



# The Association Between Adolescent Violence and Future Enlistment in Military Services

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## Introduction

- The military has been an all-volunteer force since 1973 (U.S. Department of Defense, 2023), relying on recruitment and self enlistment to build its forces, however there is a current enlistment shortage, requiring the military to increase recruiting (Military Officers Association of America, 2022)
- Additionally, the military's recruitment has a "transformative reputation," marketing itself as a fresh start providing a sense of stability for soldiers' with its numerous financial benefits (Segal, 1989)
- Adolescent physical fighting is associated with adverse adulthood outcomes (Froyland & Soest, 2019).
- This study will investigate if a history of adolescent violent behavior is associated with future employment in military services to make implementations about military recruitment tactics.

## Research Question

- To what extent is a history of adolescent violence associated with enlistment in the military

## Methods

### Sample

- A nationally representative sample was drawn from 7th-12th graders in 1994 (n=6504) and in 2016-2018 when the respondents were in their late 30s and early 40s (n=4188) from The National Longitudinal Study of Adolescent Adult Health

### Measures

- The explanatory variable in analysis, Adolescent Violent Behaviors, was measured by the sum of three questions concerning adolescent fighting and violence asked in the survey of wave 1. This variable was used to determine the level of violence the participant displayed during adolescence.
- The three levels of adolescent violent behaviors that the participants were categorized into were no violent behaviors, moderately violent behaviors and extreme violent behaviors
- The response variable was whether or not the participant was enlisted in the military or not

## Results

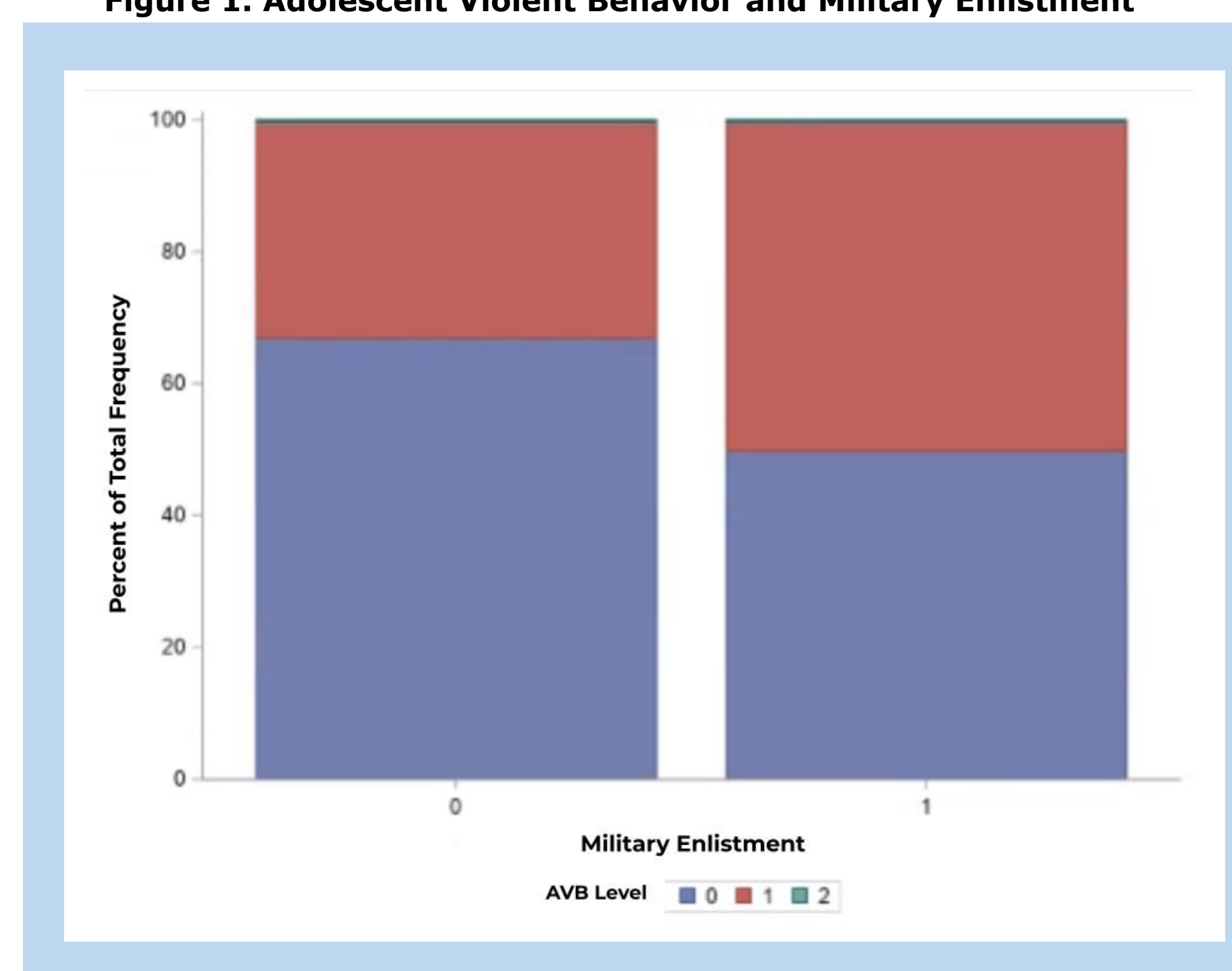
### Univariate

- 92.86% of respondents are not enlisted in the military and 7.14% of respondents are enlisted in the military
- 65.71% of respondents did not display violent behaviors during adolescence, 33.93% of respondents were moderately violent during adolescence and 0.36% of respondents were extremely violent during adolescence
- 82.98% of respondents exceeds classroom expectations, 14.37% of respondents meet classroom expectations and 2.65% of respondents do not meet classroom expectations

### Bivariate

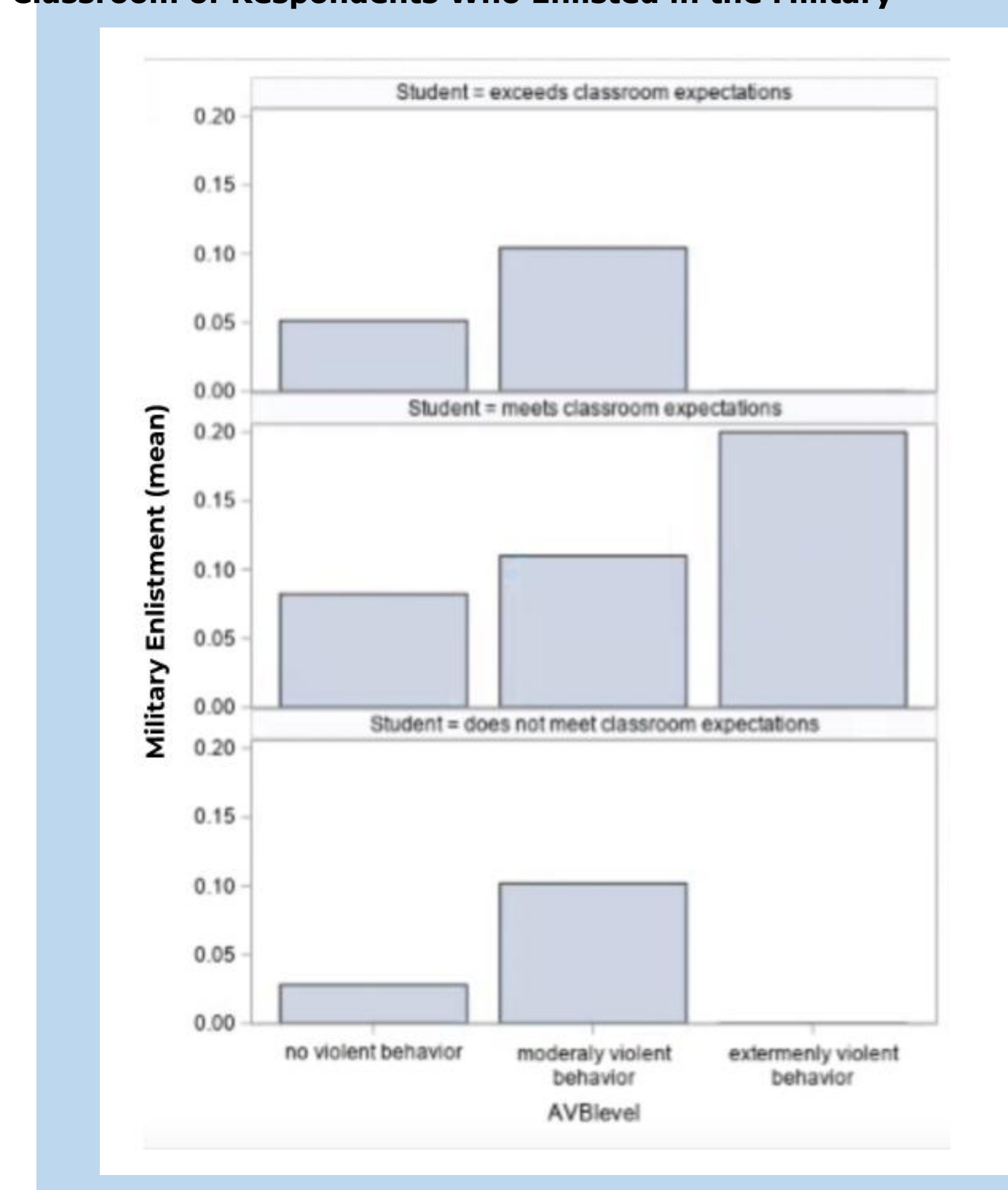
- A post hoc chi-square test showed that there is a significant difference between nonviolent adolescents and moderately violent adolescents ( $p = <.0001$ ,  $X^2 = 36.07$ ), however there is not a significant difference between non violent adolescents and extremely violent adolescents ( $p=.63$ ,  $X^2=.047$ ) pr moderately violent adolescents and extremely violent adolescents ( $p=.63$ ,  $X^2=.228$ )

Figure 1. Adolescent Violent Behavior and Military Enlistment



- Additionally, a multiple regression analysis showed that **respondents who displayed moderate adolescent violence wee significantly associated with the likelihood of enlisting in there military (OR 0.489, CI 0.385-0.620). Adolescents who are moderately violent are 50% more likely to join the military than adolescents who do are not violent.**

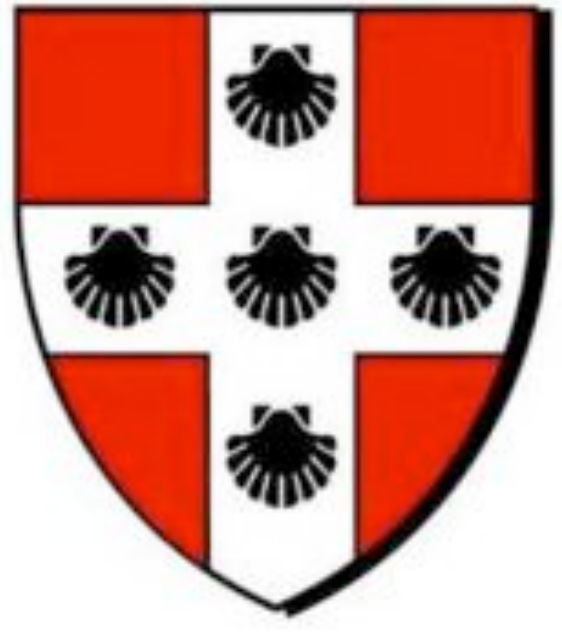
Figure 2. Adolescent Violence and Student Behaviors in the Classroom of Respondents Who Enlisted in the Military



## Discussion

- The relationship between adolescent violence and military enlistment is no longer significant after controlling for a third variable of student behaviors in the classroom
- These results show implementations of military recruitment using its transformative reputation to recruit people from violent backgrounds
- A possible limitation to this study was the small number of respondents who categorize as extremely violent during adolescents
- Further research into the relationship between adolescent violence and military enlistment could use a larger sample of participants in each category and a clear distinction between levels of adolescent violent behaviors.





# The Association Between Smoking Quantity and Nicotine Dependence among Young Adults with and without Psychiatric Disorders



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## Introduction

- Psychiatric disorders are a potent group of risk factors consistently implicated in the development of nicotine dependence (Rohde et al., 2003; 2004).
- While the association has been well established in the literature, less is known about the ways in which psychiatric disorders may play a role in the emergence of nicotine dependence.
- Most research has focused on how psychiatric disorders and may be a risk factor for heavy smoking e.g. the self medication hypothesis (Khantzian, 1997).
- Alternately, however, psychiatric disorders may signal a greater sensitivity to nicotine dependence at low levels of smoking (i.e. individuals with psychiatric disorders may develop nicotine dependence symptoms at lower levels of smoking than those without psychiatric disorders).

## Methods

### Sample

- Young adults (age 18 to 25) who reported daily smoking in the past year (n=1320) were drawn from the first wave of the National Epidemiologic Study of Alcohol and Related Conditions (NESARC).
- NESARC is a nationally representative sample of non-institutionalized adults in the U.S.

### Measures

- Lifetime psychiatric disorders were assessed using the NIAAA, Alcohol Use Disorder and Associated Disabilities Interview Schedule – DSM-IV (AUDADIS-IV).
- The tobacco module includes questions on symptom criteria for DSM-IV nicotine dependence.
- Current smoking was evaluated through quantity (“On the days that you smoked in the last year, about how many cigarettes did you usually smoke?”).

## Research Questions

- Which psychiatric disorders are associated with nicotine dependence after controlling for comorbidity?
- Does the association between smoking quantity and nicotine dependence differ for individuals with and without a psychiatric disorders?

## Results

### Univariate

- Fully 61% of daily, young adult smokers met criteria for DSM-IV nicotine dependence in the past year.
- A total of 55% met criteria for one or more psychiatric disorders.

### Bivariate

- Chi-Square analysis showed that daily, **young adult smokers with a psychiatric disorder were significantly more likely to meet criteria for nicotine dependence (78.5%)** than those without a psychiatric disorder (60.7%),  $X^2=152.3$ , 1 df,  $p<.0001$ . The most common disorder among daily smokers was alcohol dependence (45% SE 1.9).
- As expected, the **number of cigarettes smoked per day** was significantly associated with **DSM-IV nicotine dependence**, OR=1.04 (1.03-1.06).

### Multivariate

- Major depression (MDD), specific phobia, alcohol dependence, and antisocial personality disorder (ASPD) were each associated with DSM-IV nicotine dependence after controlling for comorbidity.
- The interaction between number of cigarettes smoked per day four specific phobia, ASPD and MDD was not found to be significantly associated with the presence of nicotine dependence.
- At each level of use, the probability of nicotine dependence is significantly higher among those with the disorder than those without (Figure 1).

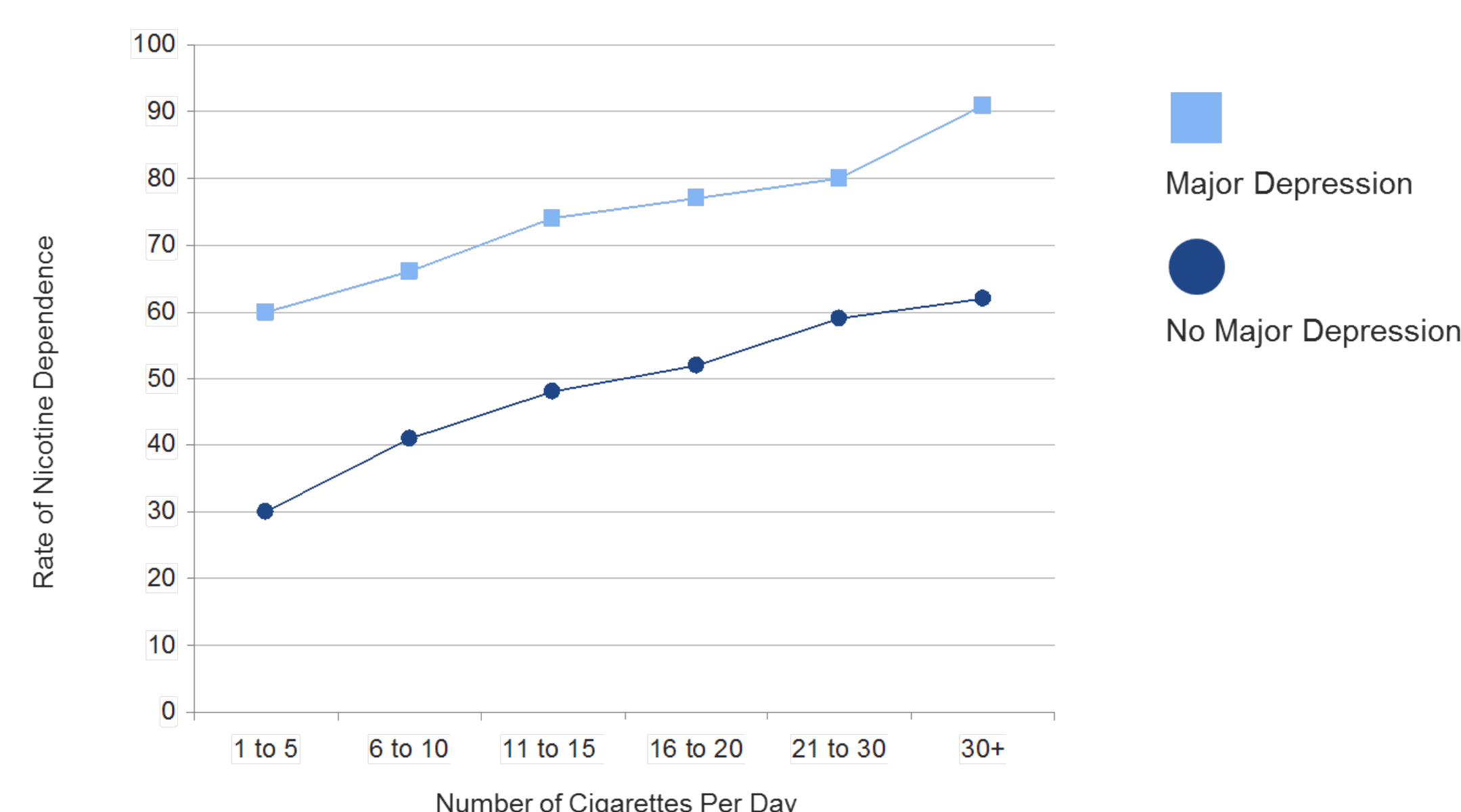


Figure 1. Smoking and Nicotine Dependence by Major Depression among Daily, Young Adult Smokers

### Multivariate (cont.)

- In contrast, the interaction between alcohol dependence and number of cigarettes smoked per day was statistically significant when predicting nicotine dependence (Figure 2).

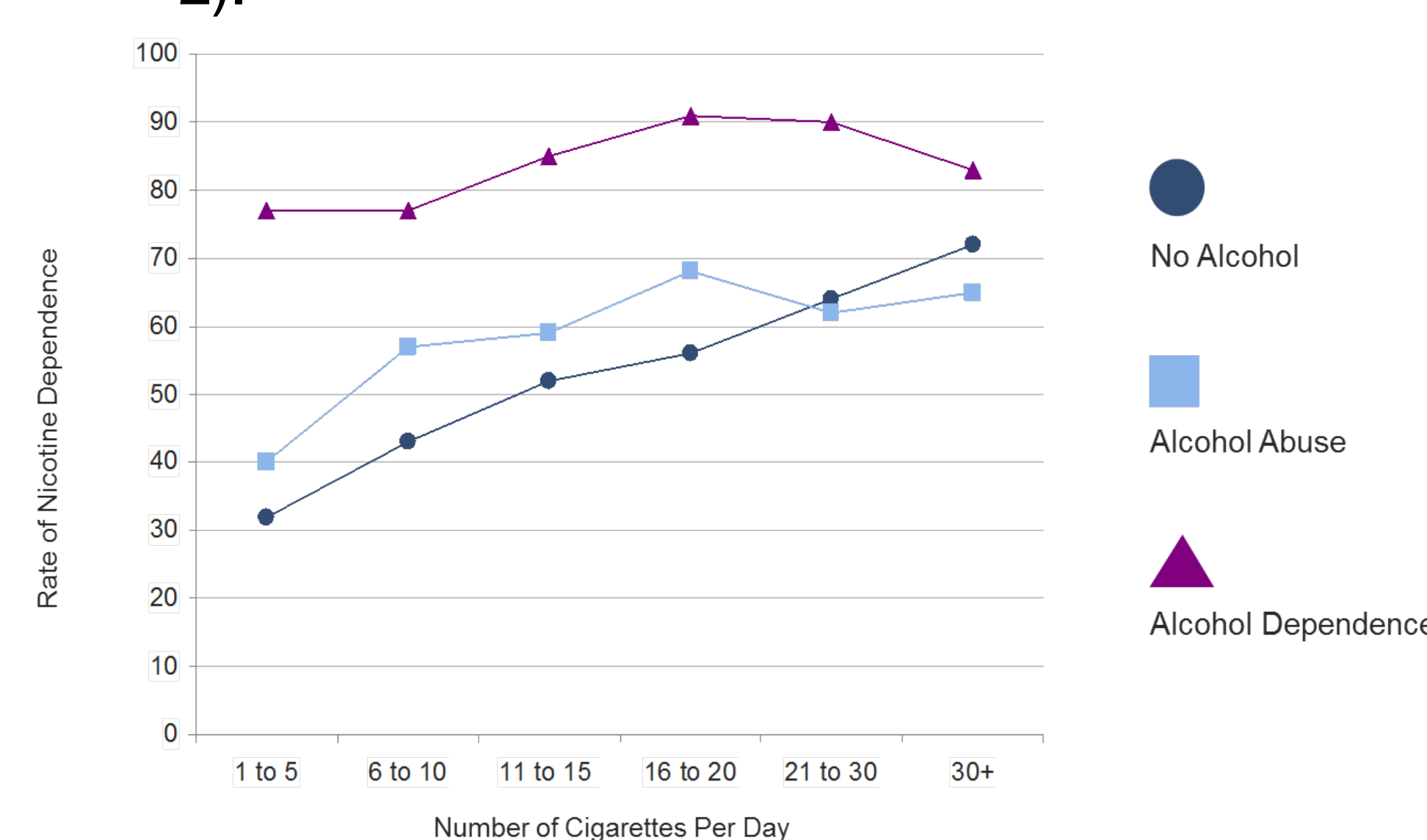


Figure 2. Smoking and Nicotine Dependence by Alcohol Use Disorders among Daily, Young Adult Smokers

- At lower levels of smoking, individuals with alcohol dependence have substantially elevated rates of nicotine dependence compared to those without alcohol dependence.
- At highest levels of use (30+ cigarettes/day), rates of nicotine dependence are statistically similar for those with and without alcohol dependence.

## Discussion

- Individuals with major depression, specific phobia and ASPD may be more sensitive to nicotine dependence across levels of smoking.
- Individuals with alcohol dependence are more sensitive to nicotine dependence at low levels of daily smoking, but not at the highest levels when compared to individuals without alcohol dependence.
- Notably, the present findings are based on cross-sectional data and do not reflect the smoking levels at which nicotine dependence emerges among those with and without psychiatric disorders.
- Further research is needed to determine whether sensitivity to nicotine dependence is based on physical and/or psychological differences related to psychiatric disorders.

Khantzian, Edward J. (1997). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry*. 4(5), 231-244.

Rohde, P., Lewinsohn, P. M., Brown, R. A., Gau, J. M., & Kahler, C. W. (2003). Psychiatric disorders, familial factors and cigarette smoking: I. Associations with smoking initiation. *Nicotine & Tobacco Research*, 5(1), 85-98.

Rohde, P., Kahler, C. W., Lewinsohn, P. M., & Brown, R. A. (2004). Psychiatric disorders, familial factors, and cigarette smoking: II. Associations with progression to daily smoking. *Nicotine & Tobacco Research*, 6(1), 119-132.