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The Association between ADHD Drug Misuse and Other Psycho-Substance Abuse

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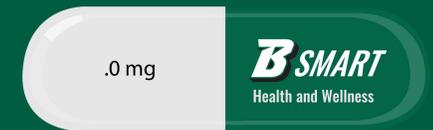
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The Association between ADHD Drug Misuse and Other Psycho-Substance Abuse



Introduction

Across North America, the abuse of ADHD medication on college campuses has become an increasingly prevalent problem, as students are becoming more acquainted with their potential as a study aid. Previous research has revealed that students who use ADHD medication in college are significantly more likely to develop a dependence on alcohol and other drugs than those who have never taken ADHD medication. The purpose of this study is to assess whether there is a relationship between ADHD medication use and other psycho-substance use such as depressants and stimulants. This study has collected survey responses from 761 undergraduate students from various US colleges. The survey included self-reported dietary patterns, mental and physical health, ADHD medication use, and perceptions regarding illicit study drug use. The anonymous survey was built in Google forms, data was analyzed using Pearson's Correlation Coefficient in SPSS, Version 26.0. Our data has indicated a significant positive correlation between illicit ADHD medication use with depressants and stimulants (caffeine) among college students. Our results support previous studies that described how a dysfunctional prefrontal cortex (PFC) is linked to impaired response inhibition and riskier decision making, such as the comorbid use of other stimulants and depressants. Thus, our results suggest that those who use ADHD medication may be inclined to abuse other substances as well. By addressing the abuse of study drugs on college campuses, we may hope to curtail the abuse of other prevalent substances among college populations.

Methods

- Data was collected using an anonymous Google Forms survey with questions regarding demographics, illicit ADHD medication use, prescribed ADHD medication use, dietary patterns, and symptoms of mental distress
- The survey was distributed to college students via email, social media, GroupMe, and outreach events at Binghamton University
- Data for this study was collected from 761 participants and analyzed using Pearson's Correlation Coefficient in SPSS, Version 26.0

Results

Table 1: Correlations between Other Substances Used when Taking ADHD Medication Illicitly or Prescribed

Substances used when taking ADHD Medication	Correlations
Depressants	.182**
Other Substance Uses	.320**
Combining More than One Substances	.186**
Stimulants (Caffeine)	.132**

Responses showed statistically significant positive correlations between ADHD medication use, illicit or prescribed, and use of depressants, other substances in general, stimulants, and combined use ($p < 0.01$).

Table 2: Correlations between Other Substance Use and Prescribed ADHD Medication Use

Substances used when taking Physician Prescribed ADHD Medications	Correlations
Other Substance Use	-.142*
Combining More than One Substances	-.175*

Responses showed a statistically significant negative correlation between other substance use and prescribed ADHD medication use ($p < 0.05$).

Responses showed a statistically significant negative correlation between combined substance use and prescribed ADHD medication use ($p < 0.05$).

Table 3: Correlations between GPA and Other Substance Use

GPA	Correlations
Other Substance Use	-.200**
Combining more than One Substances	-0.96**

Responses showed a statistically significant negative correlation between GPA and other substance use ($p < 0.01$). Responses also showed a statistically significant negative correlation between GPA and combined use of more than one substances ($p < 0.01$).

Discussion & Conclusion

- The purpose of this study is to investigate the association among ADHD medication and depressants, stimulants, other substances, and a combination of substances.
- Our findings demonstrated positively statistically significant correlations among taking ADHD medications, illicitly or prescribed, with stimulants (caffeine), depressants, other substances, and combining more than substance.
- In addition, our findings depicted a negative statistically significant correlation of taking physician prescribed ADHD medications with other substance use and combining more than one substances; GPA with other substance use and combining more than one substances.
- With our results, it provides awareness that an ongoing educational systems need to be implemented across college campuses as psycho-substance abuse and ADHD medication abuse are likely to be taken simultaneously. In addition, those who take other psycho-substances are likely to have a declination of GPA.
- Overall, we recommend that colleges offer support services and guidance to their students in regards to academic aid, treatment for mental health, and education about the dangers of ADHD and other psycho-substance use.

Future Works and Study Limitations

- Explore the relationship between specifically illicit ADHD medication use and other substances
- In our research, ADHD medication use was described in a broader sense, so future research can further distinguish between prescribed or illicit use
- There is a need to identify specific types of other substances abused
- In future research, there is a need to assess the relationship between the frequency of ADHD medication use and addiction to other substances

References

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