Abstract

The misuse of unprescribed stimulants (e.g., Adderall, Ritalin, and Vyvanse) for academic purposes in colleges across the United States is a growing concern. This study evaluated potential factors related to stimulant misuse (SM), such as perception of SM safety, SM ethicity, intrinsic academic motivation, and perceptions of SM as normative.

Introduction

• Between 8% and 43% of students report having misused stimulants at least once in their lives, and 17% of students have misused stimulants on more than one occasion (Benson, Hong, Humphrey, & Dussault, 2013). A majority of students report misusing stimulants for academic purposes, such as being able to improve study skills, to stay awake in order to study longer, and to improve concentration (Benson et al., 2011).

Some studies have found that people who perceived SM to be safer were also more likely to report having misused stimulants (Benson & Humphrey, 2016). The majority of the 1200 male participants found a hypothetical student who took Adderall for midterms to be less of a cheater and believed that he was taking a more necessary step in order to succeed in comparison with the hypothetical anabolic steroid user for his track (Evans et al., 2013).

If SM is associated with academic dishonesty, then SM could potentially be related to the same factors as cheating. Cheating has been associated with academic extrinsic motivation (Lee & Gergen, 2011), perception of campus competitiveness (Anderman et al., 2011), and perception of being common in others (Alt & Gergen, 2012).

Current Study: The purpose of this study is to explore potential factors that lead some students to misuse stimulants during their academic journeys. We hypothesized that students would be more likely to misuse stimulants if 1) they perceive SM to be safe, 2) they perceive SM to be ethical, 3) they are more extrinsically motivated in an academic setting, 4) they perceive their academic environments to be competitive, and 5) they perceive SM to be normative.

Methods

Participants: The participants included 172 undergraduate students (43.6% male, 56.4% female) recruited through an online research participation management system (age: M = 18.85, SD = 1.10).

Measures:

• Academic Extrinsic Motivation: A 12-item measure developed to assess academic extrinsic motivation, which is defined as finding motivation from an external source (Thomas et al., 2003). Participants responded using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores marking greater extrinsic motivation. (α = .89)

• Perceived Campus Competitiveness: A 2-item scale modified from the Twenty Items Value Inventory developed to assess participants’ perceptions of typical student’s competitiveness on their campus (Sandy, Gosling, Schwartz, & Klonsky, 2010). Participants responded using a 7-point Likert scale ranging from 1 (almost never) to 7 (almost always), with higher scores marking greater perceived campus competitiveness. (α = .84)

• Stimulant Use Questionnaire: an 8-item questionnaire designed to assess past experience of with SM (lifetime, past year, last semester, and last month), frequency of SM (past year, past semester, and last month), and types of stimulants used.

• Perception of Stimulant Use Among Peers: a modified 4-item measure developed to assess the perceived frequency of SM on participants’ college campuses based on different academic behaviors (Hayward et al., 2008). Participants responded using a 7-point Likert scale ranging from 1 (almost never) to 7 (almost always), with higher scores marking greater perceived SM frequency. (α = .76)

• Perception of Safety of Stimulant Use: a modified 4-item measure developed to assess the perceived safety of different kinds of stimulant misuse (Hayward et al., 2008). Participants responded using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores marking greater perceived safety. (α = .93)

• Perception of Adderall Use Ethicality: a single item response measure developed to assess the perception of whether or not the participant viewed stimulant misuse to be ethical based on a hypothetical situation about a student named Jeff taking Adderall to improve performance for a midterm (Dodge et al., 2012). Participants responded to the statement “Jeff is a cheater for using Adderall”, using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores marking greater consideration for Adderall as cheating.

Procedures: Completion of the survey took place online, and questionnaires were completed in the order listed above. Participants received one credit toward their psychology course research participation requirements.

Participants likely to misuse stimulants if 1) they perceive SM to be safe, 2) they perceive SM to be ethical, 3) they are more extrinsically motivated in an academic setting, 4) they perceive their academic environments to be competitive, and 5) they perceive SM to be normative.

Results

• Table 1 displays students’ perceptions of SM safety. Figure 1 displays students’ perceptions of commonality of SM during finals week. Figure 2 displays students’ attitude toward SM as cheating.

Future Research 1) larger sample size to test smaller variations; 2) longitudinal study could be conducted in order to evaluate if the perception of SM as cheating may actually mediate the relationship between extrinsic motivation and SM; examine perception of SM campus-wide as well as within the participants’ social circle in order to evaluate the possible differences between these influences and participants’ SM.

Table 1

<table>
<thead>
<tr>
<th>Perception of Safety of Stimulants</th>
<th>Percentage of Response</th>
<th>Number of Responses</th>
<th>Level of Item Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using prescription stimulants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>occasionally is harmless.</td>
<td>45.3%</td>
<td>48</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>is harmless.</td>
<td>28.2%</td>
<td>48</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>Using prescription stimulants daily</td>
<td>76.5%</td>
<td>45</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>is harmless.</td>
<td>12.4%</td>
<td>45</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>Prescription stimulants are safer than marijuana.</td>
<td>50.0%</td>
<td>48</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>Prescription stimulants are safer than alcohol.</td>
<td>35.3%</td>
<td>48</td>
<td>Strongly Agree/Agree</td>
</tr>
<tr>
<td>Prescription stimulants are safer than alcohol.</td>
<td>50.0%</td>
<td>48</td>
<td>Strongly Agree/Agree</td>
</tr>
</tbody>
</table>

Conclusion

This research evaluated potential factors related to academic stimulant misuse in college students, analyzing the relationships between lifetime SM and perceived stimulant safety, SM ethically, academic extrinsic motivation, perceived environment competitiveness, and perceived SM commonality. The hypotheses were not supported; however, interesting descriptive findings are discussed.

Implications

• Perceptions of SM Safety: Considering how students who view occasional SM as not harmful and as less safe than alcohol are in the minority, it is important to more accurately educate students on SM.

• Perceptions of SM Ethicity: Over half of the participants did not view Jeff as being a cheater for taking an Adderall without a prescription in order to do well on his midterms. Universities need to communicate clearly to openly with their students that this behavior is unacceptable in a form of academic dishonesty.

• Perceptions of SM Commonality: Even though only 10.5% of our participants reported misusing stimulants, most viewed it as more common than that. If the percentage of participants who reported SM is representative of the campus as a whole, it is important to educate students on the inaccuracies of the perceptions in order to depict that SM is not as normative as they believe.

References