
Poker, Sports Betting, and Less Popular Alternatives: Status, Friendship Networks, and Male Adolescent Gambling

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Abstract

The authors argue that the recent increase in poker play among adolescent males in the United States was primarily attributable to high-status male youth who are more able to organize *informal* gambling games (e.g., poker and sports betting) than are low-status male youth who are left to gamble on *formal* games (e.g., lotteries and slot machines). Using participation in sports as a proxy for status, the authors test the prediction that male athletes were more likely to engage in informal gambling and were largely responsible for the recent and much-discussed poker craze among adolescents. These and related predictions are supported using data from consecutive cross-sectional surveys of American youth from 2002 to 2008. Despite their social status, however, male youth engaging in informal gambling are more at risk for gambling problems than are those engaging in formal gambling. The authors discuss the dilemmas that their findings present for the prevention of problem gambling in young people.

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Over the period from 2003 to 2005, the National Annenberg Survey of Youth found that among males aged 14 to 17, weekly rates of gambling money on cards rose from 5% to 12% and monthly rates jumped from 24% to 34% (Romer, 2005). This rapid increase in card play among adolescent boys signaled a significant change in social behavior. Journalists were quick to pick up on the teenage male “poker craze” and bring it to the attention of the public (Applebome, 2004; Salzman & Robertson, 2005). Newspaper articles described a trend in which teenage boys would gather at each other’s houses to play poker tournaments in marathon sessions that sometimes lasted late into the night (Applebome, 2004; DiCicco-Bloom, 2006). The articles also described a growing population of parents who began to support poker play with various justifications, including, “It keeps kids off the unpredictable streets,” “helps boys build friendships,” and “teaches real-life lessons” (Thornburgh, 2006, p. 59). This parent response came into conflict with academic disciplines studying teenage gambling, which view youth betting as a risky behavior. The risk perspective is supported by a good deal of evidence that a small percentage of adolescents gamble to excess (Shaffer, La Brie, Scanlon, & Cummings, 1994) and are susceptible to a form of addiction known as pathological or problem gambling that is not unlike dependence on alcohol and other drugs (Stinchfield & Winters, 1998).

Despite concerns about the hazards of adolescent gambling, the majority of teenagers that bet do so for social or recreational reasons and come to no harm (Michaud, 2006; Winters, Stinchfield, & Kim, 1995). Moreover, such informal gambling as poker, which young people can organize on their own, can be distinguished from the more commercial and *formal* types of betting activities from which the gambling industry and state governments are more likely to profit (i.e., slot machines, lotteries, and scratch cards) and from which adolescents are more likely to be restricted (Delfabbro & Thrupp, 2003). Although in the past most adolescent gambling centered on these informal games organized by children themselves (Fisher, 1999), the recent expansion of gambling markets has fueled the tendency for youth to increasingly gamble on commercial forms like lottery and slot machines. Moreover, prior research, mostly with adults, has linked pathological gambling with the use of slot machines and lotteries (Dickerson, 1993; Volberg & Steadman, 1992). Although these findings might justify heightened attention to formal betting by youth gambling scholars, the dearth of scholarship on informal

games, such as poker and sports betting, has diverted attention away from those games that adolescents organize and play on their own (Griffiths, 2003).

Despite the greater focus on formal gambling venues, a significant proportion of adolescents who gamble do so informally. For example, though only small percentages of youth, aged 16 to 17 years, have ever gambled in a card room (6.6%) or a casino (1.6%), the two venues that youth could conceivably bet on cards formally, 46.3% have gambled in private (Potenza, 2003). Studies that have compared the effects of *informal* and *formal gambling* have labeled card gambling and sports betting as members of the former, and lottery, slot, and other machine games as members of the latter (Fisher, 1999). One study of Australian adolescents (aged 15-17 years) found that 8.1% bet weekly and 32.7% bet infrequently on informal games (cards and sports), whereas 5.6% bet weekly and 26.3% bet infrequently on formal games (lottery games and poker machines; Delfabbro & Thrupp, 2003). A study in Minnesota found that as a sample of adolescent youth reached legal age they became slightly more likely to stop playing informal games and start buying tickets for the then recently introduced state lottery (Winters et al., 1995).

Given the dramatic increase that was observed in the early 2000s in one type of informal gambling (card playing), our research asks whether this inflation was fueled by the changing habits of adolescent males with social resources that would conceivably make it easier for them to organize this form of betting. Adolescent risk scholars who study gambling typically ignore the social context in which betting occurs (Blinn-Pike, Worthy, & Jonkman, 2010), preferring to focus on the psychosocial profile of young gamblers and the empirical relationship between gambling and likelihood of gambling addiction (Schissel, 2001). The focus on the minority of youth who develop serious gambling problems (between 4% and 8%; Vitaro, Wanner, Ladouceur, Brendgen, & Tremblay, 2004) ignores the vast majority of adolescents who gamble without serious effects (Blinn-Pike et al., 2010).

In defining our research question, we asked how young people manage to organize a complex activity such as card playing on a regular basis. Some researchers who have adopted a more social approach to adolescent risk taking have demonstrated that teenagers who associate with friends who engage in and approve of risky activities such as gambling are more likely to engage in these activities themselves (Jacobs, 1999). However, this research merely moves the question one step back, since it does not explain what influences friends and allows them to engage in gambling in the first place. In this study we consider if and to what degree social status and associated friendship networks in adolescent society determine the type of gambling games a male teenager is most likely to play. We focus on adolescent males because they

are more likely to gamble than are female teenagers by a ratio of at least 2 to 1 (Chalmers & Willoughby, 2006). Moreover, since our expressed interest is in the informal games that adolescents play, the finding that males gamble on cards at a ratio of 4:1 compared to females (Romer, 2005) further supports limiting our focus to one gender. Using theory from the sociological study of teenage life, we put male adolescent gambling into its social context in order to see whether this context influences betting among teenage boys. In the process, we also derive hypotheses about the sources of the rise in male teenage poker play, its subsequent decline, and the risks involved in both informal and formal gambling.

Adolescent Gambling, Social Status, and the Structure of Friendship Networks

In line with research that highlights the importance of friends to adolescent behavior, we propose that the gambling patterns of teenage males are partly shaped by their friendship networks, especially as they are structured by the site of most adolescent social activity, the high school (Coleman, 1961; Milner, 2006). The characteristics of teen friendship networks in high school are influenced by, among other things, age, gender, race, and class (Cohen, 1977). Another factor that has been demonstrated to influence the attributes of a teen's friendship network is the social status of that teen, which he often shares with a majority of his friends relative to peers in his school (Coleman, 1961; Milner, 2006).

It has long been noted that middle and high school friendships are organized in cliques that define who an adolescent hangs out with (Brown, 1990). The primary focus of research on cliques has been on the distinction between members and nonmembers, making it particularly amenable to social network analysis (Hansell, 1984). Studies that have mapped high school friendship networks have distinguished between *clique members*, who participate in tightly knit groups of interacting peers in which almost every member names every other member as a friend, and *isolates*, who exhibit relatively few or no friendship links (Ennett & Bauman, 1996; Shrum & Cheek, 1987). A third role that has been the focus of increased attention is the *liaison*, an adolescent who interacts extensively with peers but not in a single group (Ennett & Bauman, 1996; Shrum & Cheek, 1987). In other words, friends of a liaison are much less likely to be friends with each other. Over the course of junior high school and high school, the percentage of clique members drops whereas the percentage of liaisons increases; most significantly for our question, the largest factor associated with still remaining in a clique in high

school is whether an adolescent is popular (i.e., high status; Shrum & Cheek, 1987). This is not surprising since the importance of status to a teen's social life and school experience has been documented for decades (Coleman, 1961; Milner, 2006). We contend that the status of a male student and the important role his status plays in determining clique membership has a direct bearing on the types of gambling activity that he will gain access to.

A fundamental difference between *formal* betting activities like lotteries and slot machines and *informal* gambling games like sports betting and card gambling is that the former is likely to be accessed illegally through commercial institutions while the latter can be independently and legally organized by youth on their own. Although adolescents can and do play lottery and slot machines, they are unlikely in the case of lottery (unless they are at least 18 years of age in most states) and unable in the case of slot machines to organize engagement in these activities without recourse to commercial venues. Although more traditional gambling games like cards and sports betting can also be pursued by entering a casino or calling a bookie, adolescents are just as able, and much more likely, to bet on cards and sports in school and at home through informal and unregulated gambling occasions that are organized and controlled by their friends and peers (Winters et al., 1995). This is best illustrated by the poker sessions described in the introduction and the very common practice of filling out sports brackets to compete for a pool of money during such national sporting events as the NCAA's *March Madness*.

Although informal games, like poker gambling, remain popular among youth, this does not mean that all adolescents have equal access to them. Indeed, the social barriers that block access to informal gambling games may be just as, if not more, of an obstruction to some adolescents as the legal barriers that constrain access to formal gambling. Specifically, it is a lot easier to put together a poker tournament at your house if you have access to a group of friends who know each other and already participate in informal social gatherings. Moreover, it is easier to put together a sports pool if you are in a tight-knit friendship group where everyone shares interests and trusts one another, groups that are best described by the clique. The students in high school who are most likely to be clique members are individuals who are of higher status compared to their peers (Shrum & Cheek, 1987). Since it is difficult to measure status directly, we take advantage of the significant body of research that has empirically supported a link between athletics and status for adolescent males.

The link between high-status teenage males and participation on sports teams has been a consistent finding in the literature on adolescent life for decades (Coleman, 1961; Holland & Andre, 1994). Moreover, studies that

have focused on the subpopulations or “crowds” of adolescent society consistently highlight “jocks” as the most ubiquitous elite crowd regardless of a school’s size, location, and the socioeconomic composition of its student body (Brown, 1990; Goldberg & Chandler, 1989). The relationship between sports participation and high-status is well suited to a Durkheimian analysis: Attending sporting events allows adolescents to visualize and construct their school’s community and create solidarity (Milner, 2006). Sporting events also reward most highly those individuals (athletes) who lead these collective rituals and represent the school against challengers (Milner, 2006). Of course, some studies have shown that only certain sports are conducive to high status. For example, Eder and Kinney (1995), though in the context of a middle school, found that only basketball, football, and wrestling were associated with high-status, since they often had the most visibility. That being said, Eccles and Barber (1999) found that in a sample of 1,259 adolescents, the sports with the highest participation by males were, in rank order, football, baseball, basketball, wrestling, and track; thus, a majority of the most popular sports were those that were linked to status. Therefore, though differences appear, an athlete represents par-excellence the type of male adolescent who is more likely to be of high status, and thus, more likely to be a clique member (Brown, 1990). Moreover, the jock crowd tends to socialize in the kind of informal social gatherings, like parties, which are a universal mark of high status and often rely on the tight linkages of cliques for organization and gate keeping (Milner, 2006). This final point allows us to round out the theoretical scaffold that our hypotheses rely on: Males who are athletes are more likely to be of high-status, men who are of high-status are more likely to be in cliques, and cliques represent the social unit that is most likely to facilitate informal gambling.

Athletes, or high-status male youth, are more likely than nonathletes, or lower-status male youth, to be members of a clique, and, thus, have access to the social resources that make informal gambling easier to organize. Although lower-status males may be attracted to the idea of poker or sports betting, they are less likely to have access to the tight-knit groups in which all members are friends with one another. Rather, lower-status males will be more likely to interact with peers through liaisons or solitary networks, structures that still create the opportunity for close friendships but not the kind that are amenable to larger informal social rituals such as card games. Those low-status males who do gamble will be less likely to do so through informal betting activities but will not differ from high-status males on potentially illegal betting mechanisms such as lotteries and slot machines. Thus, we put forth

Hypothesis 1: High-status adolescent males (i.e., athletes) will play informal gambling games, such as cards and sports betting, at higher rates than lower-status adolescent males (i.e., nonathletes).

This hypothesis does not predict that high-status youth will differ from lower-status youth in the tendency to engage in formal gambling activities since the barriers that inhibit formal gambling are the same for both groups. In addition, the hypothesis does not imply that low-status teens are without friends, even if there is some correlation between status and popularity. Low-status youth may have many friends through liaison networks. The difference is that high-status male youth are more likely to be members of a clique, regardless of how many friends they have in total. This is important to us because we propose clique membership as the mechanism that explains any relationship between status and informal gambling.

Building on Hypothesis 1, we also expect that youth who engage in informal gambling will travel in elite networks, such as the crowds that house high-status cliques in a high school population. As a result, informal gamblers should recognize that they and their high-status peers are more likely to organize poker and other informal gambling activities. Although lower-status youth may also recognize this, they will nevertheless not be as likely to be included in such activities, and, as a result, their gambling activity will not be related to their perceptions of what high-status peers do. Hence, we propose

Hypothesis 2: Perceptions of gambling behavior among high-status peers will be related to participation in informal gambling but not to participation in formal gambling.

To test Hypothesis 2, we need a measure of high status that is separate from simply asking about peer behavior. In this research, we used a proxy for status in male high school youth, namely, popularity. Eder and Kinney differentiate popularity from status. Although popularity is determined by how many people know someone, status is a function of how many people want to be someone's friend (Eder & Kinney, 1995). The authors found that in the case of female students, these two judgments are often independent of one another, with some girls being known by a lot of people but not necessarily desired as a friend. However, in the case of male students, the two characteristics appear to be closely linked, with the male who everyone knows also being the one that everyone wants to be friends with (Eder & Kinney, 1995). This is one of the reasons that it is easier to

measure status among high school males: One does not need to be concerned about the possibility of conceptually mistaking popularity for status since these qualities are highly correlated in boys. Thus, we test this hypothesis using perceptions of gambling behavior among “popular” male peers.

Building on previous hypotheses, our third hypothesis takes a closer look at the changing rates of poker and sports betting among adolescent males between the years 2002 and 2008. In 2003, poker overtook sports betting as the most popular form of informal gambling among adolescent males (Romer, 2005). Nevertheless, by 2005, poker play hit its peak (Romer, 2005). On the basis of the hypothesized link between status and informal gambling, we propose

Hypothesis 3: The rapid increase and then decline of card gambling (i.e., poker play) in the early years of the new millennium was predominantly attributable to the changing betting habits of high-status adolescent males (i.e., male athletes).

A fourth closely related hypothesis concerns the relationship between formal and informal gambling among male adolescents. Given the rapid increase in card playing during the early years of the new millennium, we would expect that this form of gambling would primarily displace the other popular form of informal gambling, namely, sports betting. However, given the distinction between formal and informal types of gambling and the tendency for high-status youth to dominate informal games, we would not expect card playing to displace formal types of gambling, which involve both low- and high-status youth and do not require the social organization that informal gambling tends to require. Hence, we propose

Hypothesis 4: The rapid increase and then decline of adolescent male card gambling (i.e., poker play) in the early years of the new millennium was inversely related to rates of sports betting but not to formal types of gambling.

While we seek to draw attention away from the minority of youth who exhibit problematic behavior, it is still important to consider how the population dynamics that differentiate informal from formal betting might contribute to our understanding of problem and pathological gambling. A minority of adolescents gamble in a way that compromises, disrupts, or damages family, personal, or recreational pursuits, and these individuals are called problem gamblers (Lesieur & Rosenthal, 1991). Diagnostic and epidemiological

tools for problem and pathological gambling look for those individuals who are both at risk and those who already qualify by asking a variety of questions about symptoms associated with problem gambling (Volberg & Wray, 2007). Although we argue above that the social and structural attributes of different games might explain the population dynamics that characterize each, it is also likely that youth who engage in informal gambling will experience greater risk for problem gambling given the degree to which this form of betting is embedded in the adolescent social scene. Despite the possibility that informal gambling is more likely to attract higher-status youth, the desire to socialize within high-status peer groups that feeds informal gambling might create greater opportunities to develop such problems. Moreover, the influence of the mass media on images of excitement associated with games like poker are the same types of forces that have been linked to the alluring qualities of all risk-taking activities (Volberg & Wray, 2007). Although some studies have suggested that formal games have a larger responsibility for pathological gambling among adults, we put forth the following hypothesis:

Hypothesis 5: Adolescent males who gamble on informal games such as poker and sports betting will show higher rates of at-risk problem behavior than their peers do who gamble more exclusively on formal games such as lotteries and slot machines

In considering how at-risk behavior is associated with informal versus formal gambling, this final hypothesis links problem gambling to the social contexts in which betting behavior occurs, as opposed to solely the psychological or neurological predispositions of individual gamblers (Avery, 2009).

Method

From 2002 to 2008, the Adolescent Communication Institute of the University of Pennsylvania's Annenberg Public Policy Center (APPC) has conducted the National Annenberg Survey of Youth (NASY) to study both risk and protective behavior among American youth (see <http://www.annenbergpublicpolicycenter.org/ProjectDetails.aspx?myId=10>). This study uses the NASY database to analyze youth gambling behavior over the years 2002 to 2008. The samples contain 900 telephone interviews per year using random digit dialing methodology (except for 2004 when there were 1,501 interviews and 2008 when there were 835), with young people aged 14 to 22 across the 48 contiguous states (see Romer, 2003, for a description of the survey). For

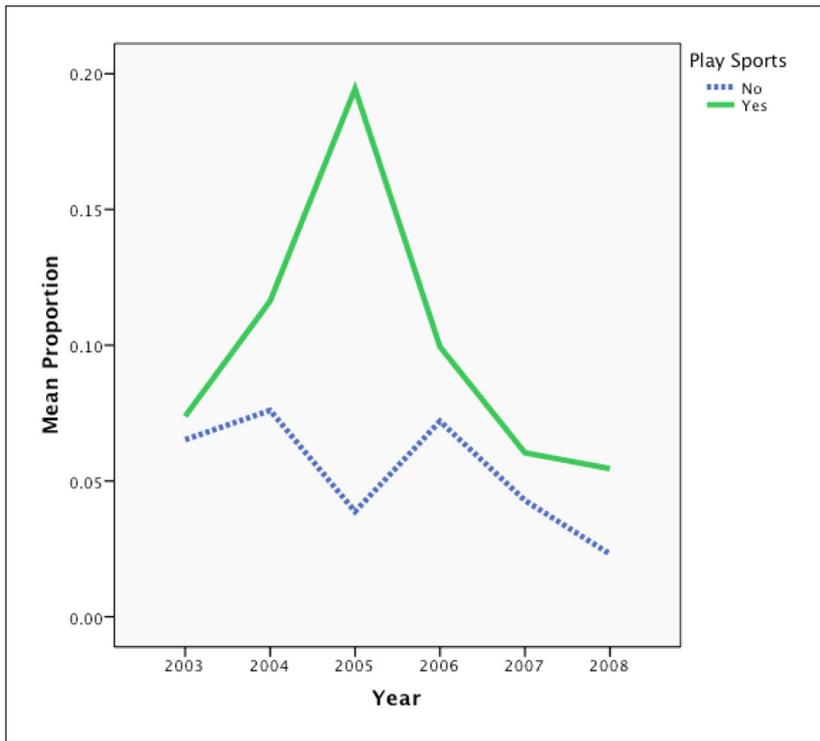


Figure 1. Weekly rates of card gambling among male adolescents who participate in sports frequently versus others from 2003 to 2008

the purposes of this study, we limit our analyses to male youth of high school age (aged 14 to 18). Each year's sample slightly underrepresents Black youth (e.g., 10% Black vs. 14% in the national population). However, we control for these and other demographic differences in our analyses. Furthermore, we use weights designed to match national rates of age, gender, education, racial-ethnic identity, and region of the country on the basis of recent Current Population Surveys when presenting national trends over time in gambling activity (Figures 1 and 2).

At each survey, respondents were asked questions about a range of risky activities, including the frequency of engaging in specific gambling activities in an average month or week. In the years 2002 to 2005, respondents were not paid an incentive to participate. However, since then, they have been paid

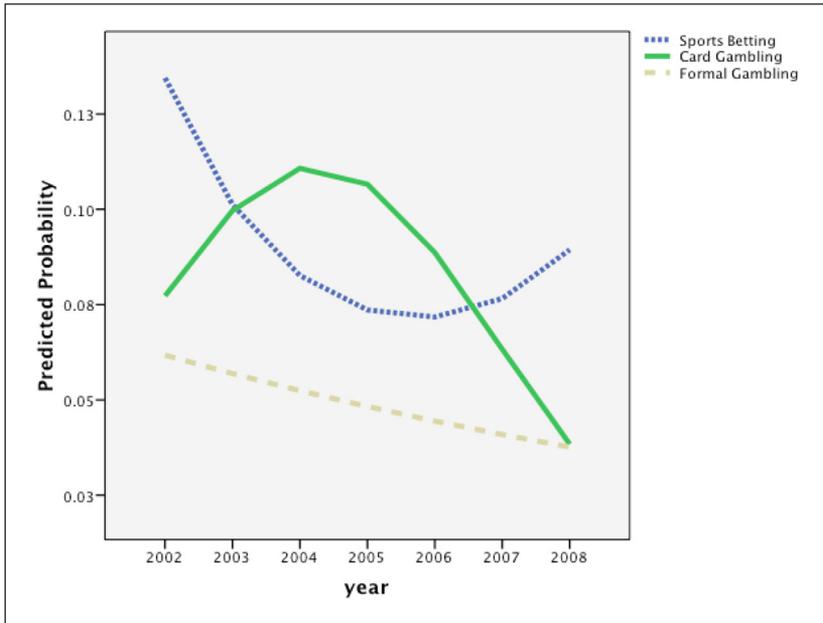


Figure 2. Predicted weekly rates of card gambling, sports betting, and formal gambling among adolescent males from 2002 to 2008

US\$10 for their time (about 30 min) to maintain response rates and reimburse for time used for talking on cell phones. Response rates have ranged between 45% and 50% across the years of the survey, a level that is comparable to the rate of telephone surveys with adults conducted by the CDC (2003). The institutional review board (IRB) of the University of Pennsylvania approved the survey each year.

Due to changes in questionnaire content across years, we use different years of the survey for each hypothesis. The number of male youth in the study age range for the years 2002 to 2008 was 2,188 (approximately 290 per year except for 2004 when there were 465). Hypotheses 1 and 2 test differences between youth who are attracted to formal versus informal gambling activities. To increase the opportunity to observe such differences, we examine monthly rates of different types of gambling, which were not obtained until year 2004 ($N = 1,618$). Hypothesis 5 examines symptoms of problem gambling among youth who gamble at least once a month, and so we also use the same base to test this hypothesis. Hypothesis 3 tests for trends in gambling

over time for high- versus low-status youth, and we use all the data regarding weekly rates of gambling for this hypothesis, except for year 2002 when the measure of status (sports participation) was not asked ($N = 1,905$). In tests of Hypothesis 4, we focus on time trends between formal and informal gambling and use the weekly data for all years ($N = 2,188$).

Demographic Control Variables

The demographic control variables we included in our analyses were racial-ethnic identity, age, neighborhood household income, and urban, suburban, or rural residence. Previous research has highlighted these variables as explanatory of youth and problem gambling. For example, studies have shown that older students gamble more than younger students (age) and that Asian American and White students reported lower rates of gambling frequency than do Hispanic American, African American, and American Indian students (Stinchfield & Winters, 1998). Since much of the research on youth betting focuses on problem gambling, many of the demographic associations are made with this minority of the adolescent gambling population. For example, research has shown that adolescent problem gamblers are more likely to have begun gambling at an early age and to have come from lower social classes (Griffiths, 2003). Although we did not have a measure of household income, we were able to match the respondent's zip code with the median household income reported by zip code in the U.S. Census in 2000. We divided our sample into five equal-income groups, including those who did not know or report their zip code (approximately 6% of the participants who were assigned the median income of the entire sample). We include these variables, as well as urbanicity of residence (since the types of gambling available to a youth may be associated with this factor), in order to more accurately test the predictive value of status differences on adolescent male betting behavior.

Other Measures

Gambling Variables. The survey asked about four types of gambling: sports betting, card playing, slot machine, and lottery gambling. Each asked whether the respondent engaged in the particular type of gambling in an average month or, in the case of Hypotheses 3 and 4, on a weekly basis within an average given month. For tests of monthly gambling, we coded playing at least once a month "1" and less than once a month "0." In the case of card gambling, the question was, "Do you play cards, such as poker, for money?"

Although this question does not exclude other forms of card gambling, its focus on poker and the reality that at the time of this survey poker was the most popular form of card gambling make the respondent most likely to be gambling on poker when they answer this question in the affirmative. Moreover, other forms of card gambling, such as black jack, have the same informal properties as poker. For our test of Hypotheses 3 and 4, we used weekly, as opposed to monthly, rates of gambling with each type of activity coded as "1" for at least once a week and "0" for less frequent play. To cover the domain of formal gambling, we examined use of slot machines and lotteries. These are the most popular types of gambling studied by gambling researchers (Griffiths, 2003). Other types of formal gambling could include racetrack betting and Internet gambling, but we do not include these.

Perceptions of gambling among popular peers. This question was examined to test Hypothesis 2 that informal gamblers' perceptions of the gambling behavior of popular (i.e., high status) peers would be related to their own gambling behavior but not to formal gamblers. We assessed these perceptions with the following: "I'd like to ask you some questions about people your age who are popular. . . . Please think about popular young men in comparison to men who are not popular. Would the popular person be 3 = *more likely*, 2 = *about as likely*, or 1 = *less likely* than others to gamble for money, such as by playing the lottery or betting on sports or a game of skill?"

Peer gambling. We also included as diagnostic variables measures of friend's gambling behavior and approval of gambling. We would expect the gambling behavior of friends to be highly related to informal gambling, but it could also be related to formal gambling, so no specific hypotheses were tested in this regard. Peer gambling was based on the question, "Thinking about your friends and the people your age that you spend time with, how many would you say currently gamble for money?" Response options included 4 = *more than half*, 3 = *between a half and a quarter*, 2 = *less than one quarter*, and 1 = *just about no one*. Peer approval of gambling was based on the question, "How do your friends feel about your gambling for money?" Response options included 3 = *mostly approve*, 2 = *don't care*, and 1 = *mostly disapprove*. For those who said that they themselves do not gamble, this question was asked as "How *would* your friends feel about you gambling for money?," with the same three answer choices provided previously. Although some respondents said they did not know what their friends did or how they felt, in those cases, we coded peer behavior at the median for the sample (2.9) and peer approval as "don't care."

Sensation seeking. Sensation seeking represents a long-standing explanatory variable in the adolescent risk tradition (Arnett, 1992). Participants were

asked to rate their agreement with four statements from the Brief Sensation Seeking Scale (Donohew, Hoyle, Lorch, Palmgreen, & Stephenson, 2002) on a 4-point scale from 4 = *strongly agree* to 1 = *strongly disagree*. The questions were, "I like to explore strange places"; "I like to do frightening things"; "I like new and exciting experiences, even if I have to break the rules"; and "I prefer friends who are exciting and unpredictable." A score constructed from the mean of these four items had a Cronbach's alpha of .64.

Sports participation. Participation on a sports team is the variable used to signify that an adolescent male is an athlete and, thus, more likely to be of high-status. The variable was created from the question, "Do you participate in a sport?," with the following response options: 3 = *most days*, 2 = *some days*, and 1 = *never*. Although this question does not directly ask whether an adolescent is a member of a sports team, several qualifications led us to be confident that this item predominantly captures such membership. First, to ask about "participation," rather than "playing a sport," links this measure to those used by other studies that consider the association between athletics and status (Holland & Andre, 1994). Moreover, the word "participate," especially "most days of the week," suggests a commitment to sports that is more likely to be exercised through formal athletic endeavors as opposed to informal recreations such as after-school pickup games.

Participation in extracurricular activities. We included this item to assess an alternative hypothesis, that youth who participate in sports may engage in informal gambling simply because they are more socially connected and, therefore, have more opportunities to organize gambling activities. The question asked in this case was, "Do you participate in a club or other extracurricular activity, and the response options are as follows: 3 = *most days*, 2 = *some days*, and 1 = *never*."

Measures of risks for problem gambling. According to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., American Psychiatric Association, 2000), pathological gambling is considered an impulse-control disorder that is typified by chaotic attempts to chase losses, resulting in an intensifying spiral that goes out of control. The NASY asks about four symptoms associated with problem gambling for those who report any monthly gambling activity: "In the past year, have you (1) often found yourself thinking about gambling or planning to gamble, (2) ever needed to gamble with more and more money to get the amount of excitement you want, (3) ever spent more than you planned to on gambling, and (4) ever felt bad or fed up when trying to cut down or stop gambling?" These questions were taken from the *DSM-IV-MR-J* questionnaire (Fisher, 2000) to assess common symptoms of dependence, including preoccupation, tolerance, loss of

control, and withdrawal, respectively. They do not permit a diagnosis of pathological gambling, but they do represent risks for the development of problem gambling. We only considered these as symptoms among those who gambled on a weekly basis.

Results

Table 1 provides a demographic summary of the high school males in our sample who engaged in different types of formal and informal gambling on a monthly basis. It also lists the monthly rates of total gambling for this population. It is clear that informal gambling is a lot more prevalent among adolescent males than is formal gambling. This should not come as a surprise because the former can be organized by adolescents solely through their own devices and the latter is often illegal for people under the age of 18 or 21. We found that about 55% of men engaged in sports on a frequent basis. This is somewhat smaller than the percentage of males, 67%, which Eccles and Barber (1999) found participating in high school team sports, and somewhat larger than the 42% of males that Broh (2002) found to be participating in high school team sports. Thus, the proportion of adolescent males in our sample who participated in a sport "most days of the week," lies between the proportion of adolescent males who claimed membership on a sports team in the studies by Eccles and Barber, and Broh.

The demographic summary also shows that, consistent with Hypothesis 1, frequent sports playing is related to engagement in both forms of informal gambling, cards and sports betting. This is not the case with either type of formal gambling, lottery or slot machines. We test these differences more stringently in what follows, using multivariate analyses and controlling for other predictors.

Table 2 presents four hierarchical logistic regression models testing the explanatory power of a variety of independent variables on card gambling among adolescent males. Model 1, our base model, includes only demographic control variables. Model 2 adds sensation seeking and perceptions of gambling in popular male peers. Model 3 adds perceptions of peer gambling and of peer approval of gambling, variables suggested as important in research on adolescent risk behavior. Model 4 adds participation in extracurricular activities and sports into the model. The model includes our two types of formal gambling, since prior research has shown that youth who are more likely to gamble on one type of game are also more likely to gamble on others (Winters, Stinchfield, & Fulkerson, 1993). This allows us to determine whether sports participation predicts card playing above and beyond a general proclivity to gamble.

Table 1. Distribution of Adolescent Males by Type of Monthly Gambling According to Selected Characteristics, 2004-2008

| Demographic variables (total) | Type of gambling | | | | Total monthly gambling (%) |
|-------------------------------|------------------|------------|---------------|-------------------|----------------------------|
| | Cards (%) | Sports (%) | Lotteries (%) | Slot machines (%) | |
| Urban-rural | | | | | |
| Urban (442) | 26.2 | 23.1 | 7.7 | 4.1 | 41.0 |
| Suburb (870) | 27.5 | 24.5 | 10.1 | 3.9 | 43.1 |
| Rural (306) | 21.6 | 21.2 | 8.2 | 4.2 | 36.6 |
| Age | | | | | |
| 14-16 (1004) | 23.0 | 22.3 | 4.9 | 3.7 | 37.5 |
| 17-18 (614) | 30.9 | 25.4 | 16.0 | 4.6 | 47.4 |
| Race-ethnicity | | | | | |
| White (non-Hispanic) (1073) | 28.3 | 22.3 | 10.4 | 3.3 | 42.1 |
| Black (non-Hispanic) (162) | 14.8 | 28.4 | 4.3 | 3.1 | 36.4 |
| Hispanic (252) | 24.2 | 28.4 | 7.9 | 7.9 | 39.7 |
| Asian (35) | 22.9 | 11.4 | 2.9 | 2.9 | 28.6 |
| Other (82) | 23.2 | 29.3 | 6.1 | 2.4 | 48.8 |
| Neighborhood household income | | | | | |
| 1 (313) Lowest | 23.3 | 23.6 | 9.9 | 3.4 | 38.7 |
| 2 (320) | 24.7 | 25.9 | 8.9 | 2.7 | 43.1 |
| 3 (324) | 25.6 | 20.7 | 9.0 | 4.0 | 40.4 |
| 4 (338) | 23.1 | 21.3 | 7.8 | 5.9 | 35.5 |
| 5 (323) Highest | 33.4 | 26.0 | 9.9 | 4.2 | 48.9 |
| Sports participation | | | | | |
| Most days (884) | 31.5 | 29.7 | 9.2 | 4.0 | 48.2 |
| Some days (388) | 24.7 | 20.1 | 10.1 | 4.1 | 39.4 |
| Never (386) | 15.3 | 13.2 | 7.8 | 3.9 | 28.0 |
| Extracurricular participation | | | | | |
| Most days (534) | 25.5 | 22.8 | 8.4 | 4.1 | 39.5 |
| Some days (528) | 29.7 | 25.0 | 8.9 | 3.2 | 45.3 |
| Never (556) | 23.0 | 22.7 | 9.9 | 4.7 | 39.2 |
| Total sample (1,608) | 26.0 | 23.5 | 9.1 | 4.0 | 41.3 |

Note: Entries in italics are significant by chi-square, $p < .05$.

As hypothesized, participation in sports was a significant predictor of card gambling even after controlling for the variables in previous models. Indeed, the predicted probability of high-status youth engaging in card playing controlling for all the factors in Model 4 was .32, whereas moderate and nonsports

Table 2. Odds Ratios From Hierarchical Logistic Regression Models Predicting Monthly Card Gambling Among Males Aged 14 to 18 Years

| Predictor | Model 1 | Model 2 | Model 3 | Model 4 |
|--|---------|---------|---------|---------|
| Race-ethnicity (reference is non-Hispanic White) | | | | |
| Non-Hispanic Black | 0.43 | 0.49** | 0.35** | 0.34*** |
| Hispanic | 0.80 | 0.86 | 0.91 | 0.83 |
| Asian | 0.68 | 0.79 | 0.85 | 0.85 |
| Other | 0.74 | 0.70 | 0.70 | 0.70 |
| Neighborhood household income (1-5) | 1.05 | 1.03 | 1.03 | 1.05 |
| Age (1-2) | 1.50** | 1.37** | 1.19 | 1.19 |
| Urbanicity (reference is suburbs) | | | | |
| Urban | 1.08 | 1.03 | 1.13 | 1.17 |
| Rural | 0.76 | 0.76 | 0.80 | 0.80 |
| Popular peers gamble (1-3) | — | 1.17* | 0.92 | 0.90 |
| Sensation seeking (1-4) | — | 1.80*** | 1.57** | 1.48*** |
| Friend's gamble (1-4) | — | — | 2.09*** | 2.03*** |
| Friend's approve of gambling (1-3) | — | — | 2.13*** | 2.00*** |
| Lottery gambling | — | — | — | 2.10*** |
| Slot machine gambling | — | — | — | 3.21*** |
| Participate in sports (1-3) | — | — | — | 1.56*** |
| Participate in extracurricular activities (1-3) | — | — | — | 0.95 |
| Constant | 0.20*** | 0.01** | 0.01** | 0.01*** |

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

playing youth were only predicted to engage in this form of gambling with probabilities of .23 and .16 respectively. Consistent with Hypothesis 2, card players were more likely than nonplayers were to believe that popular peers gamble, even when controlling for sensation seeking (Model 2). Indeed, more than 83% of card players thought that popular peers gamble as much as others, if not more, and this perception was significantly lower among non-card players (75%), $\chi^2(2) = 12.06, p < .01$. As would be expected, this relationship was no longer present after controlling for friend gambling perceptions (Model 3). Moreover, an adolescent male was more likely to gamble on cards if he said his friends gambled and approved of gambling. Finally, a sports player was more likely to play cards even when controlling for other forms of gambling.

Table 3. Odds Ratios From Logistic Regression Models, Predicting Monthly Sports Betting, Lottery Gambling, and Slot Machine Gambling Among Males Aged 14 to 18 years

| Predictor | Type of gambling | | |
|--|------------------|-----------|---------------|
| | Sports | Lotteries | Slot machines |
| Race-ethnicity (reference is non-Hispanic White) | | | |
| Non-Hispanic Black | 1.58* | 0.41* | 1.20 |
| Hispanic | 1.37 | 0.80 | 2.92** |
| Asian | 0.49 | 0.32 | 1.43 |
| Other | 1.63 | 0.57 | 0.77 |
| Neighborhood household income (1-5) | 1.00 | 0.90 | 0.85 |
| Age (1-2) | 0.95 | 3.32*** | 1.02 |
| Urbanicity (reference is suburbs) | | | |
| Urban | 0.86 | 0.73 | 0.78 |
| Rural | 0.90 | 0.73 | 1.11 |
| Popular peers gamble (1-3) | 1.20* | 0.96 | 0.95 |
| Friend's gamble (1-4) | 1.70*** | 1.20 | 0.85 |
| Friends approve of gambling (1-3) | 1.52*** | 1.45* | 1.92** |
| Sensation seeking (1-4) | 1.32** | 1.18 | 1.99** |
| Lottery gambling | 2.32*** | — | — |
| Slot machine gambling | 1.96* | — | — |
| Card gambling | — | 2.04** | 3.28*** |
| Sports gambling | — | 2.15*** | 1.99* |
| Participate in sports (1-3) | 1.63*** | 0.99 | 0.83 |
| Participate in extracurricular activities (1-3) | 0.86 | 0.93 | 1.03 |
| Constant | 0.01*** | 0.01*** | 0.01*** |

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

To further test the validity of the distinction between informal and formal gambling, we also examined the effect of our predictors on sports betting and use of lotteries and slot machines. As shown in Table 3, participation in a sport was a highly significant predictor of sports betting even after controlling

for formal gambling activity. Sports betting was also predicted by Black identity, sensation seeking, and whether a respondent said that popular peers were likely to gamble and that his friends gambled and approved of gambling. However, unlike card gambling and sports betting, participation in a sport did not predict either slot machine or lottery gambling. Although we controlled for informal gambling in these analyses, participation in sports did not predict formal gambling even when these predictors were not in the model. Older age and claiming friends who approved of gambling predicted use of lotteries. Identifying as Hispanic, sensation seeking, and claiming friends who approved of gambling predicted use of slot machines. It is also noteworthy that neither friend's gambling nor perceptions of popular peer gambling predicted use of lotteries or slots, whereas both were predictors of sports and card playing, the two betting activities that we hypothesized as heavily dependent on popular friendship networks.

Hypothesis 3 concerned the prediction that the increase in card gambling during the study period would be primarily attributable to high-status athletes. Figure 1 shows the rates of card gambling for those males who participated in a sport most days in a week compared to those who only participated some or no days in a week. Those males who participated in a sport most days of the week show a marked increase of card gambling between the years 2003 and 2005 and then a marked decrease until 2008. In a logistic regression model containing demographics, sensation-seeking and sports participation (1 = *highest* vs. 2 = *lower or no sports participation*), sports was a significant predictor of weekly card play over the 6-year period (adjusted odds ratio [AOR] = 1.54, $p = .032$). In addition, an interaction between sports participation and year 2005 (the year that card play peaked) significantly differed from other years (AOR = 5.00, $p = .003$). In separate analyses, none of the years tested produced an interaction in weekly rates of card gambling among adolescent males who played sports on only some days of the week ($p > .15$).

As further evidence of the importance of sports participation to card play, about 68% of weekly card players participated in a sport most days of the week, $\chi^2(2) = 16.13$, $p < .001$. This compares to only about 40% of weekly formal gamblers who play a sport most days of the week, $\chi^2(2) = 4.23$, $p = .121$. Thus, the adolescent males most committed to sports were most likely to play poker for money, and poker's peak in popularity among adolescent males during this period was fueled by the changing habits of high-status male gamblers. Nevertheless, by 2006 the attraction to poker had subsided among high-status male youth.

Table 4. Independent Relationships Between Four Weekly Gambling Activities and Four Symptoms of Problem Gambling

| | Type of symptom | | | |
|-----------------------|-------------------|---------------|---------------------|----------------|
| | Preoccupation (%) | Tolerance (%) | Loss of control (%) | Withdrawal (%) |
| All gamblers | 34.1 | 6.1 | 17.0 | 11.1 |
| Formal gamblers (N) | | | | |
| Slot machines (13) | 23.1 | 15.4*** | 23.1 | 23.1 |
| Lotteries (38) | 44.7 | 13.2 | 28.9 | 13.2 |
| Informal gamblers (N) | | | | |
| Cards (130) | 54.6*** | 10.8** | 35.4*** | 15.4* |
| Sports (118) | 42.4* | 11.9*** | 23.7 | 13.8 |

Note: Significant relationships are based on logistic regression models with all four types of gambling as predictors of each symptom.

* $p < .10$. ** $p < .05$. *** $p < .01$.

Hypothesis 4 concerned the changing trends in sports betting and card gambling from 2002 to 2008. In support of the hypothesis, Figure 2 shows the inverse relationship between sports betting and card gambling among high school males. The figure displays predicted probabilities of engaging in weekly card play, sports betting, and formal gambling (slot machines and lotteries) over the period from 2002 to 2008. Both linear and quadratic trends in these behaviors were included in the models. Although both the linear and the quadratic trends were significant for card playing ($OR_{lin} = 1.82, p < .001$; $OR_{quad} = .92, p < .001$) and sports betting ($OR_{lin} = .66, p < .001$; $OR_{quad} = 1.04, p = .01$), only the linear decrease in formal gambling was significant ($OR_{lin} = .92, p = .003$). Thus, formal gambling among adolescent males decreased at a constant rate, whereas sports betting and card gambling switched places as the most common type of informal gambling and then switched places again.

Hypothesis 5 concerned predictions for the relationship between behaviors that put an adolescent at risk for problem gambling and our two forms of betting. Specifically, we hypothesized that participation in informal gambling would put an adolescent at greater risk for problem gambling than for participating in formal gambling. Table 4 shows the percentages of weekly gamblers who reported each of the four "symptom" behaviors as well as tests of significant independent associations with each type of gambling. Only one of the formal types of gambling was uniquely associated with a symptom, slot machine gambling with tolerance. All of the remaining significant associations

($p < .05$) were with the two forms of informal gambling. Card playing was associated with three symptoms, and sports betting with one.

Discussion

Our results support the contention that gambling patterns among adolescent males are influenced by athletic participation because status (i.e., being an athlete) is associated with a higher likelihood of being in a clique and it is easier for cliques to organize informal betting games. Although previous youth gambling analyses have used demographic, personality, and peer attitude and behavior variables to explain differences in gambling patterns, these analyses tend to see all types of gambling as the same and, thus, have not been able to explain variation in youth who gamble on one versus another type of betting game (Griffiths, 2003). Focusing on the behavior of adolescent males, who are responsible for a majority of youth gambling, we show that by taking into account the relationship between status and the social structure of adolescent society, we can predict preferences for different types of gambling activities. We used the high-status proxy of frequent participation in sports to demonstrate that informal gambling was much more likely among high-status teenage boys whereas formal gambling was equally popular among both high- and low-status male youth. Although there was some overlap between the formal and informal gambling communities, most of the teenagers who participated frequently in informal gambling were high-status male athletes (i.e., 68%). Indeed, the time trends in Figure 1 demonstrate that teenage males who were frequent sports players were responsible for the boom and bust of weekly poker gambling rates between 2003 and 2008. During the same period, weekly card playing rates of those who played sports only some days of the week or less did not change relative to those who played sports on a frequent basis.

We attributed the greater participation of high-status males in informal gambling to their greater chance of inhabiting tight-knit social groups that allow them to more easily organize informal gambling contests like poker tournaments and sports pools. These cliquish social networks allow high-status males to more easily express the norms and values usually associated with youth culture. In support of Hypothesis 2, we found that informal gamblers were more likely to perceive that high-status (i.e., popular) peers engage in gambling and this perception was more closely aligned with their own informal gambling behavior. Although many other youth also recognized that high-status peers gamble, those who engaged in formal gambling were less likely to be part of those networks and so their gambling was not significantly

associated with this perception. In addition, youth engaging in formal gambling were less likely to be joined in this behavior by their friends than those who engaged in informal gambling. This pattern of findings is consistent with the overall hypothesis that young males who gamble informally are much more involved in tight-knit cliques that enable them to organize gambling events together. Thus, whereas in the days of James Coleman's *Adolescent Society* (1961) elite teenagers flocked to drive-in movies and fast-food eateries, informal gambling has now joined the house party as one of the modern elite gatherings of choice (for more on the link between status and parties, see Milner, 2006, pp. 72-73). This is further supported by our test of Hypothesis 3, which showed that male athletes were responsible for the rise in rates of poker play among adolescents between 2002 and 2005. Although lower-status male youth may also want to play poker, and other informal gambling games, their lesser access to cliques makes organizing such social occasions harder. Thus, when faced with the desire to gamble, lower-status males are more likely to fall back on formal gambling games—which do not require friends to organize and are often illegal.

Consistent with Hypothesis 4, time trends for participation in informal games (Figure 2) revealed strong interdependence between weekly rates of poker and sports betting. Although poker had already begun to peak between 2004 and 2005, rates of sports betting were beginning to bottom out. By 2008 weekly poker rates were as low as formal gambling rates (which fell throughout the 2002-2008 period), and weekly rates of sports betting were once again on the rise. These changes are in keeping with our contention that the same subcommunity of high-status adolescents engage in poker and sports betting; if one informal game suddenly becomes popular, it is not surprising that it will interfere with participation in other informal gambling activities. This pattern is similar to that found in a study by Winters et al. (1993) in which increases in one type of gambling balanced out decreases in another. However, the rates of formal betting games followed a different trend as they were driven more by gambling behavior that does not require the social resources usually controlled by higher-status adolescent males.

Our results indicate that poker replaced sports betting for a period as the elite gambling game of choice. Thus, poker was a fad that diffused through the high-status networks of high school males. Although Milner (2006) discusses the early adoption of cultural objects (such as clothing brands and music) by elites as an engine driving more universal consumption on the part of adolescents, events like poker are harder for lower-status youth to adopt because the activity is more difficult to achieve without access to cliquish social networks. Nevertheless, elite adolescent males stopped gambling on

cards just as quickly as they started and sports betting began to retake its place as one of the most popular forms of gambling. Once again, we showed that this is because high-status male youth stopped playing poker and returned to betting on sports.

Although our study focused on the network and cultural characteristics that allow high-status youth to play informal gambling games, there are other distinctions between formal and informal gambling games that might explain why athletes were attracted to the latter. Games like slot machines and lotteries require little mental effort, whereas poker and sports betting can both be categorized as games of skill. Moreover, slot machines and lottery do not require company, whereas informal games, by their very definition, are engaged alongside other youth. The social and competitive elements associated with skill games like poker and sports betting might attract a different set of individuals from games such as slot machines (for a comparison of social vs. nonsocial gambling, see Bernhard, Dickens, & Shapiro, 2007). Thus, either the greater social connectedness or the competitive nature of sports might explain why athletes were so attracted to the informal gambling games that mimic their athletic pursuits in many ways. Moreover, sports betting in particular is not only a game requiring considerable knowledge of the sport gambled on but is also a natural extension of participation in a sport. Thus, it would not come as a surprise that sports betting would be popular among athletes. Despite the attractiveness of these alternative explanations, a closer look at our results shows that they do not carry as much explanatory weight as our status and friendship networks framework.

The “social connectedness” explanation would posit that athletes have more opportunities to organize informal gambling activities simply because they are more likely to participate in active organizations. However, if this were the case, then one would expect that frequent participation in any extracurricular activity would also predict informal gambling among male youth. However, male youth who frequently engaged in extracurricular clubs and activities did not differ in their tendency to play cards on either a monthly or a weekly basis. Same goes for male youth who engaged in extracurricular clubs and activities and bet on sports. Thus, it is unlikely that mere membership in active organizations can explain attraction to informal gambling games.

The “competitiveness” explanation for the link between athletics and informal gambling (particularly sports betting) posits that athletes are by nature more competitive than others with the result that they would gravitate to gambling activities that involve competition. However, we contend that our status hypothesis remains a stronger explanation for variation in adolescent

gambling. Indeed, the finding that extracurricular clubs and activities are not correlated with informal gambling not only counters a social connectedness explanation but also a competitiveness explanation. Sports are not the only competitive activity that high school students are drawn to. Extracurricular activities include many competitive organizations, such as the Chess Club, Debate Club, Model United Nations (MUN), and Science Olympiad, and even organizations like the glee club, the math club, and orchestra have ranking, problem-solving, and other competitive and skill elements. Moreover, though athletics are categorized as physical contests, MUN and the Chess Club, like poker and sports betting, can be seen as intellectual contests (Guttman, 1978). Thus, it is often the case that many clubs, and some of the most popular, may have as much of a competitive and skill aspect as athletics. Therefore, since sports participation predicts informal gambling and other extracurricular activities do not, our findings point to the explanatory strength of social status over a competition explanation. In addition, our finding that informal gamblers recognize social status as more related to gambling than formal gamblers do is not predicted by a competition explanation. Rather, this relationship suggests that the behavior of elites and their social networks explains why high-status athletes are more likely to engage in informal gambling. However, it remains for future research to more effectively disentangle these explanations for the relationship between athletic participation and informal gambling.

Risks of Adolescent Gambling

Although adolescent gambling research has focused on risks associated with youth gambling, our results suggest that informal gambling serves as a normal outlet for social activity, especially among high-status youth. Nevertheless, we expected informal gambling to pose greater risks because of the increased opportunities it provided adolescent males to engage in gambling compared to more formal types of betting, which are restricted by age and venue. Indeed, our analyses of the association between four at-risk behaviors associated with problem gambling and weekly participation in various gambling activities indicated that those who engaged in card playing reported significantly more of the three at-risk behaviors and marginally more of a fourth (withdrawal). Formal gambling was only related to one of the at-risk behaviors (use of slot machines and tolerance). We suspect that the social factors that make informal gambling possible facilitate some of the very behaviors that may lead to problem gambling. Whatever the cause, our findings highlight the reality that, despite the differences between informal and

formal gambling, all betting poses some risk and informal gambling may prove even more risky than formal.

The greater risks associated with informal gambling create dilemmas for those seeking to reduce the risks that gambling poses to healthy adolescent development. In regard to formal gambling, government has a responsibility to prevent youth from entering a path that is illegal and might lead to addiction. However, informal gambling, which is not controlled or licensed by the state, poses a different conundrum. Indeed, the initial reaction to the poker fad among parents was one of amusement and, in some cases, enthusiasm. However, as the fad progressed, public reaction to it began to include less favorable accounts. *The New York Times* featured stories about youth who had run into serious problems because of gambling, such as a college student who robbed a bank to pay back card-playing debts and high school students who owed more than US\$100,000 in gambling debts (Salzman & Robertson, 2005; Schwartz, 2006). These and other stories may have played a role in reducing the overall allure of formal and informal gambling since 2005.

Because adolescents engage in more informal than formal gambling and these forms of gambling appear to create more opportunities for addiction, one cannot ignore the risks that this form of gambling poses. Nevertheless, a large proportion of youth who gamble early (whether they experience problems or not) “mature out” of the behavior as they age (Slutske, Jackson, & Sher, 2003, p. 264.) Furthermore, those who go on to develop serious problems are only a minority of the entire population who gamble, and we need to recognize that the majority of youth who gamble on informal games are engaged in a social activity that is more normative than formal gambling. Indeed, though some formal games may be played in a social manner (for the prevalence of syndicate, or group play, among adult lottery ticket buyers, see Garvía, 2007), the majority of youth under 18 years of age who gamble on slot machines and lotteries do so in a solitary fashion and illegally. Thus, betting games are structurally different, even if all pose dangers, and gambling scholars need to analyze how these distinctions shape gambling behavior among youth.

In the end, our findings leave us with a dilemma regarding how to confront informal gambling among youth. Unlike the more solitary and illegal elements that characterize formal gambling, informal gambling is facilitated by social interaction among adolescents, predominantly that of high-status males and, thus, may contribute to a variety of positive outcomes. As parents explained when commenting on their sons’ poker gambling, the activity provided a generally safe social outlet that strengthened friendships and exercised intellectual abilities. However, informal betting activities may lead to

problem gambling among a larger number of youth than formal gambling would, and this reality should not be ignored when comparing poker and sports betting to lotteries and slot machines.

For those concerned about the risks posed by informal gambling, any preventive policies should recognize the social character of betting games, like poker and sports betting, and tailor their interventions accordingly. For example, educational and behavior-change initiatives should target athletes to increase the chances that those who most need such attention receive it. However, our findings suggest that any approach needs to take into account the possibility that for many youth gambling is a potentially positive experience that may even be consonant with healthy personal and social development. As noted by Jessor (1992), research and policies directed to youth risk taking need to consider both the cons *and* the pros of such behavior (for an example of the developmental gains to be had from marijuana experimentation, see Shedler & Block, 1990). Moreover, it is simplistic to conclude that behaviors that may pose risks (such as sexual activity) should be categorically labeled as “risk-taking behavior” (Michaud, 2006). For example, risky activities, such as drinking, are also linked to socially adaptive processes, such as peer acceptance, which do not necessarily lead to problems of dependence (Maggs, 1997). Indeed, the sports playing that was the focus of our analysis is also noted for its association with good educational outcomes (Broh, 2002; Eccles & Barber, 1999). Thus, we encourage future research on adolescent gambling to consider the nuances of betting behavior and the social contexts in which it takes place. Moreover, we recommend that gambling scholars focus on all youth who bet, not just the minority at risk for problem gambling, and that gambling be studied as a reality in adolescent life in which risk is only one element among many.

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Bios

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