

Risk of Teen Fatherhood among Minority High School Athletes

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Abstract

Limited research has been devoted to investigating how team sport participation impacts risk behaviors among adolescent males, specifically their risk of becoming a teen father. The current study investigated the association between team sport participation, substance use, and risk of teen fatherhood. The primary purpose was to compare risk behaviors between athletes and non-athletes. The Teen Fatherhood Risk Scale was developed to measure risky sexual behavior that elevates males' risk of becoming teen fathers. The sample consisted of 4588 male high school students between the ages of 15 and 17. T-test analysis compared risk scores between athletes and non-athletes and indicated that athletes were at a greater risk of becoming teen fathers. T-test analysis also revealed that minority male athletes were at a greater risk of becoming teen fathers. More specifically, ANOVA analysis indicated that relative to Hispanic and White athletes, Black male athletes had the highest risk of becoming a teen father. In addition, male athletes consumed more alcohol and marijuana than non-athletes did. Recommendations for practice, policy, and research are also discussed.

Keywords: substance use, risky behavior, sexual behavior, sports, athletes, minority males

Introduction:

Adolescence is a critical transition period biologically, socially, and psychologically. It is during this stage of development that adolescents explore their personal identities, sexuality, intimate relationships, and other developmental tasks. For some, the journey through adolescence is also characterized by experimentation with problem behaviors such as delinquency, substance use, risky sexual activity, and other high-risk behaviors. One major consequence of risky sexual behavior among adolescents is pregnancy. Each year approximately 700,000 teenage girls become pregnant in the U.S. In addition, 900,000 boys ages 12–16 will become fathers before their 20th birthdays (Scott, Steward-Streng, Manlove, & Moore, 2012). Although these statistics are alarming, significantly, less attention has been dedicated towards male teens and as a result, far less is known about the risk of teen fatherhood. The literature is saturated with studies pertaining to teen pregnancy and adolescent females, but there is a significant gap in the literature regarding adolescent males and teen fatherhood. However, scholarship focusing on adolescent males, and male athletes in particular, is emerging.

Approximately 7,668,000 (55.5%) high school students participated in school sports during the 2010-2011 school year (National Federation of State High Schools Associations [NFSHSA], 2011; Toporek, 2001). This is an increase of 40,000 students from 2009/2010. Males (62%) had a higher sports participation rate than females (50%), and football had the greatest number of participants, 1,108,441 students (NFSHSA, 2011). This spike in sports participation is partially explained by increased efforts to engage students in physical activity to combat childhood obesity (Office of Disease Prevention and Health Promotion, 2012). Moreover, school athletic programs provide a positive youth development experience and a buffer from negative outcomes associated with psychosocial factors (Johnson et al., 2014).

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School athletic departments provide supervision, a buffer against dropping out of high school, motivation towards academic excellence, and, for many, alternatives to delinquent behavior (Cohen, Taylor, Zonta, Vestal, & Schuster, 2007). Accordingly, teen birth rates are lower in school districts that offer a variety of extracurricular sports (Cohen et al., 2007). However, very little attention has been devoted to adolescent male athletes' risky sexual behaviors and substance use.

1. Literature Review

1.2 Team Sport Participation

Sports participation is slowly gaining attention as a factor associated with risky sexual behavior among adolescent male athletes. However, research pertaining to adolescent female sports participation and risky sexual behavior has yielded mixed findings. One body of research posits that sports serves as a protective factor for adolescent female athletes, who are consequently more likely to have protected sex, fewer sexual partners, and significantly fewer incidents of sexual intercourse under the influence of drugs and alcohol (Eitle & Eitle, 2002; Kulig, Brener, & McMarcus, 2003; Lehman & Koerner, 2004; Miller, Barnes, Melnick, Sabo, & Farrell, 2002; Miller, Farrell, Barnes, Melnick, & Sabo, 2005; Taliaferro, Rienzo, & Donovan, 2010). Other researchers have found that female athletes have more sexual partners than non-athletes (Grossboard, Lee, Neighbors, Hendershot, & Larimer, 2007; Wetherill & Fromme, 2007).

The limited research focused on adolescent male athletes and risky sexual behavior has also yielded mixed results. One body of research revealed that adolescent male athletes were more likely to participate in risky sexual behavior than adolescent female athletes (Miller et al., 2002; Miller et al., 2005). However, other research demonstrated both male and female athletes have sex more often, with more partners, and also engage in unprotected sexual intercourse more than their nonathletic peers (Habel, Dittus, DeRosa, Chung, & Kerndt, 2010; Grossboard et al., 2007; Johnson et al., 2014; Wetherill & Fromme, 2007). Kulig et al. (2003) reported that male athletes were no more likely to participate in risky sexual behavior than peers who did not participate in a team sport or physical activity.

Research has also revealed racial differences among athletes with respect to risky sexual behavior. Miller et al. (2005) found that Black male athletes, who identified themselves as jocks, engaged in sexual activity at an earlier age, had more sexual partners, and engaged in sex more frequently. Interestingly, White males who identified themselves as jocks, focused more on dating. Pate, Trost, Levin, and Dowda (2000) also found Black athletes reported more sexual intercourse partners. Although Hispanic males were sampled in the Miller et al. (2002) and Pate et al. (2000) studies, no significant association was found between sports participation and risky sexual behavior. In fact, the literature is lacking in the area pertaining to Hispanic males. Hispanic adolescents are often times excluded from the sample or represented by smaller sample sizes. For example, studies that are more recent have failed to conduct racial comparisons on risky sexual behavior among athletes, even when the sample consisted of diverse groups of athletes (Habel et al., 2010; Johnson et al., 2014; Wetherill & Fromme, 2007). Failing to conduct racial comparisons has also created a gap in the literature.

1.2 Substance Use

A possible explanation for a higher rate of risky sexual behavior among athletes is substance use. Alcohol generally puts adolescents at risk for engaging in risky behaviors, including risky sexual behavior. Adolescent substance users are more likely to have sexual intercourse and more sexual partners than adolescents who do not use substances (Averett, Rees, Duncan, & Argys, 2004; Broman, 2007; Miller-Johnson et al., 2004; Pears et al., 2005; Rashad & Kaestner, 2004; Zapata et al., 2008).

Athletes consume more alcohol than non-athletes do (Grossboard et al., 2007; Martens, Dams-O'Connor, & Kilmer, 2007; Wetherill & Fromme, 2007). With respect to other substances, athletes are less likely to smoke cigarettes (Barnes, Hoffman, Welfe, Farrell, & Dintcheff, 2007; Johnson et al., 2014; Talia, Rienzo, & Donovan, 2010). Other researchers have posited that smoking is inversely related to sport participation (Johnson et al., 2014). In fact, sport participation served as a protective factor for all substance variables for athletes in the Johnson et al. study. A possible explanation for these findings is that many athletic programs have implemented strict drug policies with random drug testing and impose stiff penalties for consuming banned substances. These policies deter many athletes from substance use (Johnson et al., 2014; Oliphant, 2011).

Results from these studies revealed that risky sexual behavior and substance use among athletes is complex and highlighted the need for additional research. This study was undertaken to investigate the association between team sport participation and risky behavior among male athletes. For the purposes of this study, risky behavior is conceptually defined as behaviors that increase risk for teen fatherhood: multiple sexual intercourse partners, unprotected sexual intercourse, and substance use during sexual intercourse, and other behaviors such as substance use that result in negative outcomes. The current study extends prior research by assessing the differences in risky behaviors between minority and non-minority athletes. The current research is intended to answer the following questions. Does participation in risky behavior vary between among athletes and non-athletes? Does participation in risky behavior among athletes vary by race? Does participation in risky behavior among athletes vary by age? Does participation in risky behavior increase for athletes who participate in multiple sports?

2. Methods

2.1 The Data Set

The data for this study were drawn from the 2007 Youth Risk and Behavior Survey (YRBS). The YRBS is a national high school-based survey established by the Centers for Disease Control and Prevention. The survey is used to monitor six areas of risk behavior and demographics. The YRBS was conducted using a multistage cluster probability sampling design. A total of 157 schools participated in the investigation and a total of 14,041 surveys were processed. For the current study, Black, White, and Hispanic males aged 15–17 were selected, resulting in a sample size of 4588.

2.2 Measures and Variables

Teen Fatherhood Risk Scale (TFRS). The criterion variable is teen fatherhood risk. Seven questions from the original survey were used to create a Teen Fatherhood Risk Scale, which was used as the teen fatherhood risk variable. Risk was based on the following seven items. (1) "Have you ever had sexual intercourse?" (2) "How old were you when you had sexual intercourse for the first time?" (3) "During your life with how many people have you had sexual intercourse?" (4) "During the past 3 months, with how many people did you have sexual intercourse?" (5) "Did you drink alcohol or use drugs before you had sexual intercourse the last time?" (6) "The last time you had sexual intercourse, did you or your partner use a condom?" (7) "The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?" The development of this scale consisted of a two-step process. In the first step, each item was recoded. Numbers were assigned based on the severity of the behavior. For example, the younger the age of first sexual intercourse, the higher the number assigned. Age 11 was assigned 7 points, the highest number assigned to this response. Individuals who never had sexual intercourse were assigned zero points. In the second step, all seven items were summed to compute a composite risk score. Scores ranged between 0 and 27, with higher scores indicating higher risk of teen fatherhood. The scale yielded a Cronbach's alpha of 0.89.

Race. In the current study, two race variables were created. The first race variable included White, Hispanic, and Black. This race variable was used to run descriptive statistics and to compare mean risk scores. A dummy coded race variable was created to investigate minority and non-minority comparisons.

Team sport participation. One question was used to measure this variable: "During the past 12 months, on how many sports teams did you play?" Students could choose A, "0 teams"; B, "1 team"; C, "2 teams"; or D, "3 or more teams." In the current study, sports participation was recoded as an interval/ratio variable. A dichotomous team sport variable was also created to compare athletes and non-athletes.

Substance use. The following questions were used to measure current substance use. (1) "During the last 30 days, on how many days have you had at least one drink of alcohol?" (2) "During the past 30 days, how many times did you use marijuana?" (3) "During the past 30 days, on how many days did you smoke cigarettes?" Similar questions were used to measure lifetime substance use. Instead of asking about the past 30 days, questions were changed to ask if participants ever used alcohol, marijuana, or smoked cigarettes.

2.3 Data Analysis Plan

All statistical analyses were conducted using Statistical Package for Social Sciences Software (SPSS), version 22.

Descriptive statistics and frequencies were computed for each predictor variable. ANOVA analysis was conducted to compare mean risk scores among athletes and non-athletes, racial groups, and the number of team sports. Chi square analysis was also used to compare risk behavior among athletes and non-athletes. The level of significance was set at .05 ($p = .05$).

3. Results

The present study group comprised 4588 males between the ages of 15 and 17. The majority of the males were White (46.2%, $n = 2120$), 31.5% ($n = 1446$) were Hispanic, and 22.5% ($n = 1022$) were Black. The mean age of the sample was 16.03 ($SD = .809$). When surveyed, 59% ($n = 2717$) reported that they participated on a sports team. The mean number of sports teams was 1.14 ($SD = 1.10$). In addition, 52% of the sample reported that they had sexual intercourse.

3.1 Teen Fatherhood Risk Scale (TFRS) Scores

An independent samples t -test was conducted to investigate the difference in mean scores on the TFRS for male athletes and non-athletes. Analysis revealed that athletes had higher risk scores ($M=8.02$, $SD=7.39$) than non-athletes ($M=6.84$, $SD=7.30$). As shown in Table 1, t -test analysis revealed a statistically significant difference in mean scores between groups ($t [4112] = -5.010$, $p < .05$). Athletes were at a greater risk of becoming teen fathers. More specifically, Chi square analysis was conducted to further assess risky sexual behaviors among athletes and non-athletes. Analysis revealed that 61% of male athletes failed to use a condom during their last sexual intercourse encounter compared to 39% of non-athletes ($X^2 = 37.356$, $p < .05$). Analysis also revealed that 67% of male athletes reported that they used a substance at last sexual intercourse compared to 33% of non-athletes ($X^2 = 28.778$, $p < .05$).

Table 1: Mean TFRS and Sport Participation

	N	Mean	SD	t
				-5.010*
Athletes	2717	8.02	7.39	
Non-Athletes	1676	6.84	7.30	

*Denotes $p < .05$

Risk of teen fatherhood among racial groups. Previous analyses revealed that athletes were at a greater risk of becoming teen fathers as demonstrated by higher scores on the TFRS. To further investigate risk of teen fatherhood among athletes, three independent samples t -test were conducted to compare mean risk scores between athletes and non-athletes for each racial group. As illustrated in Table 2, Black male athletes had the highest risk scores, followed by Hispanic athletes. There were no statistically significant differences between White male athletes and non-athletes.

Table 2: Mean TFRS for Team Sport by Race

	N	Mean	SD	t
White				-1.44
No Sports	722	5.22	6.62	
Sport Participation	482	5.68	6.82	
Hispanic				-3.22*
No Sports	555	7.55	7.46	
Sport Participation	743	8.86	7.05	
Black				-4.84*
No Sports	303	9.38	7.62	
Sport Participation	574	11.90	7.13	

* Denotes $p < .05$

Specific risky sexual behaviors among athletes. In further analysis conducted to investigate the relationship between race and specific risky sexual behaviors, chi square analysis revealed that 12.6% of White athletes, 18.5% of Hispanic athletes, and 18.9% of Black athletes did not use a condom during their last sexual intercourse ($X^2 = 217.57, p < .05$). Analysis revealed that significantly more minority athletes failed to use a condom during their last sexual intercourse encounter. In addition, 12.5% of White, 17.8% of Hispanic, and 12.5% of Black athletes reported using a substance during their last sexual intercourse encounter. Hispanic athletes reported significantly higher percentages of substance use during their last sexual intercourse encounter.

Athletes' TFRS and age: Does risk vary by age among athletes? A one-way analysis of variance was conducted to investigate the relationship between differences in mean TFRS scores among athletes by age. As shown in Table 3, risk increases for male athletes as they get older.

Table 3 Mean TFRS Scores for Athletes by Age

	N	Mean	STD	F
15 year olds	826	6.47	7.51	23.46*
16 year olds	848	8.08	7.26	
17 year olds	860	9.19	7.22	
Total	2534	8.02		

*Denotes $p < .05$

Substance use among athletes and non-athletes. Chi square analysis was conducted to compare substance use among athletes and non-athletes. Chi square analysis revealed that 20% of male athletes were current smokers compared to 24% of non-athletes ($X^2 = 10.57, p < .05$). With respect to alcohol use, 49.7% of athletes consumed alcohol in the past 30 days compared to 42.4% of non-athletes ($X^2 = 19.46, p < .05$). For marijuana use, 24% of athletes and 23% of non-athletes smoked marijuana in the past 30 days ($X^2 = .407, p > .05$). More non-athletes than athletes smoked cigarettes, and athletes drank more frequently than non-athletes. There were no statistically significant differences in marijuana usage among athletes and non-athletes.

Does substance use vary among athletes by race? Chi square analysis was conducted for each substance variable for all athletes. As shown in Table 4, in the past 30 days White athletes smoked cigarettes more frequently, and Hispanic athletes drank alcohol more frequently. There were no statistically significant racial differences in marijuana use among athletes.

Table 4: Racial Differences in Substance Use among Athletes

	White	Hispanic	Black	X ²
Cigarette Smoking	21.8%	20.6%	13.1%	20.19*
Alcohol	52.7%	54.2%	37.1%	43.75*
Marijuana	23.1%	23.8%	27.7%	5.6

*Denotes $p < .05$

Number of Teams and Risk

Analysis revealed that as the number of team sports increases, so does the risk. Male athletes who participated on three or more teams had higher risk scores. However, post hoc analysis revealed two distinct groups: athletes and non-athletes. Although males who participated in three or more sports had higher risk scores, there were no statistically significant differences between athletes who participated on one team and those who participated on multiple teams.

4. Discussion

The present study was undertaken to investigate whether athletes engaged more frequently in risky sexual behavior and substance use than non-athletes. In addition, racial differences among athletes were explored. Unlike other studies, this study consisted of a large, diverse, all-male sample. Overall, results reveal that athletes had a higher risk of becoming teen fathers, as evidenced by more frequent participation in risky sexual behaviors and higher risk scores. Findings also indicate more frequent consumption of alcohol among athletes and more frequent cigarette smoking among non-athletes. However, analysis revealed no statistically significant difference in marijuana use among athletes and non-athletes.

The context in which team sport participation occurs, and the cultural meaning attached to it, must be considered when interpreting study results. Playing sports is an American tradition that is viewed as a mechanism to socialize boys into manhood. Many boys are expected to play sports and are exposed to sports at a very young age (Messner & Bozada-Deas, 2009; Smith, 2010). In the institution of sports, sexual behaviors validate masculinity and manhood and risky sexual behaviors are often accepted. Promiscuity among male athletes does not fall prey to the same scrutiny as that of female athletes. Many athletes gain popularity status and other social benefits that they can then use as bargaining power to exchange for sexual gain. For example, high school jocks have sexual intercourse at an earlier age and more sexual intercourse partners (Miller et al., 2005). Some adolescent males may view the group norms and expectations associated with sports as an avenue to participate in risky sexual behavior.

A possible explanation for these findings is that popularity is often associated with risky behavior. Attaining popularity status sometimes means engaging in risky behavior such as risky sexual behavior and substance use (Mayeux, Sandstrom & Cillesen, 2008). This is especially true for athletes, whose popularity status is based primarily on their athletic status. Often times, status and popularity affords athletes access to alcohol and a diverse and older peer group (Grossboard et al., 2007; Nelson & Wechsler, 2001), which also provides a greater opportunity to engage in risky behavior. In addition, athletes are more likely to engage in unsafe sexual intercourse if they are under the influence of alcohol (Grossboard et al., 2007; Kalichman & Cain, 2004; Vanable et al., 2004). Engaging in risky behavior solidifies their masculinity and popularity. Consequently, these behaviors are not always considered "risky" among adolescents.

Racial comparisons of risky sexual behavior among athletes have been made in very few studies. Results from the current study revealed that Black athletes had the highest risk for teen fatherhood. These results are consistent with other studies (Miller et al., 2002; Miller et al., 2005; Pate et al., 2000). Hispanic athletes had the second highest risk scores. These results are unique because the limited studies that have included Hispanic adolescents did not reveal an association between team sport participation and risky sexual behaviors (Miller et al., 2002; Pate et al., 2000).

One possible explanation that may account for racial differences in risk scores is that minority males, especially those in poverty, may view sports as the only viable option to gain social status and success (Smith, 2010). Conversely, affluent White athletes may have a completely different outlook on sports participation, viewing it simply as extracurricular activity, and not placing significant emphasis on sports as a financial or career option (Guest & Schnelder, 2003). Athletes with post-secondary academic opportunities and career goals may view having a child in high school detrimental to achieving future goals. However, underprivileged athletes may view going to the “pros” as an imaginary avenue to escape poverty (Smith, 2010).

Thus, engaging in risky sexual behavior that could potentially lead to fatherhood would not, in their minds, jeopardize these aspirations. They may even fantasize about having plenty of money to provide for a child if they should have one in high school. In addition, racial minority athletes may idolize professional athletes because they lack role models, adequate mentors, and exposure to professional occupations in their communities. Sometimes, their only option may be to play sports in order to escape juvenile delinquency and violence within communities that often lack positive youth development. Disadvantaged minority athletes may feel that playing professional sports is their primary option to gain power, status, and control in environments where they have been stigmatized, marginalized, and discriminated against.

4.1 Limitations

Methodological limitations should be considered when interpreting these results. Secondary analysis presents limitations in its own right. Critical variables such as relationships with family members, family composition, academics, community factors, socioeconomic status, and other pertinent psychosocial variables were not collected in the original study. These variables could have provided a comprehensive overview of the correlates associated with athletes’ risky behavior. Another limitation is recall bias; participants were asked to report information regarding previous behaviors, which could have resulted in inaccurate reporting. In addition, the self-report nature of this study could have resulted in the adolescents responding in socially desirable ways. Another limitation is that the specific sport that the students played was not explored. This information could have facilitated a comparison analysis between types of sports and risky behavior. For example, do football players consume alcohol more frequently than baseball or basketball players do? Are football players at a higher risk of becoming teen fathers than baseball players? Information of this caliber could provide parents, schools, social workers, and health professionals with information that is vital to targeted prevention programs. Despite these limitations, this study provides significant contributions to the emerging literature regarding males and the complex factors that impact risk for teen fatherhood and substance use.

4.2 Implications

Study findings elucidate the need for additional exploration into sexual risk behaviors among athletes. Future research should include larger samples of minorities in order to conduct in-depth racial comparisons. Likewise, future research should also explore specific sports, and investigate whether or not risky behavior is more prevalent during the athletic season or during the off-season. In addition, further research should be used to explore specific correlates of risky behavior among athletes such as cognitive functioning, relationship with coaches, academics, and other psychosocial factors. Continued research utilizing qualitative methods is necessary to illuminate adolescent male athletes’ experiences and perspectives. The results of this study revealed that risky behavior increases, as athletes get older. Longitudinal research will enable researchers to monitor middle-school athletes through high school and track the progression of their behaviors, as well as the correlates associated with the behaviors.

Athletic programs could be the ideal platform for targeted prevention programs for high school male athletes. Coaches are already actively engaged in the lives of their athletes, often serving as positive role models. Therefore, coaches and social workers must work together to transform the athletic culture from risk inducing to an atmosphere that promotes health. In order to accomplish this task, innovative strategies that captivate the athletes and send overt messages regarding sports, risky behavior, and consequences should be instituted. One innovative strategy is to develop a mentorship program that includes local college and professional athletes who have a passion for helping high school athletes make healthy choices. College and professional athletes can share candid testimonies about overcoming their challenges with risky behavior and the consequences associated with those behaviors.

Many adolescent athletes aspire to be college and professional athletes and could benefit from mentoring from college and professional athletes. As role models, college and professional athletes might help adolescent males in prevention programs.

Policy implications should also be considered. One way to deter substance use is to implement universal, mandatory substance use policies with strict enforcement requirements and consequences for violations. Several athletic programs have implemented such policies, but implementation has not been universal. In addition, athletic programs can implement a mandatory substance abuse prevention program for athletes. School social workers can also work more collaboratively with families to ensure athletes who face substance abuse issues are receiving appropriate treatment.

Results revealed that minority athletes had a higher risk of becoming teen fathers. As a result, practitioners may be faced with a myriad of cultural challenges when working with minority adolescents. Cultural sensitivity is imperative when implementing prevention programs. The purpose of implementing culturally sensitive practice is to effectively engage minority adolescents and increase program participation. Program participation increases program exposure, thereby increasing the likelihood of goal achievement (Mistry, Jacobs, & Jacobs, 2009).

5. Conclusion

Limited research has been dedicated to the risk of teen fatherhood among athletes. Athletes in the current study had a higher risk of substance use and risky sexual behavior than their non-athlete peers. More specifically, racial minority athletes had a higher risk of teen fatherhood. A combination of subculture norms and expectations associated with sports, an idealized potential for financial gain, and the perception that having a baby will not jeopardize future goals are plausible explanations for the research findings. Future research must include anecdotal responses from adolescent athletes to gain their perspectives. In addition, practitioners and educators must target prevention among athletes during middle school to encourage positive health promotion because adolescents can make healthier choices when provided the requisite knowledge, skills, and resources.

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