# Completing the Triangle: Alcohol Attitudes and Risk-Taking Behavior

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## Introduction

•Following many alcohol-related deaths of college students, alcohol use and abuse has become a large concern at MSU and other universities nationwide.

•A thorough understanding of the factors involved with alcohol use is crucial when trying to target the issue and curb risky drinking behaviors in students.

•One factor that has been significantly linked to alcohol use is a person's attitudes toward alcohol. In 2000, Best et al. found that positive attitudes toward alcohol and other drugs are significantly related to increased drinking behaviors.

•Another factor that has been found to correlate with alcohol use is the propensity for risk taking (Bjork, Hommer, Grant, & Danube, 2007). Interestingly, alcohol dependent people display significantly more risk-taking behaviors.

•If a significant correlation between alcohol attitudes and risk taking were found, a complete triangle would be formed that links alcohol use, risk taking, and alcohol attitudes together.

•This triangle of knowledge would help to gain a more complete understanding of the factors that influence alcohol consumption and could be used to prevent dangerous drinking behaviors in college students.

•We expected risk-taking behavior, as assessed by the BART, to be significantly correlated with more positive attitudes, thoughts, and feelings toward alcohol.

## Methods

Participants were recruited through the use of the MNSU research participation system, Experimentrak. When participants arrived at the study, they were asked to sign an informed consent. Next, they completed a Balloon Analogue Risk Task (BART). The BART is a computer-based assessment that measures an individual's willingness to take risks based on rewards. Numerous studies have shown that scores from the BART significantly correlate with real-life health and safety risk behaviors (for a summary, see Lejuez et al., 2002).

Participants were then asked to complete a questionnaire that assessed their attitudes toward alcohol. The survey consisted of three subscales addressing thoughts, attitudes, and feelings toward alcohol, with each question utilizing a nine point Likert-type scale. To conclude the study, participants completed the BART a second time.

When analyzing the data, we used correlations, t-tests, between-subject ANOVAs, and Post-Hoc Tukey tests with a significant p value cutoff of 0.05.

## Results

A total of 173 people participated in the study. For participant demographics, see Table 1.

### Table 1

| | | |
|---|---|---|
| **Gender** | Male | 40 |
| | Female | 133 |
| **Ever Consumed Alcohol?** | Yes | 161 |
| | No | 12 |
| **Average # of drinks/night of consumption** | Minimum | 0 |
| | Maximum | 24 |
| | Mean | 5.4 |

**Figure 1: Relationship Between Consumption and Alcohol Attitudes, Feelings, and Thoughts**

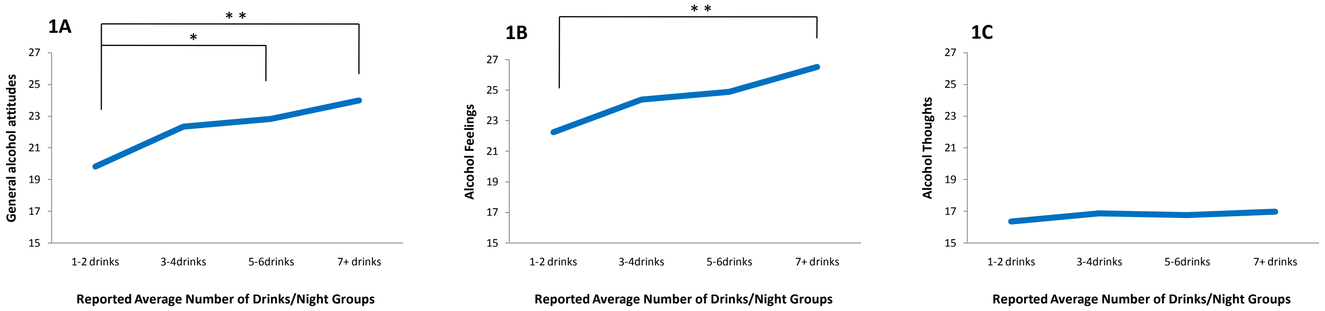



**Figure 2: Relationship Between Time Since Last Consumption and Alcohol Attitudes, Feelings, and Thoughts**

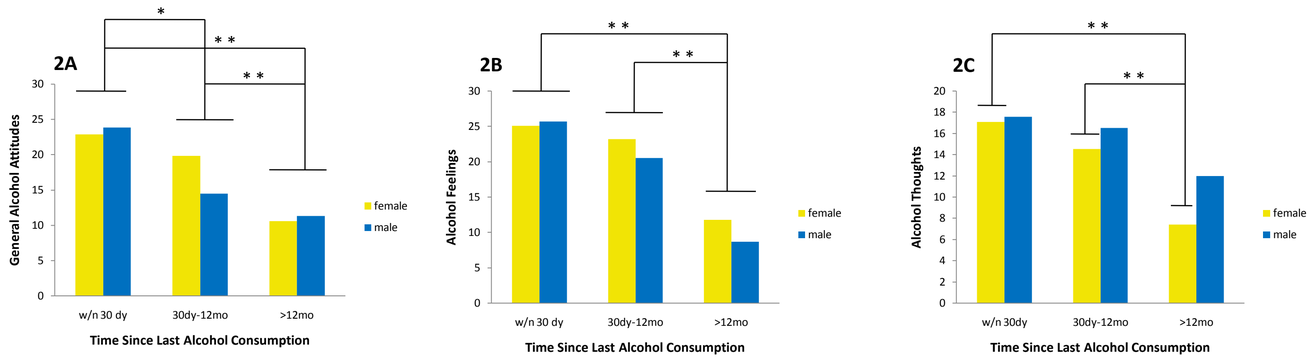
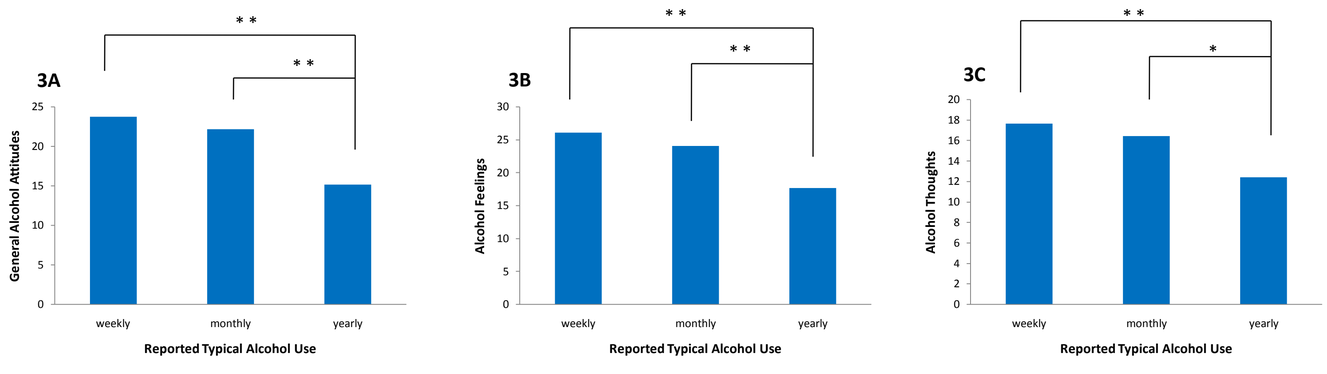



**Figure 3: Relationship Between Typical Use and Alcohol Attitudes, Feelings, and Thoughts**




## Results Continued

There was a significant difference (t(172)= -4.829, *p*=0.001) in the number of average balloon pumps between the first BART trial (*M* = 33.37, *SD*=11.97) and the second BART trial (*M*= 36.24, *SD*=11.46). Overall, there was no significant correlation between risk-taking performance as assessed by the BART and subjects' attitudes, thoughts and feelings toward alcohol (*r*=.018, *p*=n.s; *r*=.063, *p*=n.s.; and *r*=0.042, *p*=n.s., respectively)

We examined the relationships between participants' reported average number of drinks consumed in a night and their general attitudes, feelings, and thoughts toward alcohol ( Figure 1). Analysis revealed that participants' general attitudes and feelings significantly correlated with their reported average number of drinks in a night(*r*=0.233, *p*=0.004, and *r*=0.226, *p*=0.005, respectively), but their thoughts toward alcohol did not (*r*=.063, *p*=n.s.) Those who consume more tend to have more positive attitudes and feelings toward alcohol.

Participants who had consumed alcohol within the last 30 days, more than 30 days ago but within the last 12 months, and more than 12 months ago significantly differed in their general attitudes toward alcohol (*F* (2,157)=5.178, *p*=0.001; *M*=23.11, *M*= 19.26, *M*= 10.88, respectively) The participants also significantly differed in their feelings about alcohol (*F* (2, 158) =10.727, *p*= 0.001; *M*= 25.22, *M*= 22.89, *M*= 10.63, respectively). There were no main effects with thoughts toward alcohol unless gender was taken into account. Females' thoughts were significantly different according to when they last consumed alcohol (*F*(2,155)=5.146, *p*=0.025, *M*=17.10, *M*=14.53, *M*=7.40, respectively), (See Figure 2).

Participants who reported consuming alcohol yearly, monthly, and weekly were significantly different in their general attitudes, feelings, and thoughts toward alcohol (*F*=(2,157)=20.04**,** *p*=0.001; F(2,158)=17.71, *p*=0.001; *F*(2,158)=7.67**,** *p*=0.001, respectively), (Figure 3).

## Discussion

•We believe that having a sample of participants who were extremely disproportionate in their drinking behaviors prevented us from getting significant results with risk-taking from the BART. We still hold on to the hypothesis that risk-taking and alcohol attitudes are positively related. Future research should be done on this topic with a wider sample of drinkers and non-drinkers.

•Our data (Figure 1) suggests that the amount of alcohol consumed by college students could possibly be curbed by targeting emotions and attitudes associated with alcohol, instead of targeting thoughts on how healthy or safe drinking is.

•Literature on drug education suggests that teaching moderation instead of teaching abstinence from alcohol could reduce the level of excitement tied to drinking (Peele, 2006). This suggestion relates to the positive correlation we found between feelings about alcohol and reported number of drinks per night.

•Future research should focus on effective strategies for neutralizing students' emotions and attitudes toward alcohol. As Figure 1 suggests, changing students' attitudes and feelings would be more effective than targeting their thoughts, as many drug education courses currently do, with facts on alcohol use being unsafe and unhealthy.

Sources

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