

A Comprehensive Examination of Motivational Profiles for Alcohol-Related Behaviors Among College Students

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INTRODUCTION

- College drinking interventions may benefit from an increased emphasis on direct harm reduction as opposed to solely drinking reductions
- Drinking motives are the most proximal antecedent to alcohol use and have been extensively studied among college students
- Recent research has shown the utility of self-determination theory (SDT) for understanding drinking responsibly
- Understanding the simultaneous influence of these motivational constructs on alcohol-related outcomes may inform college drinking interventions for targeting both reduced alcohol use and promoting drinking responsibly
- Thus, we sought to conduct a person-centered examination of these motivational constructs to better capture how these motivations, both within and across constructs

METHOD

Participants and Procedure

❖ We used data from 2808 psychology students who reported past-month alcohol use (M_{age}=20.59, SD=4.18; 72.9% female; 75.7% white) that were recruited 10 universities in 8 states across the US to complete an online survey for partial course credit

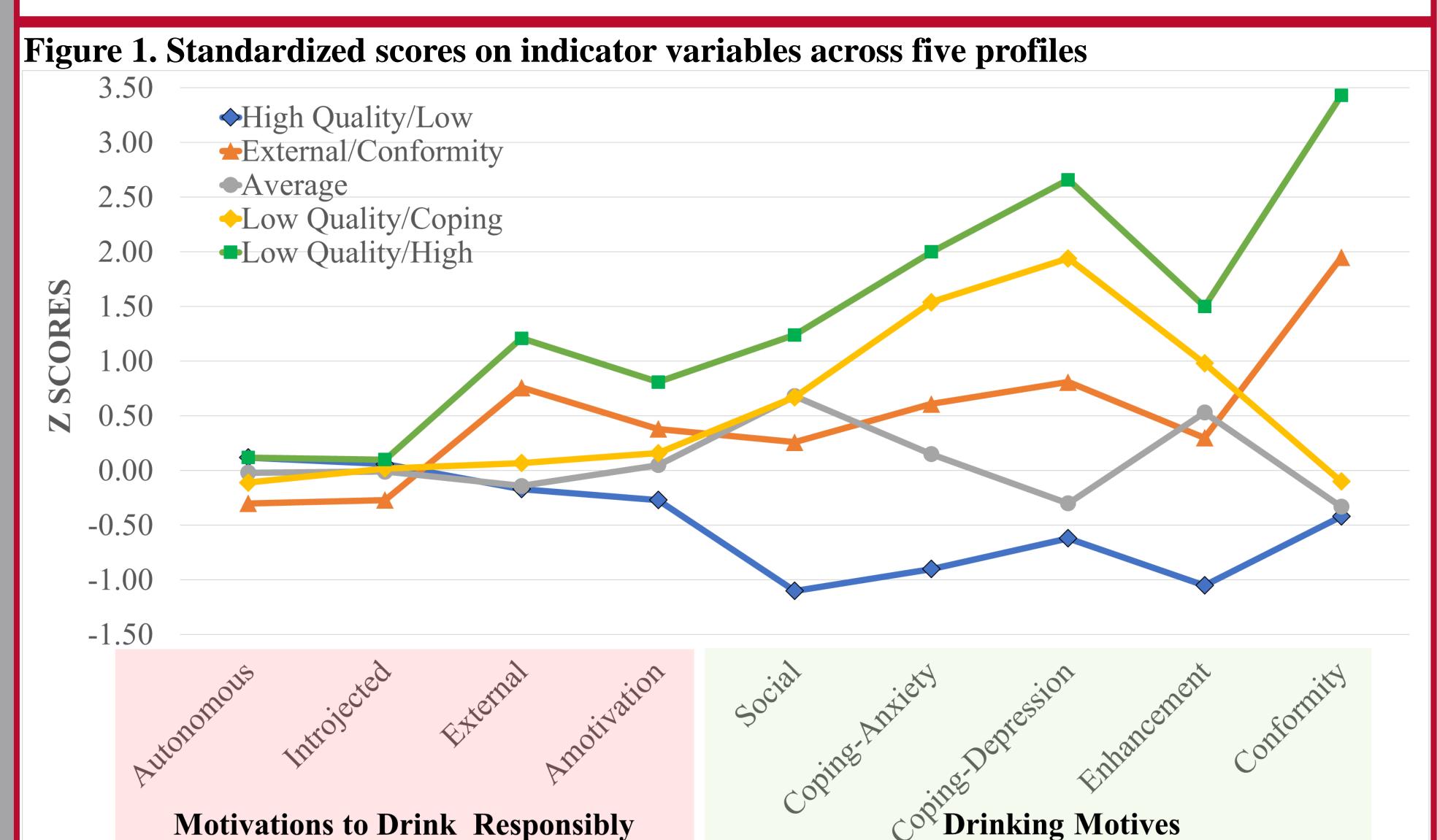
Measures

- ❖ Treatment Self-Regulation Questionnaire (TSRQ, 14 items) was used to assess SDT motivations for drinking responsibly: autonomous motivation, introjected regulation, external regulation, and amotivation
- Modified Drinking Motives Questionnaire-Revised (M-DMQ-R, 28 items) to assess drinking motives: social, coping-anxiety, coping-depression, enhancement, and conformity
- We also assessed protective behavioral strategies, alcohol use, alcohol problems, dispositional autonomy, and psychological needs

Statistical Analysis

- We conducted a latent profile analysis (LPA) using the TSRQ and M-DMQ-R subscales as indicators
- One- through 8-class solutions were examined
- ❖ Optimal profile solution was determined using: 1) goodness-of-fit indices, 2) classification diagnostics, 3) the Lo-Mendell Rubin adjusted likelihood ratio test (aLRT), and 4) substantive interpretation of the profiles
- Mean differences across the profiles on outcomes were tested using the automatic BCH method

RESULTS



| | Profile 1: | Profile 2: | Profile 3: | Profile 4: | Profile 5: |
|--------------------------|---------------------|---------------------|--------------------|---------------------|---------------------|
| | High quality/ | External/ | Average | Low quality/ | Low quality/ |
| | Low | Conformity | | Coping | High |
| Probabilistic n | 1029.5 | 278.6 | 1144.9 | 271.3 | 85.6 |
| % of total sample | 36.6% | 9.9% | 40.7% | 9.7% | 3.1% |
| PBSS-21 MOD | 3.82_{a} | 2.85_{b} | $3.08_{\rm c}$ | 3.07 _{cd} | 2.87 _{bcd} |
| PBSS-21 S/LD | $3.52_{\rm a}$ | 3.09_{b} | $3.27_{\rm c}$ | 3.12_{bd} | 3.36_{abcd} |
| PBSS-21 SHR | 4.71 _a | 4.67 _{ab} | 4.81 _{ac} | 4.07 _d | 4.34 _d |
| PBSS-21 Total | 4.06 _a | 3.61 _b | $3.80_{\rm c}$ | 3.47 _{bd} | 3.60_{bcd} |
| AUDIT Consumption | 4.43 _a | 7.53 _b | 7.32_{b} | 6.41 _c | 7.93 _b |
| AUDIT Problems | 1.15 _a | $4.43_{\rm b}$ | $2.47_{\rm c}$ | 5.58_{d} | 7.65_{e} |
| AUDIT Total | 1.15 _a | 4.43 _b | $2.47_{\rm c}$ | 5.58 _d | 7.65_{e} |
| B-YAACQ | 2.25 _a | 7.43_{b} | $4.75_{\rm c}$ | 6.97_{b} | $9.90_{\rm d}$ |
| IAF Authorship | $3.80_{\rm a}$ | 3.59 _b | 3.86 _{ac} | $3.40_{\rm b}$ | 3.73 _{abc} |
| IAF Control | 2.16 _a | 2.95_{b} | $2.41_{\rm c}$ | $3.03_{\rm b}$ | 3.62_{d} |
| IAF Interest-Taking | 3.36 _a | $3.80_{\rm b}$ | 3.64_{bc} | 3.36_{a} | 3.94 _{bc} |
| BPNSFS Autonomy Sat. | 3.75 _a | $3.52_{\rm b}$ | 3.81_a | 3.29 _d | 3.36_{bd} |
| BPNSFS Autonomy Frus. | 2.38 _a | 3.01 _b | 2.48 _a | $3.03_{\rm b}$ | 3.10_{b} |
| BPNSFS Competence Sat. | 4.06 _a | 3.88_{b} | $4.25_{\rm c}$ | $3.47_{\rm d}$ | $3.53_{\rm d}$ |
| BPNSFS Competence Frus. | 1.92 _a | 2.35 _b | 1.85 _a | $2.74_{\rm c}$ | 3.11 _d |
| BPNSFS Relatedness Sat. | $3.82_{\rm a}$ | $3.46_{\rm b}$ | 3.93 _a | 3.39_{b} | 3.44_{b} |
| BPNSFS Relatedness Frus. | 2.28 _a | 3.07 _b | 2.30_{a} | 2.88_{b} | 3.25_{b} |
| | | | | | |

Note. Subscripts indicate statistically significant differences. PBSS-21=Protective Behavioral Strategies (manner of drinking, stopping/limiting drinking, serious harm reduction), AUDIT=Alcohol use severity, B-YAACQ=Alcohol problems, IAF=Dispositional autonomy, BPNSFS = Basic psychological needs (autonomy, relatedness, competence)

RESULTS (SUMMARY)

- A 5-profile solution was selected as optimal based on entropy (.895) and substantive interpretation
- ❖ As expected, profiles defined by more internalized SDT motivations (autonomous and introjected) for responsible drinking and low drinking motives was the most protective (see Figure 1, Profile 1: High quality/Low)
- ❖ In contrast, the opposite pattern was the least protective (see Figure 1, Profile 5: Low quality/High)
- ❖ Profile 1: "High quality/Low" reported the most frequent protective behavioral strategies use, least severe alcohol use, fewest alcohol problems, highest dispositional autonomy, and generally the highest and lowest psychological need satisfaction and frustration, respectively
- Profile 5: "Low quality/High" had the opposite pattern of Profile 1

DISCUSSION

- The most protective motivational profile was defined by greater endorsement of more self-determined motivations for drinking responsibly and weaker drinking motives
- These findings are consistent with prior variable-centered research
- Promoting harm reduction behaviors in conjunction with reducing alcohol use through their unique motivational pathways may be the most effective strategy for college drinking interventions
- We provide some initial insight into potential intervention targets to achieve this, such as supporting psychological need satisfaction
- Replication and intervention development is needed

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