# The Social Norms Approach to Reducing Alcohol Use among High School and College Students 

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## Agenda

- DeJong
- Results of the Social Norms Marketing Research Project
- Farnum
- Challenges of using social norms marketing in the high school setting
- Discussion


## Students have exaggerated views of how much other students drink



Students perceive greater normative expectations to drink

## Students increase alcohol consumption

## Social Norms Marketing

Use campus-based media to report accurate drinking norms

Decrease in perceived normative expectations to drink

## Decrease in alcohol consumption




## Early Case Studies

Impact on Heavy Drinking Rates

- University of Arizona (3 years)
- 5+ drinks in one sitting in the past 2 weeks
$-40 \% \Rightarrow 31 \%$
- Message changed from 0-5 to 0-4 drinks
- Hobart and William Smith Colleges (3+ years)
- Drinking 5+ in a row 3-plus times in the last 2 weeks
$-41 \% \Rightarrow 28 \%$


## Social Norms Marketing Research Project

## National Institute on Alcohol Abuse and Alcoholism

## U.S. Department of Education

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## Social Norms Marketing Research Project

Findings for Study 1 Cohort A = 18 Colleges and Universities



## Selection of Participating Institutions

- AOD coordinators received open invitation
- Applicants completed questionnaire
- Never had a social norms campaign
- Willing to be in control group, if assigned
- Demonstrated commitment to the project
- Secured IRB approval (Study 1 = 18 sites)
- Matched schools into pairs (based on region, size, governance, student demographics)
- Randomly assigned one school from each pair to the treatment group


## Study Timeline: Study 1

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5+ |
| :--- | :--- | :--- | :--- | :--- |
| $(1999-00)$ | $(2000-01)$ | $(2001-02)$ | $(2002-03)$ | $(2003-05)$ |

## All Schools

Survey of College Alcohol Norms and Behavior
Contextual data collection

## Treatment Group Schools (9)

## Just the Facts <br> Implementation

## Control Group Schools (9)

Just the Facts Implementation

## SNM Message Guidelines

## Campaign messages must:


$\checkmark$ Be targeted to the entire undergraduate population
$\checkmark$ Convey information about a behavior typical of a majority of students
$\checkmark$ Correct an identified student misperception
$\checkmark$ Be simple statements of fact (i.e., should not have a judgmental or moralistic tone)

## SNM Message Guidelines (cont'd)

- Campaign materials must include:
$\checkmark$ Normative message
$\checkmark$ Campaign logo
$\checkmark$ Identification of the source of information (survey, date)
$\checkmark$ Drink equivalency line (i.e., " 1 drink = 12 oz . beer $=4 \mathrm{oz}$. wine $=1 \mathrm{oz}$. liquor)
- Print advertisements should include an eye-catching photograph


## Campaign Messages*

Number of Schools
[NAME] students have 0-5 drinks when they party. [NAME] students have 0-5 drinks a week.
[NAME] students have 0-4 drinks when they party. 5 [NAME] students have 0-4 drinks a week.
[NAME] students have 0-3 drinks when they party. 1 [NAME] students have 0-3 drinks a week.


## Media Channels

-Newspaper Ads -Radio and TV ads -Flyers/Posters
-Billboards
-Table Tents
-Mailing Inserts

- Item Giveaways
- Talks/Presentations
-Student Orientation
-Email Messages
\$2,000 per year (3 years)
\$300-\$1,650 per year
supplements (2 years)



## Limited Campaign Exposure

55.4\% of students reported seeing social norms information during the school year

Only 35.8\% reported that this occurred a few times a month or more often


| Findings | Treatment Group |  | Control Group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \mathbf{n} \begin{array}{c} n=1,515 \\ \mathrm{M}(\mathrm{SD}) \end{array} \end{gathered}$ | $\begin{gathered} 2003 \\ \begin{array}{c} n=1,536 \\ \mathrm{M}(\text { (SD) } \end{array} \end{gathered}$ | $\begin{gathered} 2000 \\ \begin{array}{c} n=1,406 \\ \mathrm{M}(\mathrm{SD}) \end{array} \end{gathered}$ | $\begin{gathered} \mathbf{n} \mathbf{n = 1 , 3 6 5} \\ \text { M (SD) } \end{gathered}$ |
| Greatest number of drinks on one occasion in past two weeks | $\begin{aligned} & 3.57 \\ & (4.57) \end{aligned}$ | $\begin{aligned} & 3.95 \\ & (4.86) \end{aligned}$ | $\begin{aligned} & 3.44 \\ & (4.39) \end{aligned}$ | $\begin{aligned} & 4.30 \\ & (5.17) \end{aligned}$ |
| BAC for greatest number of drinks on one occasion in | $\begin{gathered} .0830 \\ (.0979) \end{gathered}$ | $\begin{gathered} .0859 \\ (.1023) \end{gathered}$ | $\underset{(.0911)}{.0804}$ |  |
| Drinks when students party | $\begin{aligned} & 3.30 \\ & (3.34) \end{aligned}$ | $\begin{aligned} & 3.57 \\ & (3.48) \end{aligned}$ | $\begin{aligned} & 3.20 \\ & (3.26) \end{aligned}$ | $\begin{aligned} & 3.85 \\ & (3.70) \end{aligned}$ |
| Drinks per week | $\begin{aligned} & 4.67 \\ & (7.92) \end{aligned}$ | $\begin{aligned} & 4.62 \\ & (8.00) \end{aligned}$ | $\begin{aligned} & 4.61 \\ & (7.93) \end{aligned}$ | $\begin{aligned} & 5.24 \\ & (8.43) \end{aligned}$ |

## Study 1: Summary

- Relative risk of alcohol consumption was lower at schools with a JTF campaign
- Pattern:
- Minor changes at treatment group schools
- Heavier alcohol consumption at control schools
- Core Institute data suggest a national trend for increased heavy drinking between 2000 and 2003


## Social Norms Marketing Research Project

## Findings for Study 2 Cohort B = 14 Colleges and Universities



| Findings | Treatment Group |  | Control Group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 2001 \\ & \begin{array}{c} n=1,117 \\ \mathrm{M}(\mathrm{SD}) \end{array} \end{aligned}$ | $\begin{aligned} & 2004 \\ & n=979 \\ & \text { M (SD) } \end{aligned}$ | $\begin{gathered} 2001 \\ \begin{array}{c} n=1,199 \\ \mathrm{M} \text { (SD) } \end{array} \end{gathered}$ | $\begin{gathered} 2004 \\ n=1,063 \\ \text { M (SD) } \end{gathered}$ |
| Greatest number of drinks on one occasion in past two weeks | $\begin{aligned} & 4.87 \\ & (5.00) \end{aligned}$ | $\begin{aligned} & 5.12 \\ & (5.84) \end{aligned}$ | $\begin{aligned} & 4.70 \\ & (4.91) \end{aligned}$ | $\begin{aligned} & 4.78 \\ & (5.23) \end{aligned}$ |
| nber of drinks one occasion in | $\begin{aligned} & .1364 \\ & (.1003) \end{aligned}$ | $\begin{gathered} .1420 \\ (.1107) \end{gathered}$ | $\underset{(.0970)}{.} 1337$ | $\underset{(.0990)}{.} 1296$ |
| Drinks when students party | $\begin{aligned} & 4.33 \\ & (3.63) \end{aligned}$ | $\begin{aligned} & 4.35 \\ & (4.00) \end{aligned}$ | $\begin{aligned} & 4.16 \\ & (3.55) \end{aligned}$ | $\begin{aligned} & 4.37 \\ & (3.85) \end{aligned}$ |
| Drinks per week | $\begin{aligned} & 6.07 \\ & (8.50) \end{aligned}$ | $\begin{aligned} & 6.59 \\ & (10.37) \end{aligned}$ | $\begin{aligned} & 6.24 \\ & (8.85) \end{aligned}$ | $\begin{aligned} & 6.20 \\ & (9.16) \end{aligned}$ |

## Overall Summary

## Study 1

Students attending an institution with a SNM campaign have a lower relative risk of heavy alcohol consumption

## Study 2

Replication failure


## Social norms marketing campaigns are less likely to work in campus communities with high alcohol outlet density.

- Richard Scribner, LSU



## Alcohol Outlet Density

Number of on-premise alcohol outlets
within 3 miles of campus boundary, per 1,000 total students enrolled


## Range $=2.3$ to 128.0

Median $=10.78$
High density =
$10.78+$ outlets per 1,000 enrolled

## Summary

- Significant interaction between onpremise alcohol outlet density and the intervention effect

Experimental Group x Time x Outlet Density

- Number of drinks when partying
- Recent maximum consumption
- Composite drinking scale
- High density: no intervention effect
- Low density: intervention effect


## Mean Number of Drinks When Partying by Experimental Group \& Alcohol Outlet Density


$\square$ Control $\quad \square$ Treatment

## Alcohol Outlet Density Explains Study 1 v. Study 2 Results

- Study 1:
- 18 sites, 5 at or above the median
- 3 treatment group sites
- 2 control group sites
- Study 2:
- 14 experimental sites, 11 at or above the median
- 6 treatment group sites
- 5 control group sites



## Implications

- Social norms marketing can work to reduce student alcohol use
- But it did not work as well in alcoholrich environments
- Need an even more intensive social norms marketing campaign
- Need to work to change the campus community's alcohol environment


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