



Original article

Temporal Associations of Popularity and Alcohol Use Among Middle School Students

Joan S. Tucker, Ph.D.^{*}, Jeremy N.V. Miles, Ph.D., Elizabeth J. D'Amico, Ph.D., Annie J. Zhou, M.S., Harold D. Green, Jr., Ph.D., and Regina A. Shih, Ph.D.

RAND Corporation, Santa Monica, California

Article history: Received December 9, 2011; Accepted April 23, 2012

Keywords: Popularity; Adolescent; Longitudinal; Alcohol; Middle school; Cross-lagged

A B S T R A C T

Purpose: The goal of this study is to better understand the longitudinal cross-lagged associations between popularity, assessed through self-rating and peer nominations, and alcohol use among middle school students.

Methods: The analytical sample comprises 1,835 sixth- to eighth-grade students who were initially recruited from three California middle schools and surveyed in the fall and spring semesters of 2 academic years. Students reported on their background characteristics, past-month alcohol use, and perceived popularity. Additionally, students provided school-based friendship nominations, which were used to calculate peer-nominated popularity. A cross-lagged regression approach within a structural equation modeling framework was used to examine the longitudinal relationship between popularity (self-rated and peer-nominated) and alcohol use.

Results: There was a statistically significant ($p = .024$) association between peer-nominated popularity and the probability of alcohol consumption at the subsequent survey, but not vice versa. Our results suggest that in a scenario where 8% of students are past-month drinkers, each increase of five friendship nominations is associated with a 30% greater risk of being a current drinker at the next wave. We found no evidence of longitudinal associations between past-month alcohol consumption and self-rated popularity.

Conclusions: Popularity is a risk factor for drinking during the middle school years, with peer-nominated popularity being more predictive of use than self-perceptions of popularity. To inform alcohol prevention efforts for middle school students, additional research is needed to better understand why adolescents with a larger number of school-based friendship ties are more inclined to drink.

IMPLICATIONS AND CONTRIBUTION

Future alcohol use is more likely among middle school students who receive a greater number of friendship nominations from classmates. Further research is needed to understand whether this effect is because of greater direct exposure to drinking role models, access to alcohol, opportunities to use, social stress, or other factors.

© 2013 Society for Adolescent Health and Medicine. All rights reserved.

Although popularity among one's peers is undoubtedly coveted by most middle school students, its association with underage drinking may be a cause for concern. A study of 185 seventh to eighth graders examined associations of popularity, with a composite substance use measure that included alcohol and marijuana use and problems from their use [1]. Assessing popu-

larity as the number of schoolmates who nominated the student as someone with whom they would "most like to spend time on a Saturday night," results indicated that more popular students tended to show increases in the substance use measure 1 year later. Another study of 5,104 sixth to eighth graders, assessing popularity as the number of friendship nominations received by each student, found that relatively popular adolescents were more likely to be drinkers 2 years later at age 13 or 15 years [2]. A third study of 156 seventh graders assessed popularity in terms of "most popular" nominations by schoolmates [3]. Current

^{*} Address correspondence to: Joan S. Tucker, Ph.D., RAND Corporation, Santa Monica, CA 90407-2138.

E-mail address: jtucker@rand.org (J.S. Tucker).

drinkers in the fall semester were more likely than nondrinkers to be nominated as popular by their schoolmates, and maintained this higher social standing in the spring semester regardless of whether they continued or stopped drinking.

As these studies illustrate, the association between being popular in middle school and subsequent alcohol use has received some support. However, none examined whether the association might be reciprocal: is it the case that being popular increases a student's risk of alcohol use, and students who engage in alcohol use experience increased popularity over time? Certainly, social motives are commonly endorsed by adolescents as reasons why they drink or want to drink [4], but it is unclear whether middle school students who drink alcohol might reap social benefits from engaging in this risky behavior. To the best of our knowledge, only one study has examined the reciprocal associations of adolescent popularity and alcohol use, albeit in an older sample of high school students. Among 405 10th graders from a Northeastern high school, Mayeux et al [5] assessed popularity in terms of “most popular” nominations received by schoolmates. Students who were viewed as most popular in 10th grade reported more frequent alcohol use in 12th grade, but alcohol use in 10th grade did not predict their subsequent level of popularity. It is unclear whether the 2-year lag between assessments in this study may have diluted the effect of alcohol use on students' popularity, given the dynamic nature of adolescent friendships. The present study will determine whether this result replicates using more proximal twice-yearly assessments.

The literature on adolescent popularity and substance use has tended to assess popularity in one of two ways. The first is to use a peer-nomination measure (e.g., who is their friend, who is most popular) and calculate popularity based on the number of nominations each adolescent receives [1,3,5–8]. The other is to use a self-report measure, such as rating their popularity on a Likert scale or categorizing themselves as “very popular,” “somewhat popular,” or “not popular” [9,10]. A recent cross-sectional study based on a portion of the data used in the present study [11] found that self-rated popularity was weakly related to the number of friendship nominations that students received from their schoolmates. However, both measures of popularity were positively associated with concurrent past-month drinking. Although the research reviewed previously suggests that popularity based on peer nominations is a risk factor for later alcohol use, it is unknown whether perceiving oneself as popular has a similar effect, given the lack of longitudinal studies including both types of measures.

The present study extends the limited longitudinal literature on adolescent popularity and alcohol use in three respects. First, it builds on the cross-lagged study of high school students by Mayeux et al [5] by examining these associations in a younger cohort of sixth to eighth graders who were surveyed twice a year for 2 academic years. Second, it extends the literature by including both peer-nominated and self-rated measures of popularity, focused on popularity in the adolescent's local social context, to evaluate their relative importance as potential risk factors and consequences of alcohol use. Third, it examines these associations in a predominantly Hispanic sample of middle school students. Hispanic youth are sometimes found to have higher rates of substance use than their non-Hispanic white, African American, and Asian peers [12,13], and there is some evidence that peer relationships [14,15] (including difficulty resisting offers to

use [13]) may have a particularly strong influence on the risk of substance use in Hispanic youth during this period.

Methods

Participants

Participants were part of the evaluation of CHOICE [16], a voluntary after-school substance use prevention program. Students in sixth to eighth grades ($n = 8,932$) from 16 middle schools were enrolled in the study and completed four in-school surveys: fall 2008, spring 2009, fall 2009, and spring 2010. Students at three of the schools ($n = 2,002$ at baseline) were administered a friend nomination survey at the time that they completed each in-school survey [17]. The present analyses are based on 1,835 respondents who completed at least one in-school survey and were not missing demographic information (Table 1). Study materials and procedures were approved by the individual schools, the school districts, and the institution's internal review board. A Certificate of Confidentiality was obtained from the National Institutes of Health.

Measures

Background covariates. All analyses controlled for age (in years), gender, race/ethnicity (dummy coded: non-Hispanic white [reference], non-Hispanic black, Hispanic, other), and which of the three schools the student attended (dummy coded; note that two schools received the intervention and thus controlling for school also controls for any treatment effect).

Alcohol use. Students were asked the number of days they had at least one drink of alcohol during the past month ($1 = 0$ days to $7 = 20$ – 30 days) [18,19]. Because of the rare responses at higher levels of use, we dichotomized this measure to any use ($=1$) versus no use.

Popularity. Self-rated popularity was assessed with a five-item scale based on a measure of social goals [20]. Sample items include “When I'm with people my own age, everyone wants to

Table 1
Descriptive information on study variables

Variable	Mean (Standard Deviation)	%
Age (range = 10–15 years)	12.0 (.84)	
Male		50.2
Female		49.8
Hispanic		73.1
Non-Hispanic white		15.9
Non-Hispanic black		2.8
Other		8.2
Self-rated popularity 1	2.21 (.84)	
Self-rated popularity 2	2.25 (.87)	
Self-rated popularity 3	2.28 (.92)	
Self-rated popularity 4	2.31 (.87)	
Alcohol consumption 1		7.0
Alcohol consumption 2		8.9
Alcohol consumption 3		9.4
Alcohol consumption 4		9.2
Peer-nominated popularity 1 (range = 0–16)	2.48 (2.34)	
Peer-nominated popularity 2 (range = 0–22)	3.42 (2.80)	
Peer-nominated popularity 3 (range = 0–14)	3.03 (2.52)	
Peer-nominated popularity 4 (range = 0–13)	2.57 (2.22)	

Download English Version:

<https://daneshyari.com/en/article/10511489>

Download Persian Version:

<https://daneshyari.com/article/10511489>

[Daneshyari.com](https://daneshyari.com)