## **B2**

## Mary Valmont Ph.D.

Advisor(s): Marilyn Fraser M.D.

Co-author(s): Alany Marcellus, Jeemonda Richards, Ibrahim Barry, Joanna Clarke, Fayonna Jean-Philippe, Mali Joseph, Robert King, Kavya Collingwood, Meagan Vanzie, Roudjessie Charles, Taskin Khan, Kirabo Nanyanzi, Dong Zhen, Janille Williams, Mary Valmont, Marilyn Fraser

## Examining the Relationship between Marijuana Use and Participating in Physical Fights among Adolescents in the United States

Abstract:

Background: Marijuana use among adolescents has been linked to negative behavioral outcomes, such as aggression and physical violence. With the rising prevalence of marijuana consumption, particularly after legalization in some states, concerns about its impact on adolescent behavior have grown. This study explores the relationship between marijuana use and physical fighting among adolescents aged 12-19, focusing on altercations occurring on school grounds.

Methods: An analysis of the 2021 Youth Risk Behavior Survey (n=17,232) examined the relationship between marijuana use and physical fighting among adolescents. Descriptive statistics summarized demographic data, and chi-square tests explored these associations.

Results: Among adolescents who reported ever using marijuana, 32.7% were involved in a physical fight, compared to 13.2% of non-users ( $\chi^2 = 523.8$ , p<0.001). Additionally, 14.2% of marijuana users fought on school property, compared to 4.6% of non-users ( $\chi^2 = 219.7$ , p<0.001). Marijuana users were 3.2 times more likely to engage in physical fights (OR=3.2, p<0.001) and 2.9 times more likely to fight on school grounds (OR=2.9, p<0.001). Current users had even higher odds of involvement in fights (OR=3.7, p<0.001).

Conclusion: The study found a significant association between marijuana use and increased physical fighting, particularly on school grounds. These findings highlight the need for targeted prevention and intervention programs addressing marijuana use and its potential to escalate aggressive behaviors in adolescents. Further research is necessary to establish causal relationships and understand the long-term effects on aggression.