G Model SOCSCI-1421; No. of Pages 8

ARTICLE IN PRESS

The Social Science Journal xxx (2017) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

The Social Science Journal

journal homepage: www.elsevier.com/locate/soscij



The impact of alcohol and marijuana use on academic achievement among college students[☆]

Riane M. Bolin^{a,*}, Margaret Pate^b, Jenna McClintock^c

- ^a Department of Criminal Justice, Radford University, 801 East Main Street, PO Box 6934, Radford, VA 24142, United States
- ^b Department of Criminal Justice, Radford University, 801 East Main Street, Radford, VA 24142, United States
- ^c Department of Criminal Justice and Criminology, University of North Carolina Charlotte, 9201 University City Blvd, Charlotte, NC 28223. United States

ARTICLE INFO

Article history: Received 23 December 2016 Received in revised form 3 August 2017 Accepted 11 August 2017 Available online xxx

Keywords: Alcohol use Marijuana use Skipping class Academic achievement

ABSTRACT

The present study explored the direct and indirect relationship between substance use, specifically alcohol and marijuana use, and academic achievement among college students, using skipping class as a mediator. Online self-administered surveys were distributed to undergraduate students at a mid-size university in the southeast. Individually, both alcohol and marijuana use significantly predicted GPA; as the frequency of students' reported alcohol and marijuana use increased, GPAs decreased. However, when included in the same model, marijuana use appeared to mediate the relationship between alcohol use and GPA. Additionally, it was found that skipping class partially mediated the relationship between both alcohol use and GPA and marijuana use and GPA. Given the negative relationship them was found between substance use and academic achievement for all students in our sample, we highlight the importance of substance use prevention efforts that target students throughout the entirety of their college careers. We also discuss the limitations of current prevention efforts across college campuses that focus on alcohol use alone. We recommend that prevention efforts include a focus on marijuana use, in addition to alcohol use, especially given our current findings for marijuana use.

Published by Elsevier Inc. on behalf of Western Social Science Association.

1. Introduction

Since the 1990s, substance use among college students has been steadily increasing in the United States (Johnston, O'Malley, Bachman, Schulenberg, & Miech, 2015). The two most prevalent substances being used on college campuses today are alcohol and marijuana. According to the most recent data from the 2014 Monitoring the Future survey, approximately 76% of students reported alcohol use and

The relative popularity of alcohol and marijuana use among college students has led many researchers to explore the impact that such use has on a variety of different areas of their lives including mental health (Buckner,

E-mail address: rbolin1@radford.edu (R.M. Bolin).

http://dx.doi.org/10.1016/j.soscij.2017.08.003

0362-3319/Published by Elsevier Inc. on behalf of Western Social Science Association.

Please cite this article in press as: Bolin, R. M., et al. The impact of alcohol and marijuana use on academic achievement among college students. *The Social Science Journal* (2017), http://dx.doi.org/10.1016/j.soscij.2017.08.003

^{34%} reported marijuana use within the last year. Though alcohol use remains more common among college students, the trend in marijuana use has been increasing at a much quicker rate. In fact, when examining daily use, marijuana has now surpassed alcohol with 5.9% of students reporting daily use of marijuana compared to only 4.3% for alcohol.

^{1.1.} The impact of alcohol and marijuana use on academic achievement

[☆] This research was supported in part by a College Research Award from the Radford University College of Humanities and Behavioral Sciences.

^{*} Corresponding author.

R.M. Bolin et al. / The Social Science Journal xxx (2017) xxx-xxx

Ecker, & Cohen, 2010; Perera, Torabi, & Kay, 2011), mental functioning (Caldeira, Arria, O'Grady, Vincent, & Wish, 2008), involvement in risky behaviors (Bell, Weschler, & Johnston, 1997; Brown & Vanable, 2007; Cooper, 2002; Shillington & Clapp, 2001), and even death (Hingson, Zha, & Weitzman, 2009; Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002). One area that has received less attention has been the impact of alcohol and marijuana use on academic achievement.

Studies have found mixed results when examining the relationship between alcohol use and academic achievement. Some studies have found that a significant negative relationship exists, with students who reported increased alcohol use also reporting falling behind in class, missing class, doing poorly on exams and papers, and having lower grades/GPA (Aertgeerts & Buntinx, 2002; Burt et al., 2016; Engs, Diebold, & Hanson, 1996; Piazza-Gardner, Barry, & Merianos, 2016; Powell, Williams, & Wechsler, 2004; Singleton, 2007; Singleton & Wolfson, 2009; Thombs et al., 2009; Wechsler et al., 2000; Wechsler et al., 2002; Wolaver, 2002). However, other studies have found the two were not significantly related (El Ansari, Stock, & Mills, 2013; Paschall & Freisthler, 2003).

The research regarding marijuana use seems to be more consistent. A number of academic problems appear to be related to college student marijuana use including skipping classes (Arria, Caldeira, Bugbee, Vincent, & O'Grady, 2015; Caldeira et al., 2008), falling behind in schoolwork (Bell et al., 1997), performing inadequately on exams (Shillington & Clapp, 2001), receiving lower grades (Arria, Garnier-Dykstra et al., 2013; Arria, Wilcox et al., 2013; Arria et al., 2015; Bell et al., 1997; Buckner et al., 2010; Suerken et al., 2016), and even dropping out of college (Tucker, Ellickson, Orlando, Martino, & Klein, 2005; Suerken et al., 2016).

To date, only one study has looked at the combined effect of alcohol and marijuana use on academic performance (Meda et al., 2017). Students were categorized into three groups of users: (1) non-users or light users of alcohol and marijuana, (2) moderate/large users of alcohol while being non-users or light users of marijuana, or (3) heavy users of both alcohol and marijuana. Individuals in the third group, heavy users of both alcohol and marijuana, had the lowest GPA, followed by individuals in group two, those who used alcohol in moderate/large amounts while not using marijuana or using marijuana in small amounts. This study confirmed and added to previous literature, finding that substance use has a negative influence on academic performance even when exploring the effects of marijuana and alcohol together.

1.2. Substance use, skipping class, and academic achievement

While studies have sought to explore the impact of alcohol and marijuana use on academic achievement, many of these studies are flawed in that they fail to control for a number of non-substance use related factors found to impact student success. One particularly important variable that has been largely excluded from the literature is skipping class. Many studies have found skipping class to

be a significant predictor of student success (Dobkin, Gil, & Marion, 2010; LeBlanc, 2005; Shimoff & Catania, 2001). Credé, Roch, and Kieszcynka (2010), for example, conducted a meta-analysis of the relationship between class attendance and both class grades and GPA and found that class attendance was strongly correlated with both variables. Based on their findings, they concluded that class attendance is a better predictor of college grades than any other known predictor of academic performance. Due to the importance of class attendance in predicting student success in the classroom, it can be argued that any study exploring the relationship between substance use and academic achievement should control for this variable. More specifically, we believe that it is important for studies to determine whether the relationship between substance use and academic achievement is mediated by class attendance.

To our knowledge, only three studies have been conducted exploring whether skipping class mediates the relationship between substance use and academic achievement (Arria, Wilcox et al., 2013; Arria et al., 2015; Conway & DiPlacido, 2015). Utilizing a sample of first-semester college students, Conway and DiPlacido (2015) found an indirect effect of alcohol use on GPA through skipping class. In their longitudinal prospective study, Arria, Wilcox et al. (2013) found that skipping class mediated the relationship between both alcohol use and marijuana use and GPA. Specifically, they found that students who were diagnosed with either an alcohol use or cannabis use disorder were more likely to skip class, and, in turn, were more likely to have lower GPAs. Utilizing the same data, Arria et al. (2015) explored both the direct and indirect relationship of marijuana use and GPA, using skipping class as the mediator. Consistent with their previous findings, it was found that marijuana use not only had a direct impact on GPA, but an indirect impact through poorer class attendance as well.

1.3. The current study

The purpose of the current study is twofold. The first purpose is to examine the relationship between substance use, specifically alcohol and marijuana use, and academic achievement among college students. Specifically, the present study tests the hypothesis that college students who use alcohol and marijuana on more occasions will have lower GPAs than those students who report using on fewer occasions. The second purpose is to expand on prior research in this area by exploring the potentially mediating role of skipping class on the relationship between substance use and GPA. Due to the limited amount of research on this topic, we sought to determine whether findings from previous research on the relationship between substance use, skipping class, and GPA could be replicated at a mid-size, public university.

2. Method

2.1. Sample and data collection

The sample for the present study consists of undergraduate students who were enrolled at a mid-size,

Download English Version:

https://daneshyari.com/en/article/6576027

Download Persian Version:

https://daneshyari.com/article/6576027

<u>Daneshyari.com</u>