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# A Case Study Examination of Social Norms Marketing Campaign to Improve Responsible Drinking 

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#### Abstract

This research discusses the use of social norms marketing to improve responsible drinking among college students. It was observed in each year of research that students studied overestimated their peers' drinking practices. During the social norms marketing campaign decreases were observed in both students' self-reported number of drinks consumed and perceived number of drinks consumed by peers at bars or parties, indicating that the social norms marketing efforts were somewhat successful. In addition, students reported drinking less alcohol over a shorter period of time. However, some negative behaviors related to drinking did not improve.


Keywords: Social norms marketing, responsible drinking

## Background

Irresponsible alcohol consumption among young adults has been a problem in society for many years. Social norms marketing is an approach used to encourage responsible drinking among college students. Social norms are people's beliefs about the attitudes and behaviors that are considered normal within a particular social context. Most people tend to adopt group attitudes and act in accordance with perceived group behaviors for needs of affiliation and acceptance (Festinger, 1954). These perceived norms greatly influence their own behavior. However, if people misperceive this norm, and think that it is more or less common than is actually the case, they may choose to engage in behaviors that are in-sync with the false norm. Social norms theory predicts that many people, both young adults and adults, will overestimate their peers' drinking practices, and that this overestimation will directly affect their own drinking behavior. If educated of the true norm and expected alcohol consumption patterns, then individual consumption will likely decrease (Berkowitz, 2004).

While social norms are the perceptions of the attitudes and behaviors prevalent among the members of a community or society, social marketing is the application of commercial marketing technologies and techniques to the analysis, planning, execution, and evaluation of programs designed to influence the behavior of a target group (Armstrong and Kotler 2010).

The application of social norms theory to college drinking practices was first suggested by Dr. H. Wesley Perkins and Dr. Alan Berkowitz in 1986 (Berkowitz et al., 1986). Findings from the Berkowitz and Perkins college-based studies revealed a pattern of misperceptions held by students in regards to the drinking behavior of their peers. Most students perceived the norms for frequency and quantity of alcohol consumption of their peers to be much higher than was actually the case. The reduction and decline of college-based, alcohol related abuse and harm can be done by correcting negative misperceptions (Berkowitz et al., 1987). Using a sample of 76,000 students attending 130 different universities across the country, the correlation between student's misperceptions and students drinking behavior was shown. The majority of the students surveyed overestimated the amount of alcohol consumed by their peers. Additionally, the overestimation was the predictor for the amount of alcohol personally consumed by the same students (Perkins et al., 2005).

## Case Study Research Design

In order to examine the social norms theory and the impact of a social marketing campaign at a Cal State University campus, a simulated before and after experimental marketing research design was used to eliminate the impact of pre-measurement error during the later phases of the studies (Churchill, 1987). During the spring quarters of 2004, 2005 and 2007, a total 1,451 questionnaires were conducted through personal interviews and 1,230 respondents were drinkers of alcoholic beverages, Table 1. The simulated before and after design dictated that different students were interviewed during each phase of the research. Each phase of the research interviewed a representative sample of the Cal State University Student body. Questions in the survey addressed students' own alcohol related behavior and the perceived behavior of their peers.

## Impact of Social Norma Campaign on Student Attitudes and Behavior

Data obtained from the first phase of the survey in 2004 was used as the baseline data and provided the rationale for the Under Four social norms marketing campaign developed by a group of business students at Cal State University in a senior project class. Social norms theory states that students typically overestimate their peers' drinking behavior and believe that their peers consume more alcohol than is actually the case. The results from the baseline data agreed with this theory. In 2004, Cal State University students' reported that they on average consumed 3.9 drinks in at bars or parties; however, they perceived that their peers, the typical Cal State University student, consumed on average 4.9 drinks at bars or parties. The average of 3.9 and 4.9 included the responses of non-drinkers. The average number of drinks consumed at bars or parties among drinkers was self-reported to be 4.62 and perceived to be 5.04 for the typical Cal State University student on the campus examined in this research.

Since students self-reported (including non-drinkers) that they drank less than four drinks at bars or parties, but they perceived their peers to drink 4.9, a creative and informative marketing campaign developed by the students used the slogan "Under Four" to communicate the norm to students. The marketing campaign included print advertisements in the campus newspaper, fullcolor posters at many campus locations, banners, promotional gifts, and events. The campaign was launched in 2004 and continued through 2007. It achieved $78 \%$ aided awareness in 2006 based on additional survey research. Therefore, a majority of the students were aware of the campaign and its message.

After the first year of the research period and implementation of the social norms marketing campaign which was executed commencing in the Fall of 2004 and continued through the Spring of 2007, the proportion of students who had been exposed to messages about what other students were thinking and doing regarding alcohol use increased significantly (Table 2). This indicates that the campaign and study was having an impact on the students, and students were able to remember seeing the messages.

## Self Compared to Typical Cal State University Student

As discussed, in 2004, the baseline year of the study, there was a significant difference between students' self-reported average number of drinks consumed typically at parties and bars students' and perceived average number of drinks consumed among their fellow Cal State University students consumed typically at parties and bars. Cal State University students were reminded through the marketing campaign that their peers actually drink less alcohol than they may perceive them to drink. After exposure to the social norms marketing campaign in 2005 and 2007, a significant difference was still observed between students' self-reported average drinks consumed typically at parties and bars and the perceived consumption among their peers. In each year of the study, students consistently overestimated their peers' typical drinking practices at parties and bars, which is consistent with the social norms theory (Table 3). Although students continued to overestimate the alcohol consumptions of their peers, the self-reported alcohol consumption consumed typically at parties and bars experienced a decrease of $5 \%$, from 4.62 drinks in 2004 to 4.39 drinks in 2007, another finding that is consistent with the social norms theory. Self-Reported Greatest Number, Last Time Number of Drinks and Hours Drinking

When students were asked to identify the greatest number of drinks consumed in one sitting and the hours it took to consume those drinks, no significant difference was found during the research period (Table 4). However, there was a significant difference between students' self reported last time drank number of drinks over the research period. In 2004, students indicated on average that the last time they consumed alcohol they were consuming almost four and a half drinks in one sitting. In 2007, the average number of last time drank number of drinks decreased significantly to slightly over four drinks in one sitting and was considerably lower than the average reported for both 2004 and 2005 (Table 4).

During the research period there was a significant difference in the length of time students drank during their last time drinking. The first year of the study, students' drinking was spanning a time period of over three and half hours. Between 2004 and 2007, that length of time decreased significantly to a little over three hours, indicating that students were drinking a lower number of alcoholic beverages in a shorter length of time (Tables 4 and 5). Although the extreme behavior, most drinks, remained the same, the typical behavior at parties and bars and last time improved during the period of the marketing campaign. This data is consistent with the finding that irresponsible drinking behavior was becoming less acceptable. And, although students were consuming alcohol over a shorter period of time (in one sitting) they were in fact drinking less alcohol in that shorter period of time.

## Negative Behaviors

Although the number of self-reported drinks declined during the study, twenty percent of students reported that they were hurt or injured due to their drinking two or more times in a year. The proportion fluctuated over the course of the study, increasing between 2004 and 2005. The majority of the student population (almost $80 \%$ ) never to rarely experienced injury due to drinking (Table 6). This result is similar to the data observed by the National Social Norms Resource Center, that three-quarters of students employ at least one protective behavior to help lessen the chances of them causing harm to themselves or to others (NSNRC 2008). However, it is alarming that almost one-fifth of the Cal State University students on the campus studied did get hurt from drinking more than once.

Another alarming statistic observed from this research was that approximately $15 \%$ of students were taken advantage of sexually while drinking and $4 \%$ admitted taking advantage of another sexually while drinking (Tables 7 and 8). Neither of these negative behaviors improved during the social norms marketing campaign.

Students showed an improvement during the research period when drinking in environments where they knew they would be safe. Those students who indicated they "rarely" engaged in this positive responsible behavior slowly decreased from 2004 to 2007. Similarly, the number of students who "usually to always" engaged in this behavior increased between 2004 and 2007, rising almost 10 percentage points from $61.9 \%$ to $71.1 \%$ (Table 9).

## Conclusions and Recommendations

In an effort to promote responsible drinking behavior and correct negative misperceptions about alcohol consumption at a California State University campus, social norms marketing was used by a group of senior project students. It was observed in each year of research that students at the Cal State University campus studied overestimated their peers' drinking practices. During the social norms marketing campaign decreases were observed in both students' self-reported number of drinks consumed and perceived number of drinks consumed by peers at bars or parties, indicating that the social norms marketing efforts were somewhat successful. In addition, students reported drinking less alcohol over a shorter period of time. Decreases were observed in the average number of drinks most recently consumed and the length of time used to consume those drinks.

There were no improvements in such negative behaviors as being taken advantage of sexually, taking advantage of another sexually, and binge drinking. Thus, the social norms marketing campaign appears to have some positive impacts on the student alcohol consumption behavior. However, additional outreach was needed to improve responsible drinking behavior among the students at the Cal State University observed during this research.

TABLES
Table 1. Questionnaires collected

|  | 2004 | 2005 | 2007 | Total |
| :--- | :--- | :---: | :---: | :---: |
| Drinkers | 438 | 406 | 386 | 1230 |
| Total Sample | 534 | 471 | 446 | 1451 |

Table 2. Exposure to information or messages about what Cal Poly students think and do regarding alcohol use (among drinkers)

|  | 2004 <br> $\mathrm{~N}=422$ | 2005 <br> $\mathrm{~N}=400$ | 2007 <br> $\mathrm{~N}=376$ | Total <br> $\mathrm{N}=1198$ | P-Value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Never | $28.4 \%$ | $9.8 \%$ | $12.0 \%$ | $17.0 \%$ |  |
| Once | $18.7 \%$ | $8.5 \%$ | $11.7 \%$ | $13.1 \%$ |  |
| Twice | $21.1 \%$ | $18.0 \%$ | $14.4 \%$ | $17.9 \%$ |  |
| 3 Times | $12.8 \%$ | $15.5 \%$ | $18.9 \%$ | $15.6 \%$ |  |
| 4 Times | $5.0 \%$ | $11.5 \%$ | $7.4 \%$ | $7.9 \%$ |  |
| 5 or more Times | $14.0 \%$ | $36.8 \%$ | $35.6 \%$ | $28.4 \%$ | $.000^{* *}$ |
| *Significant at the .10 level |  |  |  |  |  |

Table 3. Number of alcoholic drinks consumed by Cal Poly students at parties or bars (among drinkers)

|  | Students' Self-Reported <br> (Yourself) <br> $\mathrm{N}=434$ | Students' Perceived <br> (Cal Poly Students) <br> $\mathrm{N}=434$ | P-Value |
| :--- | :---: | :---: | :---: |
| Year 1: 2004 | 4.62 | 5.04 | $.000^{* *}$ |
| Year 2: 2005 | $\mathrm{~N}=406$ | $\mathrm{~N}=406$ |  |
|  | 4.58 | 4.79 | $.034^{* *}$ |


| Year 3: 2007 | 4.39 | 4.99 | $.000^{* *}$ |
| :--- | :--- | :--- | :--- |
| *Significant at the .05 level | ${ }^{* S i g n i f i c a n t ~ a t ~ t h e ~} .10$ level |  |  |

Table 4. Greatest number of drinks, last time drank number of drinks and length of time (among drinkers)

|  | 2004 <br> $\mathrm{~N}=438$ | 2005 <br> $\mathrm{~N}=405$ | 2007 <br> $\mathrm{~N}=386$ | Total <br> $\mathrm{N}=1229$ | Sig. <br> One- <br> Way <br> ANOVA |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Greatest Number of Drinks (Mean) | 5.43 | 5.34 | 5.32 | 5.36 | .856 |
|  | $\mathrm{~N}=436$ | $\mathrm{~N}=405$ | $\mathrm{~N}=386$ | $\mathrm{~N}=1229$ |  |
| Hours (Mean) | 3.46 | 3.53 | 3.60 | 3.53 | .590 |
|  | $\mathrm{~N}=435$ | $\mathrm{~N}=405$ | $\mathrm{~N}=385$ | $\mathrm{~N}=1225$ |  |
| Last Time Drank Number of Drinks <br> (Mean) | 4.49 | 4.62 | 4.12 | 4.42 | $.017^{* *}$ |
|  |  | $\mathrm{~N}=437$ | $\mathrm{~N}=405$ | $\mathrm{~N}=384$ | $\mathrm{~N}=1226$ |
| Hours (Mean) | 3.40 | 3.36 | 3.10 | 3.30 | $.033^{* *}$ |

Table 5. Multiple comparisons between last time drank number of drinks and length of time (among drinkers)

| Last Time Drank Number of Drinks Consumed in One Sitting | Year | Comparison Years | Mean Difference | Sig <br> Tukey <br> Test |
| :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | -. 12452 | . 758 |
|  |  | 2007 | . 37303 | . 091 * |
|  | 2005 | 2004 | . 12452 | . 758 |
|  |  | 2007 | . 49755 | .017** |
|  | 2007 | 2004 | -. 37303 | .091* |
|  |  | 2005 | -. 49755 | .017** |
| Spanning How <br> Many Hours | Year | Comparison Years | Mean Difference | Sig |
|  | 2004 | 2005 | . 04171 | . 938 |
|  |  | 2007 | . 30284 | .038** |
|  | 2005 | 2004 | -. 04171 | . 938 |
|  |  | 2007 | . 26113 | .096* |
|  | 2007 | 2004 | -. 30284 | .038** |
|  |  | 2005 | -. 26113 | .096* |

Table 6. Number of times students experienced negative behaviors due to drinking: were hurt or injured (among drinkers)

|  | 2004 <br> $\mathrm{~N}=432$ | 2005 <br> $\mathrm{~N}=400$ | 2007 <br> $\mathrm{~N}=377$ | Total <br> $\mathrm{N}=1209$ | P-Value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Never to Once | $81.5 \%$ | $73.3 \%$ | $84.1 \%$ | $79.6 \%$ |  |
| Twice to Three + | $18.5 \%$ | $26.8 \%$ | $15.9 \%$ | $20.4 \%$ | $.000^{* *}$ |

Table 7. Number of times students experienced negative behaviors due to drinking: were taken advantage of sexually (among drinkers)

| 2004 | 2005 | 2007 | Total | P-Value |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{N}=435$ | $\mathrm{~N}=397$ | $\mathrm{~N}=376$ | $\mathrm{~N}=1206$ |  |


| Never | $83.0 \%$ | $86.4 \%$ | $84.9 \%$ | $84.7 \%$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Once to Three + | $17.0 \%$ | $13.6 \%$ | $15.1 \%$ | $15.3 \%$ | .704 |

Table 8. Number of times students experienced negative behaviors due to drinking: took advantage of another sexually (among drinkers)

|  | $\begin{gathered} 2004 \\ \mathrm{~N}=432 \end{gathered}$ | $\begin{gathered} 2005 \\ \mathrm{~N}=398 \end{gathered}$ | $\begin{gathered} 2007 \\ \mathrm{~N}=376 \end{gathered}$ | $\begin{gathered} \text { Total } \\ \mathrm{N}=1206 \end{gathered}$ | P-Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Never | 94.7\% | 96.0\% | 97.1\% | 95.9\% |  |
| Once to Three + | 5.3\% | 4.0\% | 2.9\% | 4.1\% | . 335 |

Table 9. How often students drank in environments where they knew they would be safe (among drinkers)

|  | 2004 <br> $\mathrm{~N}=431$ | 2005 <br> $\mathrm{~N}=395$ | 2007 <br> $\mathrm{~N}=367$ | Total <br> $\mathrm{N}=1193$ | P-Value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Rarely | $20.4 \%$ | $15.9 \%$ | $14.2 \%$ | $17.0 \%$ |  |
| Sometimes | $17.6 \%$ | $17.7 \%$ | $14.7 \%$ | $16.8 \%$ |  |
| Usually to always | $61.9 \%$ | $66.3 \%$ | $71.1 \%$ | $66.2 \%$ | $.067^{*}$ |

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