MILWAUKEE PUBLIC SCHOOLS

Prescription Drug Misuse Among High School Students

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Background and Rationale

Research has shown that students who engage in risky behaviors tend to have more negative educational outcomes, especially when focusing on the increasing prescription drug misuse among adolescents in the United States (Bonar et al., 2020; Tucker et al., 2015). Specifically, engaging in substance misuse tends to relate to negative educational outcomes for many students. This study aimed to investigate high school students who engage in higher rates of prescription drug misuse and how that behavior relates to dropout and graduation rates of their schools.

Research Questions

Data from the 2023 administration of the Youth Risk Behavior Survey (YRBS) were used in the analysis. The sample included responses from 8,267 students in grades nine through 12, and from 29 high schools.

- Is average rate of prescription drug misuse significantly associated with lower graduation rates of high schools?
- Is average rate of prescription drug misuse significantly associated with higher dropout rates of high schools?

Multiple linear regression analyses were conducted to determine the association of prescription drug misuse, graduation rates, and dropout rates.

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Q1 Results

Prescription drug misuse was not significantly associated with lower graduation rates (B = -.80, β = -.33, p = .08). Although the association is non-significant, the standardized coefficient suggests a negative moderate effect size indicating that the relationship between prescription drug misuse and graduation rate is inversely related: as prescription drug misuse increases, the graduation rate decreases. Ninety-five percent confidence intervals of [-1.72 –– .10] indicate a high degree of uncertainty in the effect of prescription drug misuse on graduation rates.

Q2 Results

Prescription drug misuse was not significantly associated with higher dropout rates (B = 2.7, β = .26, p = .17). Although the association is non-significant, the standardized coefficient suggests a positive small–moderate effect size indicating that the relationship between prescription drug misuse and dropout rate is directly related: as prescription drug misuse increases, the dropout rate also increases. Ninety-five percent confidence intervals of [-1.20 –– 6.62] indicate a high degree of uncertainty in the effect of prescription drug misuse on dropout rates.

Discussion and Conclusion

Though these findings are non-significant, the rate at which prescription drug misuse is rising across the United States, especially throughout Milwaukee County and particularly among adolescents, should remain an area of concern for educators and administrators alike (Bonar et al., 2020). Leveraging partner organization ties is key to helping adolescents understand the potential repercussions of their choices and maintaining a harm-reduction lens when addressing prescription drug misuse. The effect sizes of the analyses indicate the directionality of the relationships between prescription drug misuse and both the graduation and dropout rates. Prescription drug misuse and graduation rate are inversely related with a moderate effect size. Further investigation is likely needed to address Type II error and power-related issues in the analyses.

See accompanying paper for a full list of references and more details.