman and Matjasko 2007). This means that with the dichotomous operationalization, sports participants are composed of two groups: youth who focus exclusively on sports and those who are simultaneously engaged in sport and non-sport activities. Treating individuals in these two groups together makes it difficult to determine whether an effect of participation is due to involvement in sports per se, involvement in other types of activities per se, or involvement in sports and non-sports simultaneously (i.e., having a more diverse activity profile). Second and by the same token, when youth are categorized as sports participants or non-participants, the latter group may be made up of youth who spend a great deal of time in alternative extracurricular activities and those who simply are not engaged in any school extracurricular activities. Combining these types of non-participation in sports confounds the results by obscuring whether youth are worse off (or better off) when they fail to participate in sports or fail to participate in any extracurricular activity.

Recognizing the complexity of involvement in activities, a growing body of research has begun to distinguish between exclusive participation in sports or non-sports versus having a diverse activity profile across sports and non-sports. A consistent narrative emerging from this literature is that youth who participate in sports generally have a lower likelihood of troublesome outcomes than those who are not involved in extracurricular activities, with the benefits of participation in sports over non-participation being more pronounced when involvement in sports occurs in conjunction with involvement in nonsports (Fredricks and Eccles 2006; Harrison and Narayan 2003; Linver et al. 2009). To illustrate more concretely, Harrison and Narayan (2003) studied ninth graders and demonstrated that participation in sports, alone or in combination with other activities, is associated with a lower likelihood of suicidal behavior, substance abuse, and physical and sexual abuse victimization. Further, substance abuse and vandalism are less common for participants who combine sports and non-sports than for those who participate in sports alone. In addition, when participants in sports alone are compared with participants in non-sports alone, the latter group has more favorable outcomes than the former. Similarly, Gardner et al. (2009) found that the likelihood of non-violent delinquency among boys who participate in sports is lower than for boys who do not participate in extracurricular activities after adjusting for race/ethnicity, family structure, parental education, and prior nonviolent problem behavior and physical violence. However, boys who participate only in sports activities have a higher likelihood of such delinquency than those who combine sports with involvement in other activities. In general, recent research indicates that participation in extracurricular activities has protective benefits for youth over non-participation; however, participation yields the greatest protection from risky behaviors when youth are



simultaneously involved in sports plus non-sports, followed by involvement in non-sports and then by sports alone.

Why should participation in a diversity of extracurricular activities be associated with less involvement in youthful delinquency and other behavioral risks than involvement in a single domain of activity? The answer to this question is not entirely clear. Scholars speculate that involvement in a mix of organized activities offers youth exposure to a greater variety of adults, peers, skills, and experiences that may promote successful development and more readily counter the risks of problematic behaviors (Fredricks and Eccles 2006). Relatedly, a mix of extracurricular activities may provide youth with opportunities to acquire the competence and confidence to overcome adversities that would otherwise lead to risk behaviors (Schmidt 2003). Also, participating in a combination of activities may counterbalance the risks associated with participation in other extracurricular activities (e.g., certain contact sports) that themselves enhance the likelihood of problem behaviors (Linver et al. 2009). Whatever the reason, recent literature leads to two general conclusions about the extracurricular activityproblematic youthful behavior relationship. First, participation in organized activities is associated with more favorable development than no participation in extracurricular activities (Feldman and Matjasko 2005; Fredricks and Eccles 2006; Simpkins et al. 2008). Second, simultaneous participation in a diversity of activities apparently makes a meaningful difference in youthful outcomes (Blomfield and Barber 2009; Busseri et al. 2006).

Yet, it is unclear to what extent the above patterns hold for youthful violence. This is unfortunate because youths' participation in violence might well be tied to the types and combinations of activities in which they participate. For example, some sports include a violence element (or nearviolent contact between opponents) that is not an aspect of many non-sports activities, however competitive. For young people (and especially those with the physical assets and prowess often associated with "contact" sports), interpersonal contact on the "field" may teach the lesson that it is okay to hit, bump, tackle or otherwise use physical means to settle disputes or respond to offensive behaviors by others off the "field." Participation in non-sports activities is not likely to carry this type of message. And whatever conventions are communicated from being involved in academic clubs and other non-sports activities along with sports may offset the violence-encouraging lessons gained from participation in sports. To assess how different profiles of extracurricular activities matter for youthful violence, the present study examines the link between the likelihood of serious violence and participation in several mutually exclusive types of activities: sports alone, non-sports alone, sports plus non-sports, and no extracurricular activities.

The Moderating Influence of Generations of Immigration

Patterns of participation in extracurricular activities differ for immigrants and their domestic counterparts in the United States in that immigrants have overall lower levels of participation (Evenson et al. 2004; Reardon-Anderson et al. 2002). Notably, data from the National Survey of America's Families show that immigrant children ages 12 through 17 are substantially less likely than their counterparts from native families to participate in sports or other extracurricular clubs (Reardon-Anderson et al. 2002). Beyond participation patterns, little is known about the comparative role of extracurricular activities for the general population of US students versus their immigrant peers. For example, it is not known how the claims of protective effects of participation apply when considering different profiles of activity in relationship to serious violence, or when considering immigrant youth. Recent studies of immigrants (and immigrant communities) and violence indicate that immigrants (and presumably, immigrant youth) have a lower likelihood of violence than their domestic counterparts (Morenoff and Astor 2006; Sampson and Bean 2005). However, current immigrant youth, who are disproportionately from Latin America and Asia, are exposed to contexts and concerns that put them at risk for violence, including residing in disadvantaged residential environments and the strains associated with living in a foreign cultural context (Stein et al. 2002). What is not known is whether these risks are counteracted by involvement in extracurricular activities. That is, to what extent is involvement in violence for immigrant youth from different generations linked to their participation in extracurricular activities?

School administrators and educators generally hold an optimistic view of the potential benefits of extracurricular activities for immigrants. They share an assumption derived from classical assimilation theory that the more immigrants become "like" mainstream Americans in their cultural and behavioral patterns (e.g., language, customs, dress, beliefs, and values), the more likely they are to achieve full assimilation and socioeconomic success. With this assumption as a backdrop, participation in extracurricular activities is viewed as an important vehicle for absorbing immigrant youth into the American mainstream, and enhancing their attachment to conventional US society and behaviors (Fass 2007). This optimistic view notwithstanding, the assumption of a unidirectional path of assimilation from common processes, and consequent inability to explain differential outcomes, for contemporary immigrant groups in the United States has long been criticized (Harker 2001; Keller and Tillman 2008; Portes 1995).



According to segmented assimilation perspectives, upward assimilation is not necessarily characterized by immigrants' full embrace of mainstream cultural and behavioral patterns (Zhou 1997). The fact that groups participate in similar activities does not indicate that the meaning of their participation is the same (Juniu 2000). Relevant to this point is research showing that immigrant minorities are likely to retain their own cultural beliefs about leisure activities, which may not be consistent with US mainstream values (e.g., Juniu 2000; Stodolska and Yi 2003). For example, studies indicate that Mexican immigrants place a high priority on family-centered activities that are spontaneous, people-oriented, and not highly planned and organized. These are the opposite of the underlying values (e.g., individualism, privacy, structure, and self-fulfillment) often presumed for mainstream US leisure activities (Juniu 2000; Stodolska and Yi 2003). Also illustrative, Asian parents tend to view extracurricular activities as extraneous to formal academic processes or even as in direct conflict with their views on proper adolescent behavior (Pong et al. 2005). In this context, the success of participation in preventing errant behavior, including violence, may depend on the extent to which the activities do not conflict with beliefs and values held dear among the groups under consideration (Agnew and Petersen 1989). However, extracurricular activities in US schools usually are not tailored to the cultural traditions, values, and preferences of particular groups (Grey 1992). This lack of tailoring may be consequential for immigrant youth in two ways.

First, immigrant youth may perceive mainstream school extracurricular activities to be unimportant (not geared to their goals) or inappropriate (in conflict with their values and traditions). If so, for those who nonetheless are involved in these activities, such participation may neither help them integrate into mainstream systems and values, nor hold sway as effective controls in curtailing violence or other errant behavior. Relatedly, although immigrant parents strongly expect their children to assimilate successfully into the educational and economic systems of mainstream society, they also expect them to retain ethnic traits within their own groups. Youth who rebel against parental expectations in favor of rapid assimilation may be deprived of family (and perhaps community) support and resources, leaving them vulnerable to deviant influences, including ones that enhance their likelihood of violence (Zhou 1997).

Second, even if youth view extracurricular activities as relevant for them, they may nonetheless experience a sense of marginalization or alienation, or be isolated, from their domestic peers and school authorities. Alienation or marginalization (felt or actual) could result from the expectation (or presumed expectation) that immigrant youth display the same level of performance, enthusiasm, and

ritual celebration, or the same English language acuity in understanding and interpreting instructions and results as domestic youth. Isolation and segregation could occur in contexts where, due to felt alienation, immigrant youth gravitate to extracurricular activities with which they are more familiar (e.g., perhaps soccer rather than US-style football) or in which a larger share of immigrants participate (Grey 1992). Although her focus is not on immigrants, Kao's (2000) work reinforces this point as she found that group images about who has what competencies support segregation among groups in extracurricular activities. Along with domestic youth, immigrant students may concentrate on activities that fit their competence in the eyes of others, and thereby, reinforce segregated peer groups within extracurricular activities. Marginalization and isolation (felt and real) have implications for the role of extracurricular activities in curtailing risk behaviors among youth. For example, Bohnert et al. (2009) demonstrate that alienation in discretionary time activities contributes to depressive symptoms and delinquency among urban African American adolescents. Other research has demonstrated that stress related to the perception and experience of marginalization and alienation is linked to external problems among immigrants such as violence and substance use (Kulis et al. 2009; Miller et al. 2011). The question that we raise is the extent to which such patterns apply to violent delinquency across youth in different generations of immigration.

In brief, then, participation in extracurricular activities in American schools may expose immigrant youth to culture conflict, role strain, and marginalization, which could, in turn, enhance the likelihood of their involvement in violence and other risk behaviors. This might be particularly true for early generations. For example, first-generation immigrant youth are socialized, and may attend early schooling in their home countries. Thus, these youth may experience more stress related to culture conflict when they actively participate in extracurricular activities in US schools. If so, this would be evident in a greater likelihood of errant behavior than for their counterparts who are more acculturated to US society. Similarly, second-generation youth who are socialized within the United States by foreign-born parents may adhere strongly to their ethnic culture and behavioral patterns, even if they conflict with those of domestic populations. Thus, they too might be subject to the detrimental effects (including involvement in violence) of culture conflict and marginalization, though to a lesser degree than their first generation counterparts. Yet, if it is true that the longer the exposure to US culture, the more likely youth are to discard their cultural heritage in favor of more Americanized identities (Rong and Brown 2001), then differences in perspectives and values that matter for the influence of extracurricular activities should diminish across generations of immigration due to



acculturation (Alba and Nee 2003). Notably, third plusgeneration youth really comprise the non-immigrant population (Harker 2001). As such, participation in extracurricular activities as a violence-prevention strategy should be effective for this group as they do not confront the above-noted obstacles.

Additional Factors Associated with Youth Violence

Research points to a variety of factors that are related to youth violence and other problem behaviors. Among these are school and family control, attachment and monitoring factors. The likelihood of engaging in delinquency is lower for youth when parental monitoring and attachment to parents and school are strong (Hirschfield and Gasper 2011; Parker and Benson 2004). Youth who have well-educated parents and who come from two-parent families are less likely to be involved in violence than their counterparts whose families have different characteristics (Demuth and Brown 2004). Literature on differential association theory and its merits indicate that being enmeshed in deviant networks contributes to individuals' own engagement in deviance (e.g., Haynie 2001; Matsueda and Anderson 1998; Sutherland 1947). Thus, in the analyses that follow, we include two measures of peers' delinquency: friends' violence and friends' minor delinquency. To be sure that the relationships that we observe between participation in extracurricular activities and violence do not simply reflect differences in aggressive tendencies between participants and non-participants, we also include measures of youths' prior antisocial behavior: prior minor delinquency and prior violence.

Youth are more likely to be involved in violence if they are male, are older, are physically bigger, and belong to racial/ethnic minorities (Felson 1996; Haynie and Payne 2006; Kreager 2007). Also, youth who spend long hours in paid work tend to exhibit more problem behaviors such as school deviance, delinquency, and substance use than youth who work fewer hours or not at all (Johnson 2004; Lee and Staff 2007; Staff and Uggen 2003; Staff et al. 2010). We include covariates to control for these sociodemographic characteristics. Finally, although research has not established that language use is related to youth violence, this factor has been found to be associated with other assimilation outcomes for immigrant youth (Waters and Jiménez 2005). Thus, our analyses take into account a measure of the language usually spoken at home.

The Current Study

This study investigates the associations between schoolbased extracurricular activities, generations of immigration, and youthful involvement in violence. It extends previous research on violence by distinguishing between individuals who focus exclusively on sports or non-sports and individuals who are simultaneously involved in sports and non-sports and by investigating the moderating effect of generations of immigration on the association between participation in extracurricular activities and involvement in violence. Three specific hypotheses are tested.

First, based on previous studies indicating that participation in any structured activity is associated with more optimal outcomes for youth than no participation (e.g., Feldman and Matjasko 2005), it is hypothesized that participation in extracurricular activities, including sports alone, non-sports alone, and the combination of sports and non-sports, will be associated with a lower likelihood of violence than non-participation. Second, in line with research showing that non-sports participants and sportsplus-non-sports participants demonstrate better developmental outcomes than participants in sports-alone (Gardner et al. 2009; Harrison and Narayan 2003), we anticipate that the expected negative association between participation in extracurricular activities and violence will be stronger for youth who participate in non-sports alone, or in combination with sports, compared with those who participate in sports alone. Finally, given the potential cultural conflict, role strain, and marginalization that may be related to participation in extracurricular activities for immigrant youth (Juniu 2000; Kao 2000; Zhou 1997), it is hypothesized that the relationship between participation in extracurricular activities and violence will be weakest (perhaps even positive) for first-generation immigrants and increasingly strong moving from second- to the third-plus generation (i.e., nonimmigrant youth).

Methods

Data and Participants

We test our hypotheses with data from the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a longitudinal, nationally representative, schoolbased survey of adolescents in grades seven through 12 drawn from a representative sample of 132 high schools throughout the United States. An in-school survey was administered in 1994-1995 to all students (n = 90,118) in the respective schools and grades who were present on the day of the survey. Approximately 200 students from each school (n = 20,745) were randomly selected to participate in subsequent in-home interviews, along with their mothers or other female heads of households. The analyses below are based on the set of respondents who completed both the in-school survey and the Wave-I in-home survey, had valid



sampling weights, and had no missing data for the dependent variable (N = 13,236).

Measures

Involvement in Violence

Involvement in violence is derived from items collected during the in-home survey. Students were asked, how often during the past 12 months they: pulled a knife or gun on someone; shot or stabbed someone; had a serious physical fight; or hurt someone badly enough to need a bandage or care from a doctor or nurse. Each item was first coded into a binary response, indicating whether the respondent engaged in the activity. We then created a dichotomous violence measure indicating whether or not the respondent reported having been involved in any of the four behaviors $(1 = had\ engaged\ in\ violence,\ 0 = had\ not\ engaged\ in\ violence)\ (\alpha = .61).$

Overall Participation in Extracurricular Activities

We constructed five measures of participation in extracurricular activities. Students were asked to indicate whether during the school year they were/would be participating in any of 33 clubs, organizations, or teams. Overall participation in extracurricular activities distinguishes students who reported that they were/would be participating in such activities (1) from youth not participating in extracurricular activities (0).

Participation in Sports Alone

Participation in sports alone is a dichotomous measure indicating whether youth participated in at least 1 of 12 sports teams (i.e., baseball/softball, basketball, field hockey, football, ice hockey, soccer, swimming, tennis, track, volleyball, wrestling, other sport) but no non-sports activities (1 = participated in sports alone, 0 = else).

Participation in Non-Sports Alone

Participation in non-sports alone indicates whether a respondent participated in at least 1 of 21 non-sports clubs/ organizations (i.e., French club, German club, Latin club, Spanish club, book club, computer club, debate teams, drama club, Future Farmers of America, history club, math club, science club, band, cheerleading/dance team, chorus/ choir, orchestra, newspaper, honor society, student council, yearbook, other club or organization), but did not participate in any sport (1 = participated in non-sports alone, 0 = else).

Participation in Sports Plus Non-Sports

Our measure of sports plus non-sports indicates whether or not a respondent simultaneously engaged in at least 1 of the 12 school sports teams and at least 1 of the 21 non-sports clubs/organizations noted above (1 = participation in both sports and non-sports, 0 = else).

Non-Participation in Any Activities

Non-participation represent students who did not participate in any extracurricular activities during the year (1 = non-participation in any extracurricular activities, 0 = else); this group is the reference category for the other measures.

Generations of Immigration

Binary measures of generations of immigration were determined from adolescents' responses to in-school survey questions on whether or not they and their parents were born in the United States. First generation immigrant (n = 1.233) indicates that the respondent was born outside of the United States $(1 = first\ generation,\ 0 = else)$. Second generation immigrant (n = 2,080) refers to a respondent who is US-born but has at least one parent who was born outside of the United States (i.e., a US born youth with a non-US-born parent) (1 = second generation,0 = else). US-born respondents with parents who were also born in the US are considered as belonging to the third-plus generation (n = 9.923) (1 = third-plus generation, 0 = else). Because third-plus generation children (and their parents) are US born, they are considered as a part of the general non-immigrant population, and serve as the reference group in the analyses.

Parental Attachment

The measure of parental attachment is derived from each adolescent's responses to four items about how close s/he feels to his/her mother, how close s/he feels to his/her father, how much s/he feels that his/her mother cares about him/her, and how much s/he feels that his/her father cares about him/her, based on a scale ranging from 1 = not at all to 5 = very much. The scale is the mean of the values for the four items ($\alpha = .71$).

Parental Monitoring

Parental monitoring is a summed scale representing adolescents' responses to seven-items regarding whether their parents allow them to make their own decisions about: the



time they must be home on weekend nights, the people they hang around with, what they wear, how much television they watch, which television programs they watch, what time they go to bed on week nights, and what they eat. Response options were *no* (0) and *yes* (1). The summed scores were reverse coded so that higher values represent greater parental monitoring.

School Attachment

The measure of school attachment is the average value of adolescents' responses to three items assessing whether a youth: feels close to people at school; feels like part of school; and feels happy to be at school. Responses ranged from 1 = not at all to 5 = very much ($\alpha = .79$).

Two-parent Family

Family structure is captured with a dichotomous variable indicating whether an adolescent *lives in a household with two married parents* (1) or in *any other type of family arrangement* (0).

Parental Education

Parental education is operationalized as the mean value of education (on a seven point scale) for both parents. Education was assessed on a seven point scale as follows: 0 = no formal education; 1 = completed 8th grade or less; 2 = completed more than 8th grade but did not complete high school; 3 = finished high school or received a GED; 4 = completed a trade or vocational school education after high school; 5 = some college; 6 = is a college graduate; 7 = has a graduate or professional degree. If educational information was available for only one parent, the scale value for that parent is used.

English Language Use at Home

At home language is a dichotomous measure indicating whether adolescents reported that the language usually spoken at home is *English* (1) or *some other language* (0).

Hours Worked per Week

Youths' employment status is measured as the number of hours worked per week in a paid job during the entire school year. Hours worked were assessed on an 8-point scale as: 0 = no hours worked; 1 = 5 or fewer hours; 2 = 6-10 hours; 3 = 11-15 hours; 4 = 16-20 hours; 5 = 21-25 hours; 6 = 25-30 hours; and 7 = 31 or more hours.

Prior Delinquency

The analysis includes two measures of an adolescent's prior delinquency. *Prior violence* indicates whether a respondent was involved in a physical fight in the year prior to the in-school survey (1 = yes, 0 = no). *Prior minor delinquency* is measured as the sum of the frequency of adolescents' prior involvement in six types of problem behaviors: smoking cigarettes; drinking beer, wine, or liquor; getting drunk; racing on a bike skateboard or roller blades, or in a boat or car; doing something dangerous because of a dare; and skipping school without an excuse. The responses ranged from 0 = Never to 6 = nearly everyday ($\alpha = .73$).

Friends' Delinquency

To capture peer influences, we include two measures of peers' delinquency: friends' violence and friends' minor delinquency. These are defined, respectively, as the proportion of a respondent's friends who was involved in a serious fight during the year prior to the in-school survey, and the average frequency (range = 1–36) of friends' participation in the same six problem behaviors included in the measure of respondents' prior minor delinquency.

Demographic Variables

Several demographic factors are controlled in the analyses. Sex distinguishes between males (1) and females (0). Age (in years) is also included. Race/ethnicity is measured as four dichotomous variables distinguishing among Blacks, Hispanics, and Asians, with Whites as the reference category. In addition, we control for the effect of youths' physical size measured as respondents' body mass index (BMI), calculated as: BMI = weight [kilos]/height (m²).

Analysis Plan

The analysis proceeds in several stages. First, we present descriptive statistics for all the variables in the analysis, followed by tables indicating how violence is distributed across extracurricular activities and how violence and participation in extracurricular activities are distributed across generations of immigration. Next, we present a series of regression models designed to examine the effects of participation in extracurricular activities and generations of immigration on the likelihood of violence, net of the control variables. The final model in this series incorporates interactions between extracurricular activities and generations of immigration to determine whether the role of extracurricular activities on violence is conditioned by



generation of immigration. The findings for the interactions are also presented graphically.

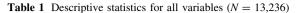
Because the measures of involvement in violence are dichotomous, we use survey-corrected logistic regression procedures available in STATA to take into account possible design effects of the Add Health data, which if left uncorrected could result in biased estimates of the parameters, variances, and standard errors. Of particular importance here is the fact that the Add Health survey was designed as a cluster sample with 132 schools as primary sampling units. Using the survey-correcting procedures allows us to produce estimates that adjust for the clustering of observations within school. (See Chantala and Tabor (1999) for a detailed discussion of these procedures and their merits.) We also utilize a multiple imputation procedure (via STATA) to handle missing data, and apply sampling weights to ensure the national representativeness of the data (Schafer and Graham 2002).

Results

Descriptive Findings

Table 1 presents means and standard deviations for the variables under consideration. Here, we draw attention to the patterns for the dependent and central independent variables. Overall, slightly over one-third (35%) of youth in the sample report involvement in violence. The large majority of youth (77%) participate in extracurricular activities. Across the patterns of participation, about a fifth of students participate in sports alone (21%) or non-sports alone (23%). Another third (33%) participate in a combination of sports and non-sports, with the remaining 23% of students not participating in any form of school extracurricular activities. Regarding generations of immigration, the sample is largely composed of youth who are third-plus generation (75%), equivalent to the non-immigrant population. First- and second-generation youth comprise 9 and 16% of the sample, respectively.

Table 2 presents the percent of adolescents involved in violence for each type of extracurricular activity. We also indicate with asterisks (*) whether the average levels of violence for extracurricular participants are significantly different from the level for non-participants. Overall, 34% of youth who participate in extracurricular activities report being involved in violent delinquency. This compares to 41% of youth who do not participate in such school activities. Thus, participation in extracurricular activities seems to have a payoff in violence avoidance for youth. However, the advantage is greater for some forms of participation than others. Notably, youth who participate in non-sports alone are the least involved in violence at 25%.



	Mean	SD
Violence	.35	.48
Overall extracurricular participation	.77	.42
Sports alone	.21	.41
Non-sports alone	.23	.42
Sports plus non-sports	.33	.47
First generation	.09	.29
Second generation	.16	.36
Third-plus generation	.75	.43
Parental attachment	4.63	.55
Parental monitoring	5.17	1.55
School attachment	3.78	.85
Two-parent family	.68	.47
Parental education	4.20	1.66
English language use at home	.88	.32
Hour work per week	7.27	11.17
Friends violence	.44	.30
Friends minor delinquency	5.98	4.20
Prior physical fight	.44	.50
Prior minor delinquency	5.85	6.30
Male	.48	.50
Age	16.10	1.68
Whites	.53	.50
Blacks	.22	.42
Hispanics	.17	.38
Asians	.08	.27
Body mass index	22.54	4.42

 Table 2
 Average percent of violence involvement by extracurricular activities

	Percent (%)
Extracurricular activities	
Overall extracurricular participation	33.60***
Sports alone	45.13**
Non-sports alone	25.27***
Sports plus non-sports	32.16***
No participation	41.46

^{*} p < .05. ** p < .01. *** p < .001

This compares to 45 and 32%, respectively, for students involved in sports alone and sports plus non-sports activities.

Table 3 presents mean levels of violence and participation in extracurricular activities by generations of immigration. As well, we indicate with asterisks (*) whether the respective average levels of violence and participation in extracurricular activities for the first- and



Table 3 Average percent of violence involvement and extracurricular participation by immigrant generation

	First generation $(n = 1,233)$	Second generation $(n = 2,080)$	Third-Plus generation $(n = 9,923)$
Violence	28.71***	38.08*	35.65
Overall extracurricular participation	67.32***	71.97***	79.60
Sports alone	18.33**	18.12***	21.99
Non-sports alone	26.28**	24.95*	22.82
Sports plus non-sports	22.71***	28.89***	34.80
No participation	32.68***	28.03***	20.40

^{*} p < .05. ** p < .01. *** p < .001

second-generation are significantly different from the levels for the third-plus generation. First generation youth have the lowest level of involvement in violence at 29% compared to 38 and 36%, respectively, for second-generation and third-plus generation youth. The percentage of respondents involved in extracurricular activities rises with generations of immigration. The range is from 67% for the first generation to 80% for the third-plus generation. However, this pattern of increase in participation across generations does not hold for all types of extracurricular activities. For sports alone, first- and second- generation youth have equal levels of participation (18%), with a higher level (22%) for the third-plus generation. For nonsports alone, there is slight variation in participation across generations, but the direction is toward less participation moving from first- to second- to third-generation. Within activity categories, first-generation youth are most likely to participate in non-sports alone (26%), while second- (29%) and third-generation (35%) students most often participate in a combination of sports plus non-sports.

Participation in Extracurricular Activities, Generations of Immigration, and Involvement in Violence

How does the association between extracurricular activities and violence vary by different types of participation and generations of immigration, net of important control variables? Table 3 presents the results of the survey-corrected logistic regression analyses. Unstandardized logistic regression coefficients and their standard errors (in parentheses) are presented along with the odds ratios for the coefficients and the 95% confidence intervals [in brackets]. The odds ratios are presented for ease of interpretation. They describe the proportionate change in the odds of the dependent variable for a unit change in the independent variable. Model 1 is a baseline model that examines the overall influence of participation in extracurricular activities on the likelihood of violence among adolescents. As

expected, overall participation has a negative association with involvement in violence. On the whole, participating in extracurricular activities increases the odds of youth engaging in violence by approximately 35% (1–.65). But, do all types of participation in extracurricular activities yield similar benefits?

In Model 2, extracurricular activities are disaggregated into sports alone, non-sports alone, and sports plus non-sports; the reference category is non-participation. This model also includes measures of generations of immigration; here, the third-plus generation is the reference category. Non-sports alone and the combination of sports plus non-sports are associated with a lower likelihood of involvement in violence compared with non-participation. The odds of violence are about 56% lower for youth who participate in non-sports alone compared to their counterparts who do not participate in extracurricular activities. For youth participating in sports plus non-sports the risk of violence is smaller at 42% lower odds than for non-participants. In this model, participation in sports alone does not significantly influence youths' likelihood of violence. Regarding generations of immigration, Model 2 shows that, in the aggregate, first generation adolescents have significantly lower odds (by about 29%) than third-plus generation youth of being involved in violence. However, second generation immigrant status is not significantly associated with the violence outcome.

To evaluate the independent influence of extracurricular activities and immigrant status on violence, Model 3 adds the control variables. Including these factors reduces the sizes of the coefficients for non-sports alone and for sports plus non-sports. The coefficient for non-sports alone remains significant but its magnitude of influence is reduced substantially (from 56 to 25% lower odds of violence). The coefficient for sports plus non-sports is reduced to nonsignificance. Supplementary analyses (not shown here) reveal that the association between this factor and involvement in violence is mainly mediated by the proportion of youths' friends who participated in a serious fight and the level of friends' minor delinquency. Regarding generations of immigration, being first-generation youth is no longer significantly associated with violence after the control variables are added to the model. Regarding the control variables themselves, most are associated with the likelihood of violence in a manner consistent with prior research and theorizing. The exceptions are that parental monitoring, speaking English at home, hours worked per week, and friends' participation in minor delinquency are not significantly related to involvement in violence.

The final model in Table 4 includes interaction terms for the individual extracurricular activities and generations of immigration measures to evaluate whether the influence of participation in extracurricular activities on violence depends on youths' generational status. Five of the



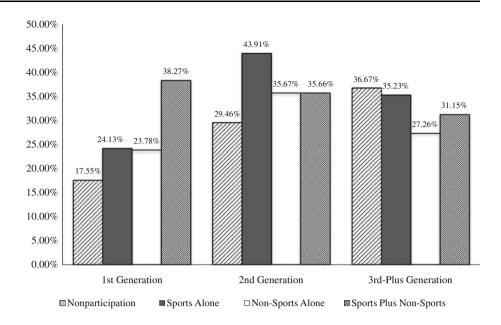
Table 4 Survey-adjusted logistic regression on violence

Deta (SE) Odds ratio Deta (SE) 195% CJJ Deta (SE) 195% CJJ Deta (SE) 195% CJJ Deta (SE) 195% CJJ Deta (SE) Deta (S		Model 1		Model 2		Model 3		Model 4	
Detail continuing Deta		Beta (SE)	Odds ratio [95% CI]	Beta (SE)	Odds ratio [95% CI]	Beta (SE)	Odds ratio [95% CI]	Beta (SE)	Odds ratio [95% CI]
extracurricular —.43**** (.06) .65 [.58.73] ipation alone	Independent variables								
100 107 134 121	Overall extracurricular participation	43*** (.06)							
orts alone83**** (.09) -44 [.37 .52]83**** (.07) 58 [.51 .66]53**** (.07) 58 [.51 .66]53**** (.07) 58 [.51 .66]53**** (.07) 58 [.51 .66]34*** (.12) 7.1 [.56 .91]10 (.08) 1.10 [.94 1.29]1	Sports alone			.07 (.06)	1.07 [.94 1.21]	.06 (.08)	1.07 [.90 1.26]	05 (.09)	.95 [.79 1.13]
blus non-sports —_55*** (07)58 [.51 .66] —34** (.12)71 [.56 .91] —34** (.12)71 [.56 .91] —14** (.12)71 [.56 .91] —10 (.08)1.10 [.94 1.29] —11 attachment	Non-sports alone			83*** (.09)	.44 [.37 .52]	28** (.10)	.75 [.62 .91]	43*** (.11)	.65 [.53 .81]
1.10 [.54 1.29] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] 344** (.12) .71 [.56 .91] .71 [.56 .	Sports plus non-sports			55*** (.07)	.58 [.51 .66]	09 (.08)	.91 [.78 1.06]	24** (.09)	.79 [.66 .94]
generation yeariables 1 attachment 1 monitoring attachment 1 monitoring attachment 1 monitoring attachment 1 education 1 education 1 education 1 education 1 education 2 education 3 education 3 education 3 education 4 education 4 education 5 education 5 education 6 education 7 education 7 education 8 education 8 education 8 education 8 education 8 education 9 educ	First generation			34** (.12)	.71 [.56 .91]	29 (.19)	.75 [.51 1.09]	91*** (.26)	.40 [.24 .67]
l attachment I monitoring attachment rents family t education language use at home vork per week wiolence minor delinquency injury delinquency injury delinquency ses cs	Second generation			.10 (.08)	1.10 [.94 1.29]	10 (.11)	.91 [.73 1.13]	56** (.19)	.57 [.39 .84]
l attachment I monitoring attachment rents family I ceducation language use at home vork per week violence minor delinquency rysical fight inor delinquency inor delinquency salone ports alone	Control variables								
I monitoring attachment rents family Leducation I education I alonguage use at home vork per week violence minor delinquency rysical fight inor delinquency cs cs cs rearation * activities sy alone ports alone sports alone ports alone	Parental attachment					17** (.05)	.85 [.77 .93]	17** (.05)	.85 [.77 .93]
attachment rents family I education language use at home vork per week violence minor delinquency rysical fight inor delinquency cs cs cs cs square s	Parental monitoring					.00 (.02)	1.00 [.96 1.05]	.00 (.02)	1.00 [.96 1.05]
rents family 1 education 1 anguage use at home vork per week wiolence minor delinquency tysical fight inor delinquency ions neration * activities alone ports alone	School attachment					17*** (.04)	.84 [.77 .92]	17*** (.04)	.84 [.77 .92]
leducation language use at home work per week wiolence minor delinquency sysical fight inor delinquency ions cs cs cs cs readone ports alone	Two-parents family					28*** (.07)	.76 [.66 .87]	28*** (.07)	.75 [.65 .87]
language use at home work per week wiolence minor delinquency sysical fight inor delinquency inor delinquency is alone ports alone sports alone sports alone ports alone ports alone ports alone sports alone sports alone ports alone sports alone ports alone sports alone sports alone ports alone ports alone sports alone sports alone ports alone sports alone sports alone sports alone	Parental education					06* (.02)	.94 [.90 .99]	06** (.02)	.94 [.90 .98]
work per week wiolence minor delinquency tysical fight inor delinquency is alone ports alone sylus non-sports generation * activities s alone ports alone sylus non-sports solone ports alone sylus non-sports solone ports alone sylus non-sports solone sylus non-shorts solone sylus alone sylus non-shorts	English language use at home					03 (.17)	.97 [.70 1.34]	08 (.16)	.92 [.67 1.27]
wiolence minor delinquency sysical fight inor delinquency inor delinquency cs cs rions neration * activities s alone ports alone s plus non-sports generation * activities s alone ports alone	Hours work per week					(00.) 00.	1.00 [.99 1.00]	(00') 00'	1.00 [.99 1.01]
minor delinquency 1 ysical fight inor delinquency cs fions froms f	Friend violence					.66*** (.13)	1.93 [1.50 2.48]	.65*** (.13)	1.91 [1.49 2.47]
rysical fight inor delinquency inor delinquency cs cs rearation * activities s alone ports alone	Friend minor delinquency					.00 (.01)	1.00 [.98 1.02]	.00 (.01)	1.00 [.98 1.02]
inor delinquency cs cs neration * activities s alone s plus non-sports generation * activities s alone ports alone	Prior physical fight					1.45*** (.07)	4.27 [3.73 4.89]	1.45*** (.07)	4.27 [3.71 4.90]
cs rions neration * activities ports alone splus non-sports generation * activities s alone ports alone ports alone ports alone ports alone s blus non-sports	Prior minor delinquency					.05*** (.01)	1.05 [1.04 1.06]	.05*** (.01)	1.05 [1.04 1.06]
cs tions neration * activities alone ports alone s plus non-sports alone ports alone ports alone ports alone ports alone ports alone ports alone	Male					.76*** (.07)	2.13 [1.87 2.43]	(90') ***92.	2.14 [1.88 2.43]
rions neration * activities a lone ports alone s plus non-sports s alone ports alone s alone ports alone ports alone	Age					07** (.02)	.93 [.89 .98]	07*** (.02)	.93 [.89 .98]
anics anics actions generation * activities rrts alone orsports alone orts plus non-sports nd generation * activities orts alone rrts plus non-sports rrts alone rrts alone rrts alone	Blacks					.74*** (.09)	2.10 [1.77 2.50]	.74*** (.09)	2.10 [1.76 2.49]
actions generation * activities orts alone orts plus non-sports and generation * activities orts alone ris plus non-sports orts alone orts alone orts alone orts alone	Hispanics					.48*** (.11)	1.62 [1.30 2.01]	.50*** (.11)	1.64 [1.32 2.04]
generation * activities yrts alone n-sports alone yrts plus non-sports nd generation * activities yrts alone n-sports alone n-sports alone n-sports alone	Asians					.52** (.19)	1.68 [1.16 2.42]	.44** (.17)	1.55 [1.10 2.17]
First generation * activities Sports alone Non-sports alone Sports plus non-sports Second generation * activities Sports alone Non-sports alone Non-sports alone Shorts alone	BMI					.01* (.01)	1.01 [1.00 1.03]	.01** (.01)	1.01 [1.00 1.03]
First generation * activities Sports alone Non-sports alone Sports plus non-sports Second generation * activities Sports alone Non-sports alone Non-sports alone	Interactions								
Sports alone Non-sports alone Sports plus non-sports Second generation * activities Sports alone Non-sports alone Non-sports alone	First generation * activities								
Non-sports alone Sports plus non-sports Second generation * activities Sports alone Non-sports alone Sports alone	Sports alone							.46 (.28)	1.59 [.90 2.81]
Sports plus non-sports Second generation * activities Sports alone Non-sports alone Showts alone	Non-sports alone							.82* (.37)	2.27 [1.09 4.72]
Second generation * activities Sports alone Non-sports alone Shorts alone	Sports plus non-sports							1.32*** (.30)	3.74 [2.05 6.82]
Sports alone Non-sports alone Snorts nlus non-enorts	Second generation * activities								
Non-sports alone Sworts only non-snorts	Sports alone							.70* (.28)	2.01 [1.15 3.51]
Snorte plue non-emorte	Non-sports alone							.72* (.28)	2.06 [1.18 3.58]
Sports plus non-sports	Sports plus non-sports							.54* (.25)	1.71 [1.05 2.78]





Fig. 1 Predicted probability of violence by generations of immigration and by patterns of extracurricular participation



interaction coefficients are significant: first generation by non-sports alone and by the combination of sports plus non-sports, and second generation by sports alone, nonsports alone, and sports plus non-sports. To provide a clear picture of these relationships, the interaction findings from Model 4 are displayed graphically in Fig. 1, which shows the predicted probabilities of involvement in violence by activity type across generations of immigration. The first set of bars show that first generation youth who participate in any type of extracurricular activity have a higher (not lower) probability of violence than non-participants of the same generation, and this is particularly so for students who engage in a combination of sports and non-sports. A similar pattern holds for second generation youth except that the difference from non-participants is greatest for youth involved in sports alone. These results contrast with those for the third-plus generation (non-immigrant youth), where the probability of violence is lower for youth who are involved in extracurricular activities than their non-participating colleagues, with relatively substantial differences from non-participants for those involved in non-sports alone and in sports plus non-sports.

Discussion

For many young people residing in the United States, extracurricular activities are an important part of their school experience. Moreover, it is assumed that youth from all walks of life incur benefits in the form of protection from risky behaviors from such participation. Yet, the empirical basis for this assumption is not well-established

for violent delinquency across different types of extracurricular activities, or for youth from immigrant backgrounds. Thus, the goal of this study was to extend our understanding of the relationship between participation in school extracurricular activities and involvement in violence by examining three interrelated hypotheses: participation in school extracurricular activities is associated with a lower likelihood of violence than non-participation; the beneficial effects of participation in extracurricular activities are stronger for youth who participate in non-sports alone, or sports in combination with non-sports, than for youth who participate in sports alone; and the relationship between participation in extracurricular activities and violence is weakest for youth with first-generation immigration status and increasingly strong moving from second- to third-plus generation youth. We tested these hypotheses using data from the National Longitudinal Study of Adolescent Health.

Overall, the results of our analyses provide partial support for the above expectations, but they also reveal a complex and contingent picture. To begin, the initial models appeared to confirm our hypothesis of a negative association between participation in extracurricular activities and the likelihood of participation in youthful violence. However, the final model that takes into account the interaction of types of extracurricular activity and generations of immigration revealed that, for our sample, participation is associated with lower odds of involvement in violence only for non-immigrant youth and then only for those who participate in non-sports alone or in sports plus non-sports. Thus, it cannot be taken for granted that participation in any extracurricular activity is preferable to



non-participation for all groups. Second, we did not discover across-the-board advantages for youth who participate in non-sports alone or in sports plus non-sports over those who participate in sports alone. Instead, consistent with the above basic finding, our second hypothesis of a stronger effect of non-sports relative to sports alone holds only for third-plus generation youth. Third our expectation of a progressively stronger payoff of participation in extracurricular activities across generations of immigration is partially supported. As anticipated, third-plus generation youth gain the most in terms of lowering the odds of involvement in violence from participation in school activities. However, we do not find a monotonic increase in the strength of extracurricular activity coefficients with successive generational stages. Rather, both first- and second-generation youth have higher odds of involvement in violence when they engage in extracurricular activities than when they forego involvement in extracurricular activities. Thus, while some of our specific claims are not supported, overall, the results confirm our expectation that the role of participation in extracurricular activities in violence is a contingent one, with the outcome depending on both adolescents' patterns of participation and their generational status.

Substantive Implications of the Findings

These findings have substantive and potentially practical implications. Most notably, they make it clear that we cannot take for granted that school extracurricular activities have uniformly beneficial effects for youth. As such, the higher involvement in violence associated with participation in extracurricular activities among first- and secondgeneration youth challenges educators' views regarding the potential benefits of participation in extracurricular activities for immigrants, as well as classical assimilation theorists' assumption that extracurricular activities are an important vehicle for absorbing immigrant youth into the American mainstream, and enhancing their attachment to conventional US society and behaviors (Fass 2007). Instead, our findings are more in line with the arguments of segmented assimilation, which suggests that outcomes of adopting US ways vary depending on how such ways comport with family traditions and affect parent-child conflict and family cohesion (Bui 2009; Rumbaut 2005), how they comport with "home country" ways, and the extent to which they expose immigrant youth to marginalization and discrimination (Fass 2007; Kao 2000; Kulis et al. 2009; Miller et al. 2011). It is beyond the scope of this article to determine which of these potential factors may explain the above findings. However, we encourage future research on this issue as it may point to directions for tailoring extracurricular activities to youth from recent generations of immigration in ways that yield the types of benefits that educators and others expect.

The results reported above also reaffirm the importance of disaggregating extracurricular activities into meaningful subtypes when assessing their relationship with delinquent outcomes. Here, we took into account three broad categories of participation that others (e.g., Gardner et al. 2009; Kort-Butler and Hagewen 2011) have suggested are important: sports only, non-sports only, sports plus nonsports. Further understanding of the participation-violence relationship might come from consideration of even more refined types of extracurricular activities. Take Kreager's (2007) analysis regarding males' participation in sports, for example. He found that heavy-contact and exclusively male sports increase the likelihood of delinquent peer associations, which contributes to fighting among males. However, sports that involve less physical contact and that are historically less male-dominated tend to involve conventional peers and protect youth from serious fighting. If so, this or other types of contingencies could mean that participation in some types of sports (or non-sports) might have violence-prevention benefits even for youth who are recent immigrants, but these benefits could be masked when all sports are lumped into a single category. Similarly, group-based activities (e.g., team sports) may have different influences than more individual-based activities (e.g., spelling, fencing). The point is that, by revealing the differential influence of extracurricular activities disaggregated into meaningful types, our study and others help to provide a more comprehensive understanding of when and for whom extracurricular participation is beneficial.

Limitations of the Study

In our discussion of the substantive implications of the findings, we noted two concerns that need further investigation: assessing why participation in school extracurricular activities appears to be detrimental for the wellbeing of immigrant youth and exploring what additional characteristics of school extracurricular activities might affect youth violence and other outcomes. Besides the factors emphasized by segmented assimilation theorists, a growing body of research points to the importance of capturing differences between individuals in the intensity, duration, and degree of engagement in extracurricular activities for predicting involvement in risk behaviors (see Bohnert et al. 2010). Thus, it is not enough to simply compare participants versus non-participants in assessing the reasons why the beneficial payoff of participation in extracurricular activities seems to apply solely to third-plus generation youth. Rather, researchers should investigate how variation in the nature of participation of individual youth within and across school settings affects the relationship between



participation in extracurricular activities and involvement in violence.

Along different lines, in the interest of preserving cases, we did not take advantage of the longitudinal nature of the Add Health data. Consequently, we are unable to make causal inferences based on our analyses. Future research using Add Health and other data sources should move beyond cross-sectional analyses. This will facilitate understanding of the causal processes in the extracurricular activity-risk behavior link, and also permit observation of how the association between participation in extracurricular activities and behavioral outcomes change over time as individuals age (see, for example, Kort-Butler and Hagewen 2011) and, in the case of immigrant youth, progress in their adjustment to US society. It is also important to revisit the concerns posed in this analysis with violence data for a more recent time frame. The first wave of Add Health data speak to the early mid-1990s, a period when serious violence in the US was at its highest in recent times. Such crimes have declined since, and presumably this includes the proportion committed by youth. We noted earlier that trends over time in youth violence still provide cause for concern despite declines that may have occurred. Thus, we assume that our findings are relevant to the current time-frame. However, this is an empirical question that remains to be addressed.

Finally, to some extent, our findings for generations of immigrants may be somewhat confounded with race and ethnic status. Thus, it is important to further explore meaningful subtypes of youth to assess the dual roles of race/ ethnicity and immigrant status in violence and other outcomes. As Zhou (1997) notes, given differences in culture and socioeconomic status across race and ethnicity, immigrants face unequal opportunities and challenges depending on their race or ethnic backgrounds. Exploring the extent to which these background differences matter compared to immigrant status per se is an important next step for researchers. It might also be important to explore how patterns play out for other categories of youth as well-boys versus girls, rural youth versus urban youth, and the like. In brief, we encourage additional research that helps to determine the circumstances under which different segments of the youthful population, including within generations of immigration, benefit from or are hurt by participation in extracurricular activities with varied characteristics.

Conclusion

This article has laid a foundation for future research along the lines described above by providing a baseline picture of the comparative role of several types of participation in school extracurricular activities in the likelihood of youthful violence for a national sample of immigrant and nonimmigrant youth. Research on youth development suggests that participation in extracurricular activities serves as one means of social control that reduces adolescent risk behaviors by encouraging youth to develop a commitment to conformity, and by providing leisure contexts that connect youth to supportive adults and pro-social peers, and that allow them to develop skills and competencies that facilitate involvement in conventional behaviors (see, e.g., Guest and McRee 2009: Fredricks and Eccles 2008: Linver et al. 2009). Participation in extracurricular activities is also touted by some as an avenue by which youth from immigrant backgrounds can more readily become absorbed into the American mainstream and attached to conventional US society and behavior (Fass 2007). The results presented above show that the protective effects of participation in extracurricular activities in preventing youthful violence are contingent on the type of activity and the generation of immigration of students. Specifically, we discovered that violence-reducing benefits accrue only to non-immigrant youth who participate in non-sports or sports plus nonsports (not sports alone). And, despite optimistic viewpoints about the role of extracurricular activities for youth from immigrant backgrounds, our findings indicate that such participation does not serve as a means of social control for this group. Rather, participation is detrimental for first- and second-generation youth in that those who engage in extracurricular activities have greater rather than lower odds of being involved in violence than their non-participating counterparts.

We see the baseline information that we have provided as relevant for the actions of two groups. First, they call for researchers to further explore how and why youth from different generations of immigration, and from other varied backgrounds, may be differentially affected by participation in extracurricular activities. In our discussion of the limitations of our research, we indicated some of the specific issues that need to be addressed. Second, they call for teachers and educational administrators to be cognizant that existing assumptions about how extracurricular activities work may not comport with the reality of their impact for different groups and to take into account the potential differential influence of participation on groups from varying backgrounds in developing extracurricular initiatives for school programming.

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