

Sedative Users with a Prescription Report More Anxiety than Sedative Users Without a Prescription

Priyanka Sunder, M.B.A., & Kristine M. Jacquin, Ph.D.

ABSTRACT

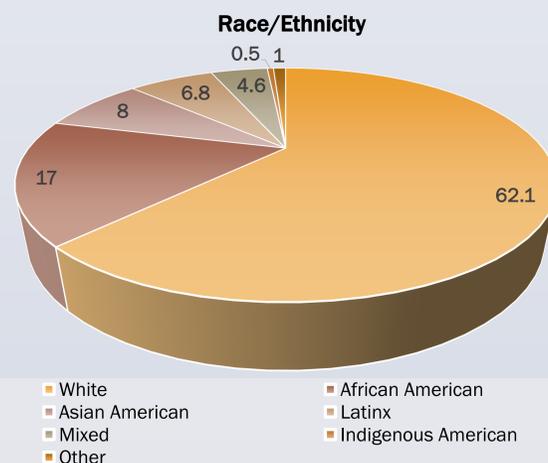
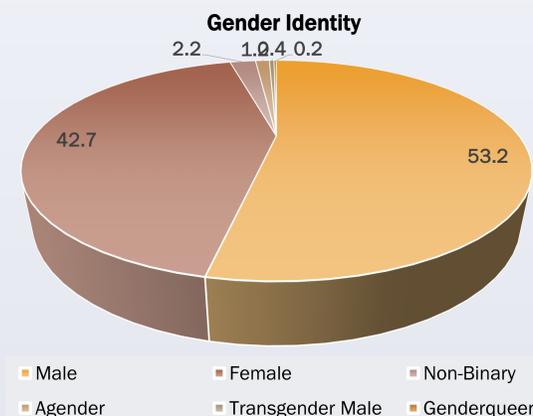
Sedative usage for anxiety has increased. The study examined the relationship between sedative use and generalized anxiety disorder symptoms. Four groups were used to study this relationship – current medical users, past medical users, non-medical users, and non-users. Results showed increased anxiety in medical users compared to other groups.

INTRODUCTION

- ▶ Almost one-third of the adult U.S. population experiences an anxiety disorder during their life (National Institute of Mental Health, n.d.).
- ▶ Pharmacological treatment options (e.g., benzodiazepines and other sedatives) are often used to treat anxiety (Ravindran et al., 2010; Slee et al., 2019).
- ▶ The effectiveness of prescription sedatives has led to a rise in medical and non-medical use although research suggests that sedative use was lower amongst prescribed (medical) users than non-medical users (McCabe & West, 2014; Weaver, 2015).
- ▶ Another study indicated that prolonged prescription sedative abuse correlated with generalized anxiety disorder in medical users (Sareen et al., 2004).
- ▶ However, no studies examined the relationship between sedative use and generalized anxiety disorder symptoms in different groups of prescription sedative users.
- ▶ We helped fill this gap by comparing generalized anxiety symptoms in current medical users, past medical users, non-medical users, and non-users.

METHOD: Participants

- ▶ $N = 412$
- ▶ U.S. adults (M age = 32.7, $SD = 11.5$)
- ▶ Recruited from Prolific



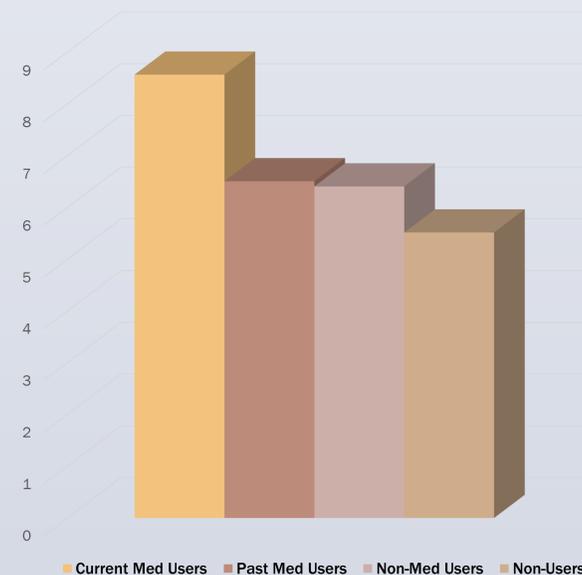
METHOD: Procedure

- ▶ Participants were divided into groups based on their use of prescription sedatives with a prescription (medical user – current or past) or without (non-medical user).
- ▶ The General Anxiety Disorder – 7 item scale (Spitzer et al., 2006) was used to measure anxiety.

RESULTS

- ▶ ANOVA was conducted with sedative user group as IV and levels of generalized anxiety disorder symptoms as DV.
- ▶ There was a significant main effect, $F(3, 382) = 3.76, p = .01, \text{partial } \eta^2 = .03$.
- ▶ Current medical users reported significantly more generalized anxiety ($M = 8.57, SD = 6.30$) than past medical users ($M = 6.51, SD = 5.86$), $p = .023$, non-medical users ($M = 6.41, SD = 5.68$), $p = .04$, and non-users ($M = 5.52, SD = 5.53$), $p = .001$.
- ▶ Non-medical users did not significantly differ in generalized anxiety symptoms from non-users, $p = .32$.

Main Effect of Sedative User Group on Anxiety



DISCUSSION

- ▶ Contrary to our expectations, current medical users reported higher anxiety than past medical users, non-medical users, and non-users.
- ▶ Possible reasons for increased anxiety include heightened anxiety levels prior to use, inconsistent use of sedatives, or ineffectiveness of treatment.
- ▶ The comparable anxiety levels between non-medical users and non-users suggest that non-medical users are not using sedatives to self-medicate, thereby strengthening the argument that non-medical users are using sedatives for recreational purposes.

REFERENCES

- Becker, W. C., Fiellin, D. A., & Desai, R. A. (2007). Non-medical use, abuse and dependence on sedatives and tranquilizers among U.S. adults: Psychiatric and socio-demographic correlates. *Drug and Alcohol Dependence*, 90(2-3), 280-287. <https://doi.org/10.1016/j.drugalcdep.2007.04.009>
- Lader, M. (2011). Benzodiazepines revisited—will we ever learn? *Addiction*, 106(12), 2055-2232. <https://doi.org/10.1111/j.1360-0443.2011.03563.x>
- Liebrez, M., Schneider M., Buadze, A., Gehring, M-T, Dube, A., & Caffisch, C. (2015). High-dose benzodiazepine dependence: A qualitative study of patients' perceptions on initiation, reasons for use, and abandonment. *Plos One*. <https://doi.org/10.1371/journal.pone.0142057>
- McCabe, S. E., & West, B. T. (2014). Medical and non-medical use of prescription benzodiazepine anxiolytics among U.S. high school seniors. *Addictive Behaviors*, 39(5), 959-964. <https://doi.org/10.1016/j.addbeh.2014.01.009>
- National Institute of Mental Health. (n.d.). *Any anxiety disorder*. National Institute of Mental Health. <https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder>
- Ravindran, L. N., & Stein, M. B. (2010). The pharmacological treatment of anxiety disorders: A review of progress. *The Journal of Clinical Psychiatry*, 71(7), 839-854. <http://doi.org/10.4088/JCP.10r06218blu>
- Sareen, J., Enns, M. W., & Cox, B. J. (2004). Potential for misuse of sedatives. *The American Journal of Psychiatry*, 161(9), 1722-1723. <https://doi.org/10.1176/appi.ajp.161.9.1722-a>
- Slee, A., Nazareth, I., Bondaronek, P., Liu, Y., Cheng, Z., & Freemantle, N. (2019). Pharmacological treatments for generalised anxiety disorder: A systematic review and network meta-analysis. *The Lancet*, 393(10173), 768-777. [http://doi.org/10.1016/S0140-6736\(18\)31793-8](http://doi.org/10.1016/S0140-6736(18)31793-8)
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2007). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166(10), 1092-1097. <https://doi.org/10.1001/archinte.166.10.1092>