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The association of reasons for not drinking and the decision to abstain or limit alcohol consumption

Amee J. Epler  
*University of Missouri - Columbia*

Kenneth J. Sher  
*University of Missouri - Columbia*

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Introduction

- Compared to reasons for drinking, much less is known about the relations between alcohol consumption and reasons for not drinking or for limiting drinking (RFNLD)
- Existing evidence suggests that some RFNLD are negatively associated with drinking, while others are positively associated with drinking, especially among moderate and heavy drinkers
- The prospective relations among RFNLD and alcohol consumption are not known
- The present study examines the relation of self-report RFNLD to abstention status and to the amount of alcohol consumed by drinkers

Method

- Participants were recruited (N=3,720) prior to their freshman year of college and invited to complete online surveys each semester for four years (Waves 0 through 6 are available)
- A 24-item measure of RFNLD was administered annually (at Waves 2, 4, and 6) during the winter semesters
- Only participants who completed at least one assessment after Wave 1 (n=1,136) were included in analyses
- Past 3-month abstention status was determined for Waves 2-6 using two alcohol consumption items (frequency of drinking, and frequency of 5 or more drinks on one occasion)
- The importance of each RFNLD item was rated on a 3-point Likert scale
- Maximum likelihood, exploratory factor analysis (EFA) with Promax rotation was used to determine the factor structure of the RFNLD items
- In addition to separate regression analyses, a structural equation model (SEM) was used to examine the relation of RFNLD factors to a two-part alcohol-use variable, 1) abstinence status and 2) alcohol quantity/frequency

EFA Results

- Three correlated RFNLD factors were extracted
  - **Upbringing**: 9 items
  - **Loss of Control**: 7 items
  - **Consequences**: 8 items

Regression Results

- Results from separate logistic regressions predicting abstention status from all RFNLD factors suggest that **Upbringing** and **Consequences** RFNLD are associated with a higher likelihood of abstaining, while **Loss of Control** RFNLD are associated with a lower likelihood of abstaining (Table 1)
- Results from separate regressions predicting weekly alcohol consumption from all RFNLD factors suggest that **Upbringing** RFNLD are associated with lower levels of alcohol consumption, while **Loss of Control** RFNLD are associated with higher levels of alcohol consumption; **Consequences** RFNLD were only associated with lower levels of weekly alcohol consumption at Wave 6 (Table 2)

Table 1: Cross-sectional Logistic Regressions Predicting Abstention

<table>
<thead>
<tr>
<th>Factor</th>
<th>Odds Ratio (95% confidence intervals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 2</td>
<td>Wave 4</td>
</tr>
<tr>
<td>Upbringing</td>
<td>15.85(9.06-29.14)</td>
</tr>
<tr>
<td>Loss of Control</td>
<td>0.30</td>
</tr>
<tr>
<td>Consequences</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Table 2: Cross-sectional Regressions Predicting Alcohol Consumption among Drinkers only (no missing)

<table>
<thead>
<tr>
<th>Standardized β Coefficients</th>
<th>Wave 2</th>
<th>Wave 4</th>
<th>Wave 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Consumption</td>
<td>Wave 2</td>
<td>Wave 4</td>
<td>Wave 6</td>
</tr>
<tr>
<td>Upbringing</td>
<td>-0.49</td>
<td>-0.54</td>
<td>-0.44</td>
</tr>
<tr>
<td>Loss of Control</td>
<td>0.40</td>
<td>0.46</td>
<td>0.47</td>
</tr>
<tr>
<td>Consequences</td>
<td>0.10</td>
<td>0.05</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Figure 1. Two-part SEM

- **Consequences** RFNLD were associated with a lower likelihood of abstaining (OR 0.37) and with lower levels of alcohol consumption at Wave 2 (intercept) among drinkers (β = -0.23)
- **Upbringing** RFNLD were associated with a higher likelihood of abstaining (OR 10.67) and with lower levels of alcohol consumption at Wave 2 (intercept) among drinkers (β = -0.36)
- **Loss of Control** RFNLD were associated with a smaller increase (β = -0.14) in drinking during the sophomore and junior years (slope); this may be due to “regression toward the mean” (i.e., those with a low intercept will increase more than those with a high intercept)

SEM Results (Figure 1)

- Consistent with the cross-sectional regression results, **Upbringing** RFNLD were associated with a higher likelihood of abstaining (OR 10.67) and with lower levels of alcohol consumption at Wave 2 (intercept) among drinkers (β = -0.36)
- **Upbringing** RFNLD were associated with a greater increase (β = -0.23) in drinking during the sophomore and junior years (slope); this may be due to “regression toward the mean” (i.e., those with a low intercept will increase more than those with a high intercept)

Conclusions

- Both cross-sectional and more conservative longitudinal analyses suggest that **Upbringing RFNLD** such as “I was brought up not to drink” and “the people I hang around with are against drinking” serve as motivation to both abstain from alcohol and to limit consumption among drinkers
- **Consequences RFNLD** such as “could interfere with my responsibilities” and “I’ve seen the negative effects of someone else’s drinking” appear to only be a motivating factor in the decision not to drink
- Conversely, **Loss of Control RFNLD** such as “makes me feel bad emotionally” and “I’ve become concerned about my drinking” appear to be predictive of being a drinker and drinking at higher levels than those low in such reasons
- Understanding the different motivational factors behind the decision to abstain and/or the decision to limit one’s alcohol consumption is an important endeavor
- Research on RFNLD may help identify those reasons that are most influential and should be specifically targeted in prevention and intervention efforts