

# The Relationship Between Alcohol Use and Suicidal Behavior Among Adolescents

Elijah Sakhleh, Qinglan Feng Ph.D., Hye-Jung Yun Ph.D.

## Introduction

- Alcohol use is common among adolescents despite being illegal.
- 12.7 million youth ages 12–20 (32.9%) reported lifetime alcohol use (NSDUH, 2024).
- Suicide is the second leading cause of death among ages 10–19 (CDC, 2021).
- Jessor’s Problem Behavior Theory (1977) suggested that alcohol use reflects underlying personality and environmental risk factors that also increase the likelihood of suicidal behavior.
- Prior research links alcohol involvement and suicide (Hallfors et al., 2004).
- The purpose of this study is to examine the association between alcohol use frequency and suicidal behaviors among Florida adolescents.

## Methods

- Data source: 2024 Florida Youth Substance Abuse Survey (FYSAS), a statewide youth substance use and mental health survey.
- Total sample: 22,016 high-school adolescents.
  - Age range: 10–19 years. Mean Age = 16.
  - 49.1% female, 50.9% male
  - 2% American Indian/Native American, 3.4% Asian, 26.5% Black/African American, 34.8% Hispanic/Latino, 0.7% Native Hawaiian/Pacific Islander, 45.4% White/Caucasian, 3% Other
- Alcohol Use Frequency: 7-point scale: from 0 = 0 occasions to 6 = 40+
  - “Have you had alcoholic beverages more than just a few sips in your lifetime?”
- Suicidal Behaviors: Ideation, Planning, Attempt in past 12 months
  - Binary measure: 0 = No, 1 = Yes (At least once)
  - e.g., “During the past 12 months, did you ever seriously consider attempting suicide?”

## *Logistic Regression Examining Associations Between Lifetime Alcohol Use and Suicidal Behaviors Among Adolescents*

Outcome	B	SE	Z	p	Odds Ratio
Suicidal Ideation	.276	.002	138.00	<.001	1.318
Suicidal Plan	.282	.002	141.00	<.001	1.326
Suicidal Attempt	.267	.003	89.00	<.001	1.307

## Analysis & Results

- Analyses were conducted in SPSS 26.
- The logistic regression model indicated that **lifetime alcohol use was significantly associated with all three suicidal behaviors among adolescents.**
  - Ideation: 31.8% greater likelihood with higher alcohol use.
  - Planning: 32.6% greater likelihood with higher alcohol use.
  - Attempts: 30.7% greater likelihood with higher alcohol use.

## Implications for Research

- Key Finding:
  - **Higher alcohol use was associated with elevated risk across multiple stages of suicidal behavior.**
- Limitations and Future Research:
  - The cross-sectional design precludes causal inference: temporal ordering unknown.
    - Use longitudinal data to track alcohol use and suicidality over time.
    - Test whether alcohol use is a precursor, consequence, or reinforcing factor.
- Implication:
  - Supports integrated public health approaches by combining substance use prevention with suicide prevention – school-based interventions and statewide prevention strategies.

