



Behavior of Undergraduates: Substance Use, Social Support, and Mental Health Concerns

Andrea L. Hinit, Megan E. Reis & Katelyn M. McDonald

Faculty Sponsor: Dr. Trisha M. Karr

Winona State University, Department of Psychology

Abstract

- College is a period of time in which students may experiment with substances and make new social relationships. The purpose of this study was to identify connections between undergraduates (N=103) behavior surrounding substance use, mental health, and social support. It was hypothesized that participants who report higher levels of mental health concerns would also report higher levels of substance use. Participants completed multiple online surveys. An Independent sample t-test was conducted to test for group differences. Findings did not indicate a connection between substance use and mental health, but the test did reveal that participants who used substances were more likely to report higher levels of social support. Implications of this study suggest that college students who use substances may have higher levels of social support and in turn, have less mental health concerns. Future research could examine a connection between social support and mental health.

Methods

- Participants:** 103 undergraduate students enrolled at a Midwestern university were recruited on a volunteer basis.
- Procedure:** Participants were given electronic versions of a demographic questionnaire, the Alcohol Use Disorders Identification Test (AUDIT), MOS Social Support Survey, Center of Epidemiologic Studies Depression Scale – Revised (CESDR), Generalized Anxiety Disorder-7 (GAD-7), and the Perceived Stress Scale (PSS).
- Recruitment.** Participants were recruited through digital signage, campus flyers, and university clubs and organizations.
- This study was approved by the Winona State University IRB for ethics.
- Table 1.**

Freshman	36
Sophomore	15
Junior	25
Senior	27
Male	14
Female	89

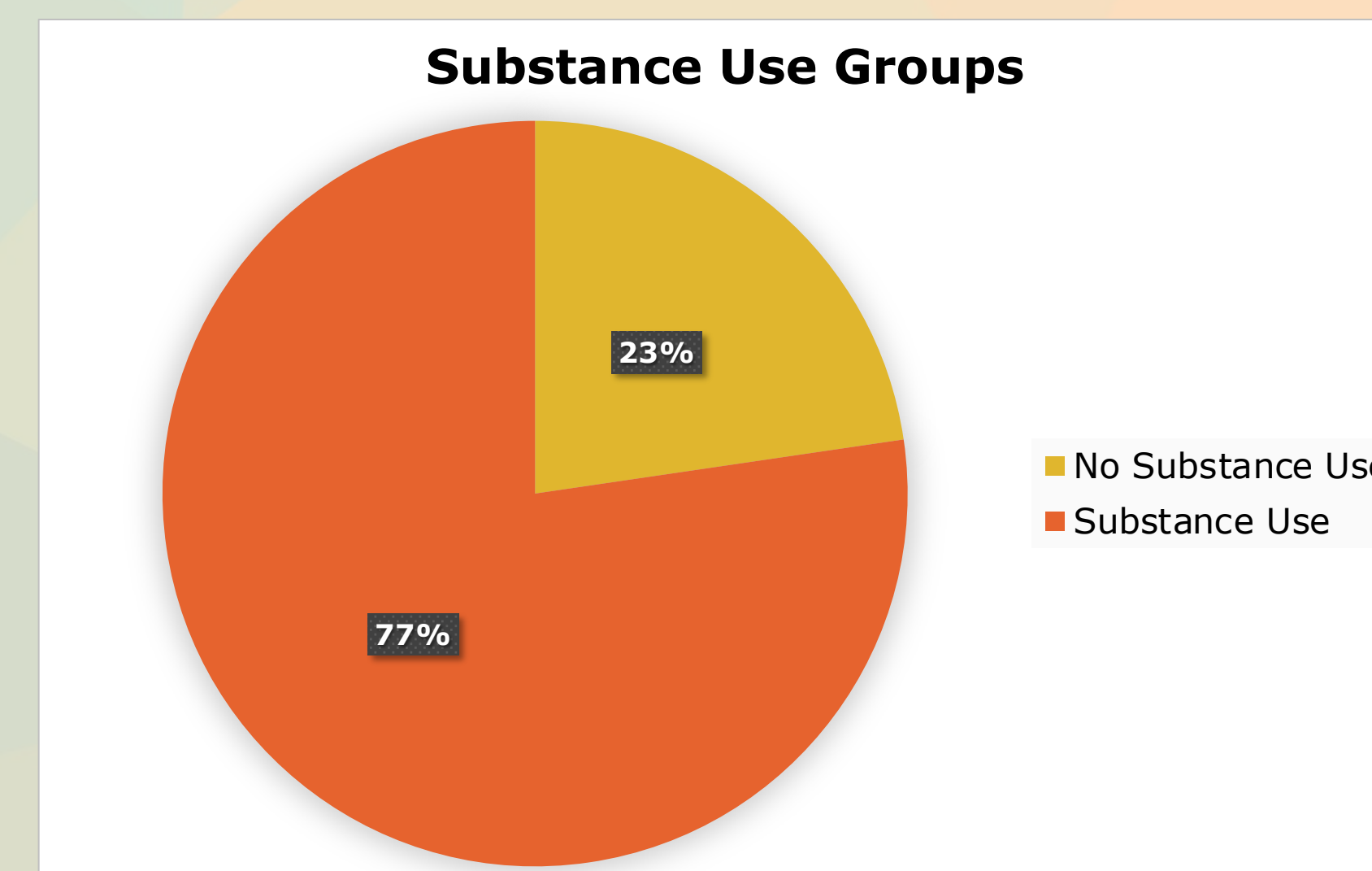
Hypotheses

- Participants who use substances will be more likely to report increased mental health symptoms and lower levels of social support.

Results

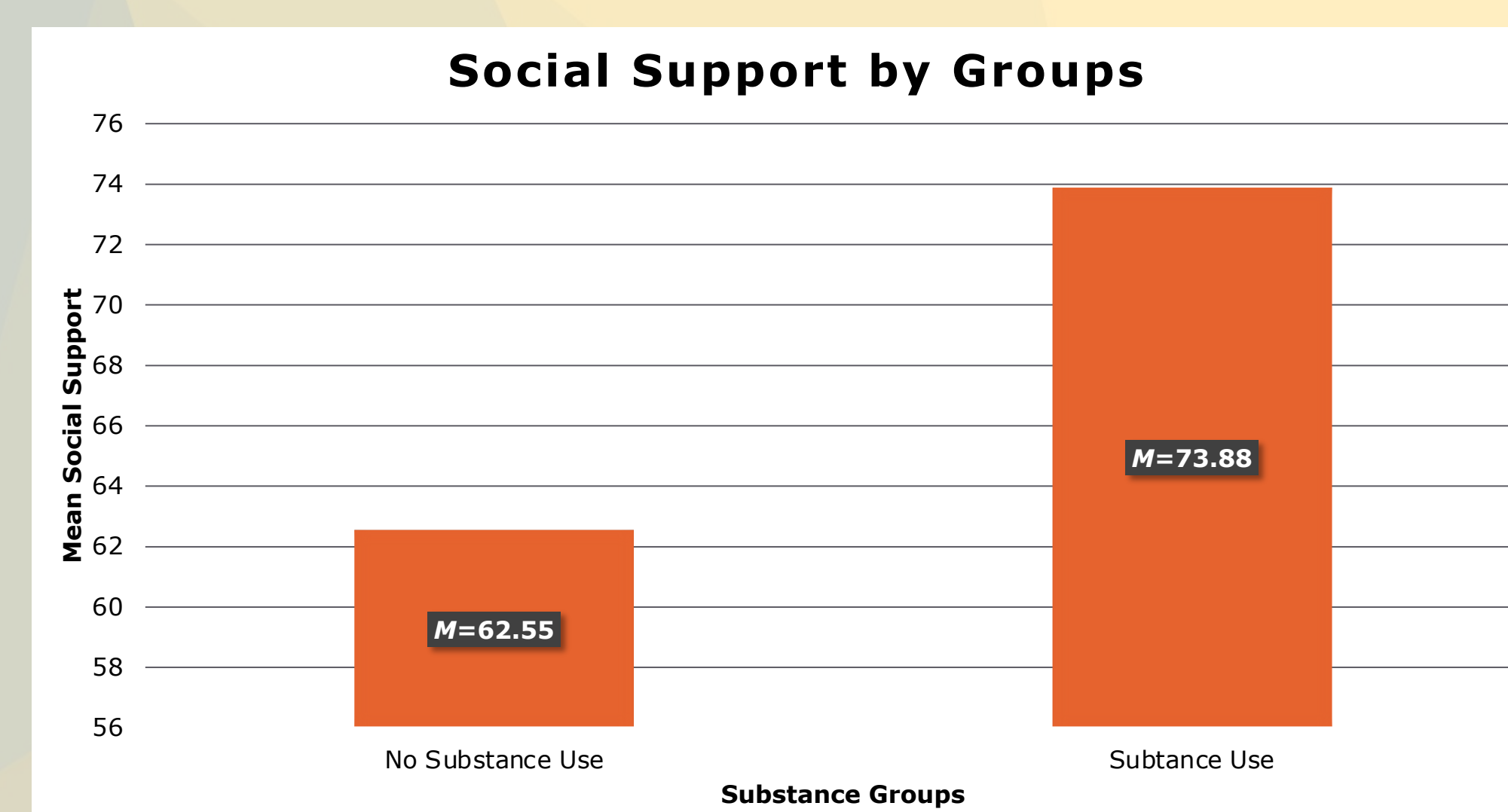
- An independent-samples t-test was conducted to compare group differences between those who do and do not use substances on mental health and social support. There were no significant differences between groups on mental health (depression, anxiety, stress), $p > 0.05$. Those who used substances reported greater social support ($M = 73.9$, $SD = 17.4$), than those who did not ($M = 62.6$, $SD = 22.7$), $p < 0.05$. The effect size for this result was medium (Cohen's $d = 0.6$).

Figure 1.



Note. Of the 103 participants, 75 reported substance use and 22 reported no substance use (6 participants had missing data).

Figure 2.



Note. Substance users reported significantly more social support than nonusers. Range of scores for the MOS Social Support Survey is 19-95.

Conclusion

Discussion:

- Participants who reported substance use also reported higher levels of social support.
- Even though mental health was not associated with substance use, substance use during social interactions could be a potential protective factor for mental health problems

Limitations:

- The sample lacks generalizability relative to the university population.
- The self-report design of the study may have influenced participant responses.

Future Research:

- Examination of use of substances to facilitate social relationships and protect against mental health concerns.
- The value of social relationships during the COVID-19 pandemic.

References

- Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., & Monteiro, M.G. (2001). The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care (AUDIT): *Technical manual*. World Health Organization.
- Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.
- Eaton, WW, Muntaner, C, Smith, C, Tien, A, Ybarra, M. Center for Epidemiologic Studies Depression Scale: Review (CESD and CESD-R). In M.E. Maruish Ed., *The Use of Psychological Testing for Treatment Planning and Outcomes Assessment (3rd ed.)*. Mahwah, NJ: Lawrence Erlbaum; p. 363-377. 2004.
- Guttmanova, K., Kosterman, R., White, H. R., Bailey, J. A., Lee, J. O., Epstein, M., Jones & T. M., Hawkins, J. D. (2017). The association between regular marijuana use and adult mental health outcomes. *Drug and Alcohol Dependence*. 177: 109-116.
- Keith, D. R., Hart, C. L., McNeil, M. P., Silver, R., & Goodwin, R. D. (2015). Frequent marijuana use, binge drinking and mental health problems among undergraduates. *The American Journal on Addictions*, 24: 499-506.
- Prosek, E. A., Giordano, A. L., Woehler, E. S., Price, E., & McCullough, R. (2018). *Substance Use & Misuse*. 53(11): 1915-1918.
- Sherbourne, C.D., & Stewart A.L. (1991). The MOS Social Support Survey. *Soc Sci Med*, 32(6), 705-714.
- Spitzer, R.L., Kroenke, K., Williams, J.B.W., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Arch Intern Med*. 166: 1092-1097.