



Original article

Impulsivity, Sensation-Seeking, and Part-Time Job Status in Relation to Substance Use and Gambling in Adolescents

Robert F. Leeman, Ph.D.^{a,*}, Rani A. Hoff, Ph.D.^{a,b}, Suchitra Krishnan-Sarin, Ph.D.^a, Julie A. Patock-Peckham, Ph.D.^c, and Marc N. Potenza, M.D., Ph.D.^{a,d,e}

^a Department of Psychiatry, Yale University School of Medicine, New Haven, Connecticut

^b Veterans Administration Connecticut Healthcare System, West Haven, Connecticut

^c Department of Psychology, Arizona State University, Tempe, Arizona

^d Department of Neurobiology, Yale University School of Medicine, New Haven, Connecticut

^e Child Study Center, Yale University School of Medicine, New Haven, Connecticut

Article history: Received April 26, 2013; Accepted September 23, 2013

Keywords: Alcohol; Cannabis; Cigarette; Employment; Gender; High school; Marijuana; Personality; Problems; Smoking

 A B S T R A C T

Purpose: Although impulsivity, sensation-seeking, and part-time employment have each been linked to risky behaviors in adolescents, their inter-relationships are less well-understood. We examined data from adolescents to assess the following predictions: (1) sensation-seeking would relate closely to substance use and gambling; (2) impulsivity would relate closely to alcohol, drug, and gambling problems; and (3) these relationships would be particularly strong among those holding part-time jobs.

Method: High-school students (N = 3,106) were surveyed to provide data on impulsivity, sensation-seeking, and part-time job status. Bivariate and logistic regression analyses were conducted to examine relationships with gambling, substance use (i.e., alcohol, cigarettes, and marijuana) and related problems.

Results: Both impulsivity and sensation-seeking related significantly to substance use and impulsivity to gambling. Impulsivity had stronger associations with drug and gambling problems than sensation-seeking did. Students with paid part-time jobs were more likely to drink alcohol, binge drink, and use marijuana. Sensation-seeking had a particularly strong relationship to heavy cigarette smoking among students with part-time jobs. Conversely, there was little relationship between part-time job status and smoking among low sensation-seekers.

Conclusions: These findings further support the relevance of sensation-seeking, impulsivity, and part-time job status to risky behaviors among adolescents. Sensation-seeking and impulsivity had unique relationships to risky behaviors, in accordance with theory and prior evidence. Impulsive adolescents may be in particular need for interventions to reduce drug use and gambling. Although part-time jobs can be beneficial, parents and caregivers should be mindful of potential negative ramifications of paid work outside the home.

© 2014 Society for Adolescent Health and Medicine. All rights reserved.

IMPLICATIONS AND CONTRIBUTION

It is important to identify and intervene with sensation-seeking and/or impulsive adolescents. Impulsive adolescents may have particular need for interventions to reduce drug use and gambling. Although part-time jobs can be beneficial, parents and caregivers should be mindful of potential negative ramifications of paid work outside the home.

Early alcohol, cigarette, and marijuana use, all of which are prevalent, may lead to subsequent use of harder drugs and substance use disorders [1]. Among late adolescents in the

United States, 78% reported lifetime alcohol use, 47% reported at least 12 drinks per year, 42% reported lifetime illicit drug use and 16% reported lifetime illicit drug abuse according to DSM-IV criteria [2]. Over 70% of adolescents report recent/past-year gambling with gambling typically defined as wagering something of value in activities such as card games and lotteries [3,4].

* Address correspondence to: Robert F. Leeman, Ph.D., Yale University School of Medicine, 34 Park Street, Room S200, New Haven, CT 01659.

E-mail address: robert.leeman@yale.edu (R.F. Leeman).

Adolescents appear two-to-four times more likely than adults to experience gambling problems [3]. Given their prevalence and negative ramifications, substance use and gambling among adolescents are public health concerns. Thus, there is a need to identify correlates of substance use, gambling, and problems with these behaviors among adolescents, which may facilitate identification of those at greatest risk and shape interventions.

Difficulties with self-control may be important correlates of risky behaviors such as substance use in adolescence [5]. Neural circuitry supporting higher-order self-regulation is not fully developed in adolescence, which likely contributes to impulsivity and sensation-seeking [6]. Impulsivity reflects “a predisposition toward rapid, unplanned reactions to internal or external stimuli with diminished regard to the negative consequences of these reactions to the impulsive individual or others” [7,8]. Sensation-seeking is the pursuit of “varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences” [9] (p. 27, emphasis in original). Impulsivity and sensation-seeking are related, yet distinct constructs [10]. Differing neurodevelopmental features may contribute to impulsivity and sensation-seeking and their divergent developmental trajectories [11]. Distinctions between these constructs parallel an empirically supported dual-pathway theory (e.g., [12]), stating that risky behaviors result from poor response inhibition and excessive reward-seeking. Poor inhibition of behavior may make impulsive individuals vulnerable to negative consequences or problems with substance use and gambling while the reward drive of sensation-seekers may predispose to frequent engagement in gambling and substance use, with basic- [13] and human-research findings [14] supporting this idea.

Related to self-control difficulties [6], adolescent impulsivity and sensation-seeking are associated with substance use cross-sectionally [15,16] and predict substance-related problems longitudinally [16,17]. Impulsivity may increase the likelihood of gambling onset [18] and predict subsequent problem gambling [19]. Adolescent sensation-seeking is associated with gambling severity cross-sectionally [20]. Relationships between substance use/gambling and difficulties with self-control may be reciprocal. Evidence suggests impulsivity and sensation-seeking measured in late adolescence predict undergraduate heavy drinking and at the same time, heavy drinking predicts subsequent increases in impulsivity and sensation-seeking among undergraduates [21].

Impulsivity and related tendencies (e.g., conduct disorder) share genetic features with substance-use disorders [22]. Genetically mediated tendencies such as impulsivity and substance dependence are often viewed as interacting with key features in the environment to produce elevated risk. Analogous to these gene-by-environment interactions, we considered interactions of impulsivity and sensation-seeking with a key feature of the adolescent environment: part-time employment. Paid employment may be beneficial for some adolescents, though positive effects are not found consistently [23]. Jobs have been linked to alcohol and drug use and gambling in adolescents, with the risk appearing to increase with increasing work hours [23,24]. However, effects were small in a national survey [25], suggesting individual differences. There are multiple proposed explanations for relationships between work outside the home and risky behaviors, which are non-mutually-exclusive. Jobs provide income that could financially support risky behaviors such as substance use and gambling [26]. Work outside the home can increase deviant activity due to exposure to deviant peers, increased adolescent autonomy,

reduced parental monitoring [23,26] and decreased opportunities for structured extracurricular activities [25,27], which have been associated with less alcohol [28], drug [28,29], and cigarette use [29]. Having a part-time job has been linked to general risk-taking proclivities among adolescents [30]; thus, adolescents having both a part-time job and difficulties with self-control may be particularly likely to engage in substance use or gambling.

We assessed relationships between difficulties with self-control (i.e., impulsivity and sensation-seeking) and risky behaviors (i.e., gambling, substance use) and problems with these behaviors among adolescents. We predicted sensation-seeking would relate more closely to substance use and gambling while impulsivity would relate more closely to problems with these behaviors [31]. We also predicted interactions, such that relationships between difficulties with self-control and risky behaviors would be strongest among those with part-time jobs. A variable capturing participation in extracurricular activities was included to account for the possibility that risk associated with having a job was due largely to nonparticipation in these activities.

The present study is unique in multiple ways. Relationships involving impulsivity and sensation-seeking have been addressed individually in prior studies involving adolescents; however, impulsivity and sensation-seeking are addressed less commonly in the same study. Testing statistical models for multiple risky behaviors in the same study is rare, and examination of correlates of substance use and gambling in the same study is even less common. There are few studies exploring moderating relationships between risky behaviors and impulsivity/sensation-seeking by part-time job status.

Method

Participants

Recruitment has been described previously (e.g., [32,33]). Briefly, all Connecticut public high schools were invited to participate. The final survey sample ($N = 4,523$) included schools from all Connecticut regions and district reference groups (DRGs), based on the socioeconomic status of households in those districts (see [supplementary materials](#) for details). The present study sample ($n = 3,106$) (Table 1) was comprised of participants providing complete data for all variables in the statistical models (i.e., demographics, sensation-seeking, impulsivity, and part-time job status) and at least one substance or gambling-related variable.

Procedure

Passive parental consent procedures were approved by participating schools and Yale’s institutional review board and the study was in compliance with the Health Insurance Portability and Accountability Act (HIPAA). Students were informed participation was voluntary and that responses were confidential and anonymous. A pen was offered to each student for participation. The refusal rate was less than 1%.

Measures

Demographics included gender, age, and race/ethnicity. As in previous reports from this survey (e.g., [32–35]), categorical variables pertaining to substance use and gambling were created and analyzed due to limited variability of responses to these items. Use of similar categorical groupings also allowed for

Download English Version:

<https://daneshyari.com/en/article/1078838>

Download Persian Version:

<https://daneshyari.com/article/1078838>

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