



EXPLORING THE MODERATING EFFECTS OF FACETS OF DISINHIBITION ON THE RELATIONSHIP BETWEEN SOCIAL ANXIETY & ALCOHOL USE

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INTRODUCTION

- Social anxiety and alcohol use are prevalent and often comorbid.
- Previous research suggests that moderating influences of specific risk factors (i.e. neurobiological traits) may help determine predispositions to developing later psychopathology.



INTRODUCTION

Two relevant facets of disinhibition:

• Impulsivity (IMP) represents a tendency to engage in behavior involving rashness, high novelty seeking, and lack of foresight/planning.



• An individual's tendency to engage in risk-taking (RT) involves making choices with uncertain outcomes, and balancing potential harm/ danger with a reward.



CURRENT STUDY

- In a sample of collegiate adults, the current study sought to understand whether:
 - 1. An individual's predisposed disinhibition influences the relationship between social anxiety and alcohol use/problems.
- I predicted that:
 - 1. SA, IMP, and RT would be positively associated with both AU & AP
 - 2. SA + high IMP/RT would yield increased AU

METHODS

Participants

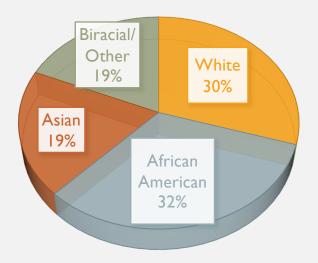
• 474 adult undergraduates, ages 18-52, recruited through GSU $(M_{age} = 20.6 \pm 3.9 \text{ years}, 49.5\% \text{ female})$

Measures

- Inventory of Depression and Anxiety Expanded version (IDAS-II; Watson et al., 2012)

 Social Anxiety scale (e.g., "I was worried about embarrassing myself socially")
- Personality Inventory for DSM-5 (PID-5) (Maples et al., 2013) Impulsivity scale (e.g., "I feel like I act totally on impulse.") Risk-taking scale (e.g., "I do a lot of things that others consider risky.")
- Externalizing Spectrum Inventory (ESI-brief; Patrick et al., 2013)
 Alcohol Use scale (e.g., "I've enjoyed getting drunk now and then, just for fun.")
 Alcohol Problems scale (e.g., "My drinking has led to problems at home.")

RACIAL DEMOGRAPHICS



DATA ANALYSIS

• Bivariate Analyses

• To examine associations between social anxiety, facets of disinhibition (IMP & RT), and substance use (alcohol use/problems).

• Multivariate Regression Analyses

• To determine the unique and interactive contribution of social anxiety and disinhibition to dimensions of alcohol use/problems in adults.

BIVARIATE CORRELATIONS

| | Age | Gender | Social Anxiety | Impulsivity | Risk-Taking | Alcohol Use | Alcohol Problems |
|------------------|----------|-----------|----------------|-------------|-------------|-------------|---------------------|
| Age | _ | | | | | | |
| Gender | 0.053 | _ | | | | | |
| Social Anxiety | -0.085 | 0.140** | _ | | | | |
| Impulsivity | -0.073 | -0.029 | 0.256*** | _ | | | |
| Risk-Taking | -0.09 | -0.185*** | 0.156*** | 0.576*** | - | | |
| Alcohol Use | 0.154*** | 0.033 | 0.037 | 0.244*** | 0.283*** | _ | |
| Alcohol Problems | 0.113* | -0.066 | 0.190*** | 0.246*** | 0.307*** | 0.424*** | - |

note: *p < .05, ** p < .01, *** p < .001

REGRESSION ANALYSES

Table 1: SA + IMP on AU

Alcohol Use

Table 2: SA + RT on AU

| | b | t | р | R | R^2 | |
|----------|--------|--------|--------|-------|--------|--|
| Step 1 | | | | Г | | |
| age | 0.057 | 10.876 | < .001 | 0.854 | 0.73* | |
| gender | 0.126 | 1.783 | 0.075 | | | |
| Step 2 | | | | | | |
| age | 0.045 | 8.078 | < .001 | 0.867 | 0.752* | |
| gender | 0.067 | 0.928 | 0.354 | | | |
| SA | -0.006 | -0.167 | 0.868 | | | |
| IMP | 0.353 | 6.054 | < .001 | | | |
| Step 3 | | | | | | |
| age | 0.037 | 5.715 | < .001 | 0.869 | 0.755* | |
| gender | 0.035 | 0.479 | 0.632 | | | |
| SA | 0.102 | 1.69 | 0.092 | _ | | |
| IMP | 0.6 | 4.959 | < .001 | 1 | | |
| SA + IMP | -0.112 | -2.326 | 0.02 | | | |
| | | | | | | |

| | b | t | р | R | R ² |
|---------|--------|--------|--------|-------|----------------|
| Step 1 | | | | | |
| age | 0.057 | 10.876 | < .001 | 0.854 | 0.73* |
| gender | 0.126 | 1.783 | 0.075 | | |
| Step 2 | | | | | |
| age | 0.036 | 6.32 | < .001 | 0.873 | 0.761* |
| gender | 0.115 | 1.633 | 0.103 | | |
| SA | -0.014 | -0.387 | 0.699 | | |
| RT | 0.473 | 7.476 | < .001 | | |
| Step 3 | | | | | |
| age | 0.034 | 4.853 | < .001 | 0.873 | 0.762* |
| gender | 0.109 | 1.517 | 0.13 | | |
| SA | 0.015 | 0.238 | 0.812 | | |
| RT | 0.54 | 4.057 | < .001 | | |
| SA + RT | -0.032 | -0.577 | 0.564 | | |

Alcohol Problems

Table 3: SA + IMP on AP

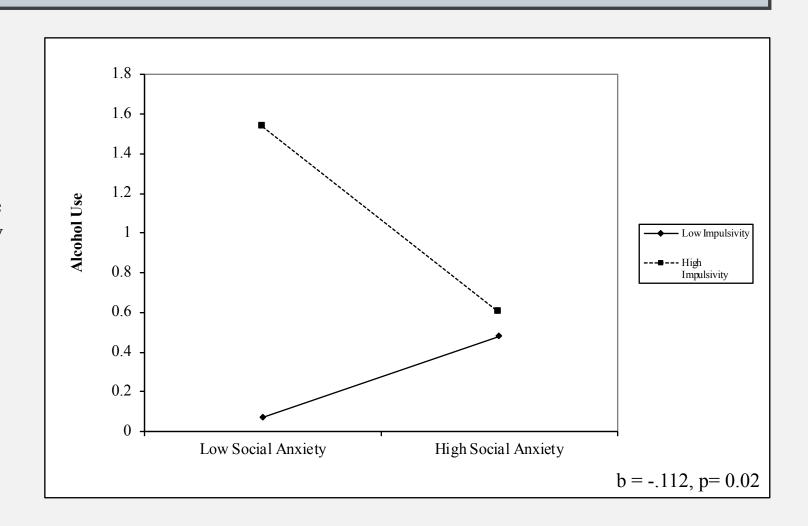
Table 4: SA + RT on AP

| | b | t | р | R | R ² |
|----------|--------|--------|--------|-------|----------------|
| Step 1 | | | | | |
| age | 0.025 | 6.33 | < .001 | 0.58 | 0.336 |
| gender | -0.052 | -0.964 | 0.336 | | |
| Step 2 | | | | | |
| age | 0.014 | 3.201 | 0.001 | 0.624 | 0.39 |
| gender | -0.143 | -2.6 | 0.01 | | |
| SA | 0.09 | 3.06 | 0.002 | | |
| IMP | 0.183 | 4.093 | < .001 | | |
| Step 3 | | | | | |
| age | 0.012 | 2.365 | 0.018 | 0.625 | 0.39 |
| gender | -0.15 | -2.684 | 0.008 | | |
| SA | 0.115 | 2.484 | 0.013 | | |
| IMP | 0.24 | 2.577 | 0.01 | | |
| SA + IMP | -0.026 | -0.701 | 0.484 | | |

| | b | t | р | R | R ² |
|---------|--------|--------|--------|-------|----------------|
| Step 1 | | | | | |
| age | 0.025 | 6.33 | < .001 | 0.58 | 0.336 |
| gender | -0.052 | -0.964 | 0.336 | | |
| Step 2 | | | | | |
| age | 0.008 | 1.891 | 0.059 | 0.638 | 0.407 |
| gender | -0.116 | -2.135 | 0.033 | | |
| SA | 0.081 | 2.839 | 0.005 | | |
| RT | 0.269 | 5.513 | < .001 | | |
| Step 3 | | | | | |
| age | 0.012 | 2.186 | 0.029 | 0.639 | 0.409 |
| gender | -0.106 | -1.928 | 0.054 | | |
| SA | 0.038 | 0.779 | 0.436 | | |
| RT | 0.169 | 1.643 | 0.101 | | |
| SA + RT | 0.047 | 1.11 | 0.268 | | |

REGRESSION ANALYSES

- At low levels of SA, IMP increases risk for AU, whereas high levels of SA are largely unaffected by IMP.
- High levels of SA
 may protect against
 the inherent risk of
 AU associated with
 high IMP.



IMPLICATIONS

- Our results demonstrate the value of anxiety in reducing the chance of engagement in risky behaviors, even in the presence of high impulsivity.
- Drinking is typically a social activity, meaning higher levels of anxiety endorsed here may be specific to social behaviors.
 - Therefore these results are not completely generalizable to *all* forms of risky behavior.

LIMITATIONS

- This study used an undergraduate sample ($M_{age} = 20.6$), which may not accurately capture typical adult substance use patterns.
- Using measures that emphasize level of severity may more appropriately characterize different sub-groups of socially anxious people.



FUTURE DIRECTIONS

- Future studies on SA should continue to take into account self-regulatory tendencies.
 - Different/additional facets of disinhibition should also be included
- Utilizing a more representative sample would more appropriately measure these relationships.
- Additional constructs (e.g. coping and expectancy strategies) should be considered.

THANK YOU SO MUCH!

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