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Predictors of Progression and Regression of Readiness to Change Among College Students

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Introduction

- Despite efforts to reduce heavy drinking among college students, college-student alcohol use and its negative consequences remains a concern for campuses across the nation.
- Readiness to change alcohol consumption may be particularly important in determining whether attempts to reduce or quit drinking will be ultimately successful.
  - Readiness to change health behaviors can be described using stages of change from the Transtheoretical Model.
    - **Precontemplation** describes individuals who are not considering change or who do not think that the behavior is problematic
    - **Contemplation** describes individuals who are considering change or who recognize that the behavior is problematic, but have not yet made changes
    - **Action** describes individuals who are currently making a change
- Examining individual differences that predict increases or decreases in readiness to change over time may help differentiate heavy drinkers who will be successful at changing their drinking on their own from those for whom more formal interventions may be necessary.

Method

- Participants were selected from an ongoing, longitudinal study of alcohol use and health behaviors conducted over a 4-year period (*N*=3,720) at a large Mid-western university.
- Current drinkers who had completed Waves 6 and 7 of the study, corresponding to the Spring semester of their junior year and the Fall semester of their senior year were included (*n*= 1,748; *M* age = 20.8, *SD* = 0.46; 63% female at Wave 6).
- Readiness to change was assessed at both Waves 6 (baseline) and 7 (follow-up) using one item:
  - "**During the past 3 months**, have you considered drinking less?"
    - ❑ I did not drink alcohol during the past three months.
    - ❑ I have not considered changing my drinking habits.
    - ❑ I have considered drinking less, but have not attempted to reduce my drinking.
    - ❑ I have tried to drink less, but have not been able to.
    - ❑ I recently cut down on my drinking.
    - ❑ I recently quit drinking.
- Wave 6 (baseline) heavy drinking was assessed using one item that asked about the frequency of consuming five or more drinks in one setting during the past month.
- Wave 6 (baseline) Alcohol abuse and dependence criteria were assessed using 26 alcohol use consequences and past month frequency of getting drunk, consuming 5+ drinks and 12+ drinks.
  - Items were combined to create dichotomous variables indicating the presence or absence of each of the DSM-IV criteria for Alcohol Abuse (n=4) and Dependence (n = 7).
  - In addition, two continuous variables were created to indicate the total number of Abuse (range 0-4) and Dependence (range 0-7) criteria met.
- In order to examine **progression** of readiness to change among drinkers who report precontemplation at Wave 6, multivariate logistic regressions including age, sex, and abuse/dependence criteria were used to predict progression to contemplation/action at Wave 7.
- In order to examine **progression** and **regression** of readiness to change among drinkers who report contemplation at Wave 6, multivariate, multinomial logistic regressions including age, sex, and abuse/dependence criteria were used to predict progression to action or regression to precontemplation at Wave 7.
- Analyses were conducted for all drinkers, controlling for baseline heavy drinking, and for a subset of heavy drinkers (5+ drinks at least weekly).

Figure 1. Stability (Kappa = .26), Progression, and Regression of Readiness to Change Drinking Over a 6-month Period

	Follow-up Precontemplation	Follow-up Contemplation	Follow-up Action	Baseline Totals
Baseline Precontemplation	1044 (59.7%)	116 (6.6%)	115 (6.6%)	1275 (72.9%)
Baseline Contemplation	123 (7.0%)	95 (5.4%)	51 (2.9%)	269 (15.4%)
Baseline Action	112 (6.4%)	40 (2.3%)	52 (3.0%)	204 (11.7%)
Follow-up Totals	1279 (73.2%)	251 (14.4%)	218 (12.5%)	1748

Figure 2. Odds Ratios Predicting Progression of Readiness to Change Drinking

Precontemplation to Contemplation/Action

Contemplation to Action
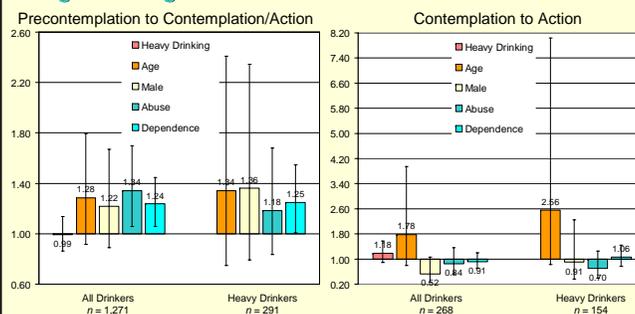
Error bars indicate 95% confidence intervals for the odds ratio, thus if the error bars contain 1 the odds ratio was not significant.

Figure 3. Odds Ratios Predicting Regression of Readiness to Change Drinking

Contemplation to Precontemplation
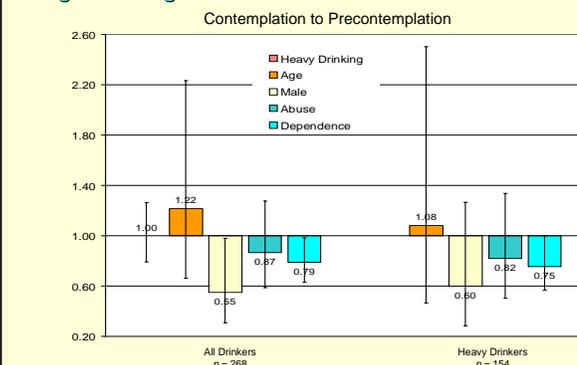
Results

Rates of Progression and Regression of Readiness to Change Drinking

- Over 70% (see marginal percents on Figure 1) of students reported that they were not interested in changing their drinking or did not feel their drinking was a problem (Precontemplation).
- Between 14 and 15% (see marginal percents on Figure 1) of students reported that they were interested in changing their drinking or felt that their drinking might be a problem, but had not made a change (Contemplation).
- Between 11 and 12% (see marginal percents on Figure 1) of students reported that they had recently cut down or quit drinking (Action).
- Approximately 13% of students who reported Precontemplation at Wave 6 (baseline) progressed to Contemplation/Action by Wave 7 (follow-up). An additional 3% of students progressed from Contemplation to action over the 6-month period (Figure 1).
- Only 7% of students who reported Contemplation at Wave 6 regressed to Precontemplation by Wave 7 (Figure 1).

Predictors of Progression of Readiness to Change Drinking

- Both Alcohol Abuse and Dependence criterion counts predicted progression from Precontemplation at Wave 6 (baseline) to Contemplation/Action at Wave 7 (follow-up) among all drinkers, controlling for frequency of heavy drinking (Figure 2, left panel).
  - Specifically, it appears that Abuse Criterion #2 (*OR* = 1.51, *95% CI* = 1.03-2.22), use if physically hazardous conditions, and Dependence Criteria #6 (*OR* = 1.97, *95% CI* = 1.18-3.30), giving up activities to drink, were uniquely associated with increased odds of progression to Contemplation/Action among all drinkers controlling for frequency of heavy drinking, age, and sex.
  - Among a subset of heavy drinkers, only Alcohol Dependence criteria predicted the same progression.
- Neither Alcohol Abuse nor Dependence criterion counts predicted progression from Contemplation at Wave 6 to Action at Wave 7 among all drinkers and among a subset of heavy drinkers (Figure 2, right panel).

Predictors of Regression of Readiness to Change Drinking

- Being male and Dependence criterion counts predicted decreased odds of regression from Contemplation at Wave 6 (baseline) to Precontemplation at Wave 7 (follow-up) among all drinkers, controlling for heavy drinking (Figure 3).
- Among a subset of heavy drinkers only Dependence criterion count predicted decreased odds of regression (Figure 3).

Conclusions

- To date, there have been no prospective studies, excluding intervention studies, on readiness to change drinking among college students.
- These results suggest that both use in physically hazardous situations and giving up activities in order to drink lead to increased motivation to change drinking among college student drinkers who previously had no motivation to change.
- It will be important to examine, non-criteria predictors in future work.
- Understanding the antecedents of motivation to reduce alcohol consumption in college students may be important for intervention efforts with this population.