



The Association Between Cocaine Dependence of Drug Users Not in Treatment and Antisocial Personality Disorder



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Introduction

- Young people who have drug use disorders are particularly vulnerable to various psychological problems (Chahua et al., 2015).
- There is a high popularity of cocaine dependence among young individuals (Chahua et al., 2015).
- There is a relatively strong association between drug dependence and personality disorders. Untreated individuals are associated with higher possibilities of certain diagnosis (Personality Profiles of Individuals with Substance Use Disorders: Historical Overview and Current Directions, n.d.).
- There is a lack of research focusing on young and untreated cocaine dependence. Most of the previous research focus on empirical observations of people in treatment facilities.

Methods

Sample

- Samples (n=43053) were drawn from the first wave of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).
- NESARC is a nationally representative sample of civilized, non-institutionalized adults in the U.S.

Measures

- Cocaine usage was measured with the question “Ever used cocaine or crack.” The dichotomous variable has 2 levels: 1 (YES) and 2 (NO).
- The extent of cocaine dependence was measured with the question “Cocaine Abuse/Dependence in last 12 month.” 4 levels of responses range from 0 (No cocaine diagnosis), 1 (Cocaine abuse only), 2 (Cocaine dependence only), to 3 (Cocaine abuse and dependence).

Results

Bivariate

- Chi-Square analysis showed that usage of cocaine were significantly associated with number of antisocial behaviors ($X^2 = 357.53$, $df = 1$, $p < 0.001$).
- Chi-Square analysis showed that cocaine dependence were significantly associated with number of antisocial behaviors ($X^2 = 51.377$, $df = 2$, $p < 0.001$).
- According to post hoc test, the relationship between cocaine abuse and dependence vs. No Cocaine Diagnosis are significant ($adj.p = 0.0097$), while others are all insignificant.

Multivariate

Cocaine Use & Antisocial Behaviors

- Logistic regression analyses showed that cocaine users were significantly more likely to have antisocial behaviors than those who don't use. (OR 20.13, $p < 0.001$).
- Sex is a significant factor in predicting ASPD that females are less likely to have antisocial behaviors than males (OR = 0.5, $p = 0.0405$).
- The association between cocaine use and antisocial behavior does not significantly differ by sex (OR = 0.464, $p = 0.1327$) (Fig. 1).

Multivariate

Cocaine Dependence & Antisocial Behaviors

- Logistic regression analyses showed a significant positive association between no cocaine diagnosis (OR = 0.0391, $p < 0.001$) and cocaine abuse and dependence (OR = 0.0476, $p < 0.001$) with antisocial behaviors.
- No significant association between cocaine abuse or dependence and antisocial behaviors. ($p = 0.465$)
- Sex is not a significant factor in predicting ASPD that females are not less likely to have antisocial behaviors than males ($p = 0.73766$).
- The association between cocaine use and antisocial behavior does not significantly differ by sex (p values are all > 0.05) (Fig. 2).

Research Questions

- Does the usage of cocaine associate with the performance of antisocial personality disorder?
- Does the extent of cocaine abuse/dependence associate with the performance of antisocial personality disorder?
- Does the association between cocaine dependence and antisocial behaviors differ with sexes?

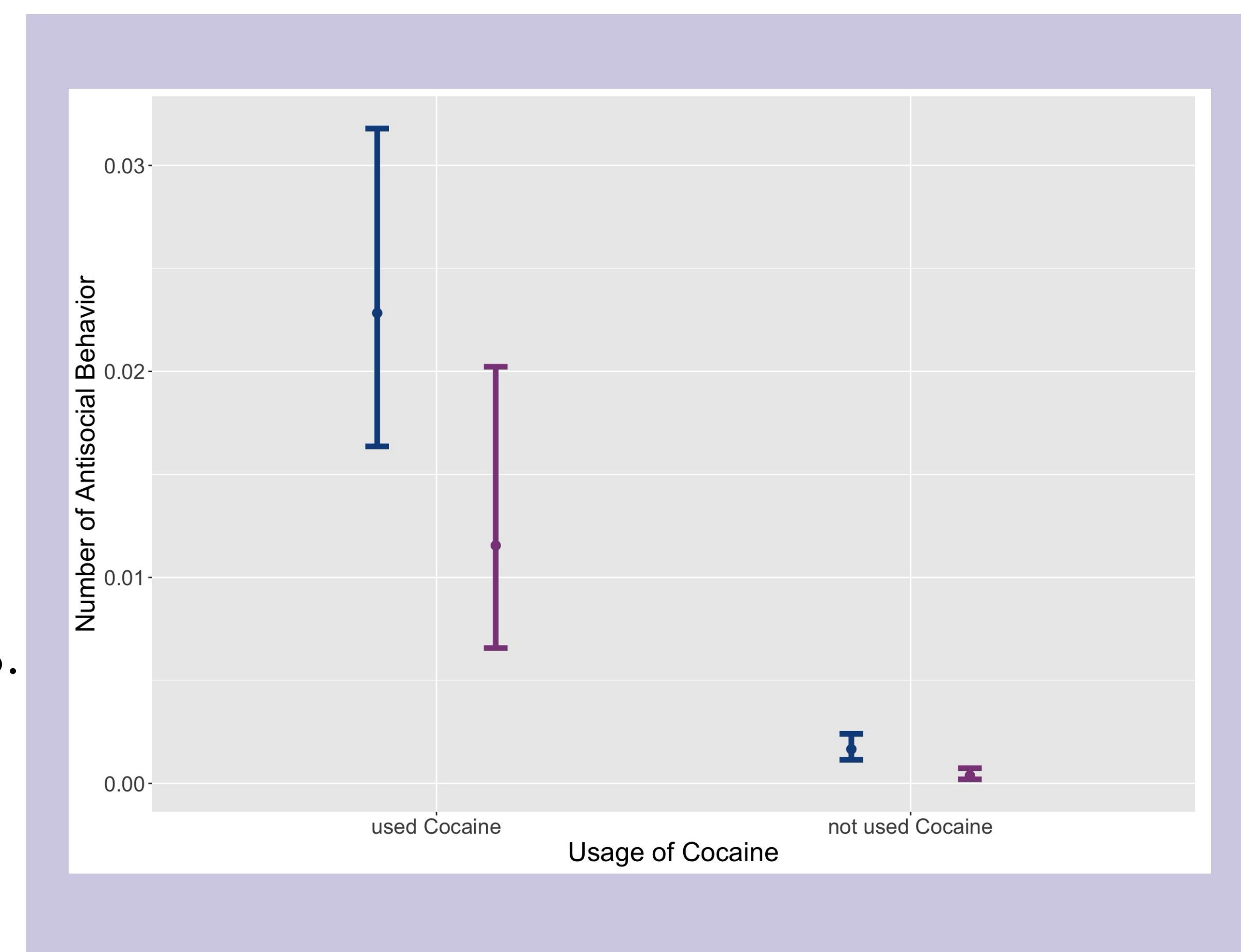


Figure 1: Cocaine Use and Antisocial Behaviors with Sex

SEX
Male
Female

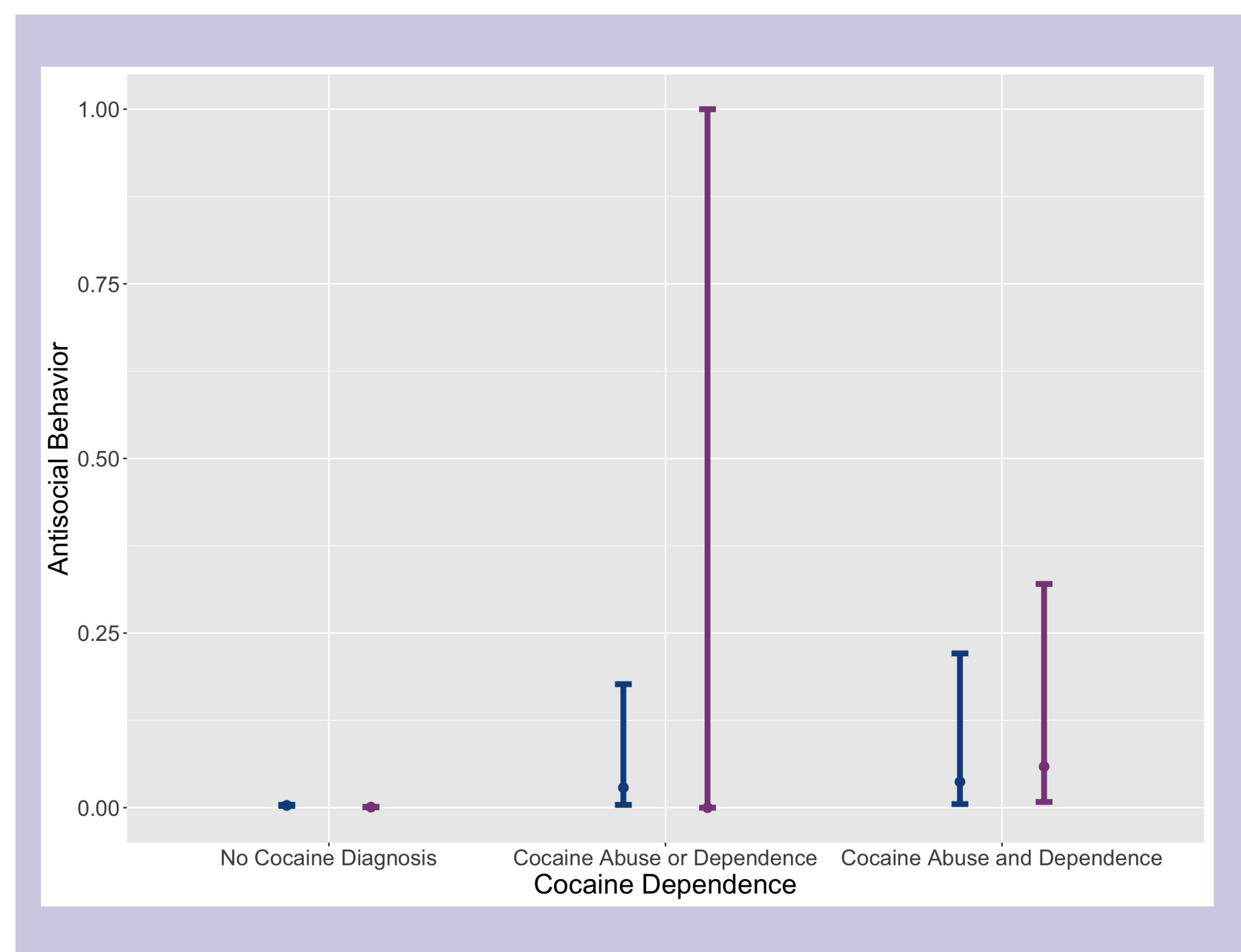


Figure 2: Cocaine Dependence and Antisocial Behaviors with Sex

SEX
Male
Female

Discussion

- Individuals with a history of cocaine use, especially those with abuse and dependence diagnoses, are at significantly higher risk for antisocial tendencies.
- The study is based on cross-sectional data that limited to infer a causal relationship between cocaine use/dependence and antisocial behaviors.
- Further research that explore more moderating variables such demographic, cultural, and temporal factors is needed to better understand the relationship between cocaine use, dependence, and antisocial behaviors.
- The results could be utilized to inform prevention and treatment strategies, as well as in political legislation to regular the society.

References

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