Comparison of an In-Class vs. Online Alcohol Diversion Program to Reduce Alcohol Consumption and Negative Consequences Among College Students: Findings from a 2-year study

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Background

- Diversion program began with AA-based 1-hour groups led by students in recovery
- 1988 – New staff member did literature review and identified two models to incorporate: Marlatt (Skill Building) and Perkins & Berkowitz (Social Norms). New program (Student Health Alcohol and Drug Education [SHADE] was increased to two 1-hour sessions led by graduate students
- 1995 – Incorporated more of Marlatt’s work through a curriculum developed at the University of Wisconsin. Moved to two 2-hour sessions taught by professional staff
2000 – New staff hired and given the task of reviewing literature and updating program. Incorporated elements of BASICS, focusing on risk reduction. Moved to three 2-hour sessions

Through all changes, no evaluation was conducted due to lack of funding for staff and incentives
2005 – Dean of Students expressed interest in moving to an online diversion program. Before making change, Campus Health wanted to test efficacy of existing program against online programming

June 2005 - Received U.S. Department of Education grant to test these two modalities
In-class Format

- 6 hour class (3 sessions over 3 weeks)
- Average class size = 15 students
- Participatory
- 5 different instructors
- Standard lesson plan, with potential for variation due to discussion and instructor
On-line Format

- Third Millennium Classrooms
- “Under the Influence”
- 2-3 hours to complete
- Conducted individually online anywhere
- No potential for content variability
In-class Content

- Standard drinks
- BAC calculation
- Alcohol in the body
- Physiological effects
- Moderation skills/Protective strategies
- Normative feedback
- Negative consequences
Online Content

- e-CHUG
- Levels of alcohol use
- Alcohol and other drugs
- BAC calculation
- Consequences of misuse
- Tools for change
Evaluation Methods

- Random assignment
- Consent
- Baseline (in-person for both groups)
- 3-month online follow-up
Survey Instrument

- Demographics
- Alcohol consumption measures
- Protective factors
- Stages of change
- Norms perceptions
- Negative consequences
Sample

- Diversion referrals from Residence Life & Dean of Students

- Total diversion referrals:
  - Online = 537
  - In-class = 504

- Total baseline:
  - Online = 430 (80.1% of baselines)
  - In-class = 449 (89.1% of baselines)

- Total matched pairs:
  - Online = 264 (64.7% of baselines)
  - In-class = 286 (71.3% of baselines)
Demographics

- 63% Male
- Average age = 19
- 80% Live in residence halls
- 78% Freshmen
- 83% Caucasian
- 28% Greek affiliation
- No significant differences between groups
Outcomes

- Both formats effective
- Significant reductions in:
  - Usual # drinks
  - Nights they party
  - Perception of peer drinking
  - Protective behaviors
  - Negative consequences
Modality Comparisons

BAC Comparison

- Online
  - Baseline: 0.11
  - Post: 0.095

- In-class
  - Baseline: 0.115
  - Post: 0.105
## Frequency of 5 or more drinks

<table>
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<tr>
<th></th>
<th>Online</th>
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<th>In-class</th>
<th></th>
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<th>p-value</th>
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<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>p-value</td>
<td>Pre</td>
<td>Post</td>
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<tr>
<td>% 1-2 times</td>
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<td>59.4</td>
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<td>46.0</td>
<td>66.1</td>
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<td>% 3-5 times</td>
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<td>39.6</td>
<td>24.7</td>
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<tr>
<td>% 6 or more</td>
<td>14.9</td>
<td>9.1</td>
<td></td>
<td>14.4</td>
<td>9.1</td>
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Comparing of Heavy Drinkers

- Defined as usually having > 6 drinks when they party
- Approximately half of each group
- Programming focuses on harm and risk reduction
- Higher risk group
Alcohol Use in Heavy Drinkers

- All drinking behaviors improved for both online and in-class groups:
  - Drinks per week
  - Drinks they usually have when they party
  - Drinks last time they drank
  - Drinks per hour last time they drank
  - BAC last time they drank
Protective Factors in Heavy Drinkers

% Who stop drinking 1-2 hours before going home

Significant improvements for the in-class group only
% who alternate with non-alcoholic beverages

Significant improvements for the in-class group only
% who set a limit on the number of drinks they will have

Significant improvements for the in-class group only
% women who pace themselves to 1 or fewer drinks per hour

Online

In-class

Pre

Post

Significant improvements for the in-class group only

* Based on women who usually have 5 or more drinks
Significant improvements for the in-class group only
Negative Consequences in Heavy Drinkers

% who had a headache/hangover past 30 days

Significant improvements for the in-class group only
% who got sick or threw up in the past 30 days

Significant improvements for the in-class group only
% who were warned about their alcohol use by a health care provider in the past 30 days

Significant improvements for the in-class group only
% who were late to work or school in the past 30 days

Significant improvements for both groups
% who missed work or school in the past 30 days

Online

In-class

Significant improvements for both groups
Significant improvements for both groups

% who got into trouble at work or school in the past 30 days
Limitations

- No control over online content
- Differences other than modality
- Multiple in-class instructors
- Difficulty with follow-up
- Relatively short follow-up period (3 months)
Lessons Learned

- Both formats were effective
- In-class had more impact on:
  - Frequency of heavy drinking & BAC
  - Protective behaviors
  - Heavy drinkers as a group
Next Steps

- Based on evaluation, online component (e-CHUG) was added to in-class format
- Develop online curriculum based on in-class components
- Continue evaluation of revised diversion programming
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