



**MADD “THINK.PROM:”**

**RESULTS FROM HUMBLE ISD**

**PROM SEASON 2007**

Pre-pared By

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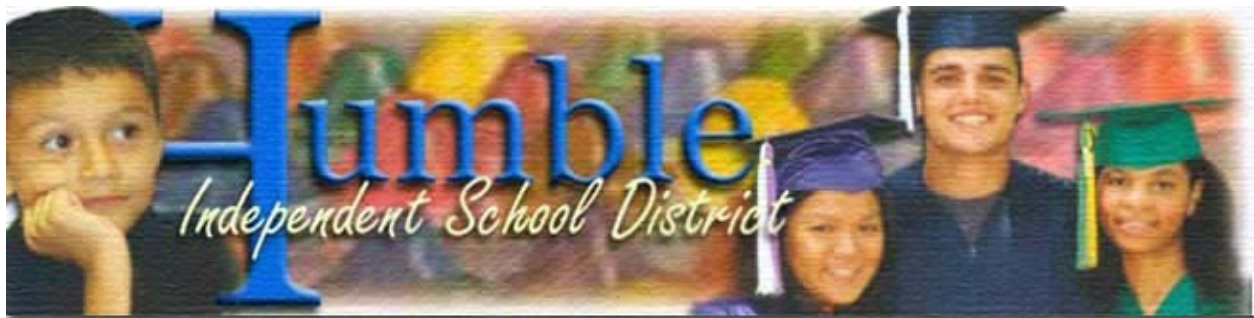
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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>III</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>METHODOLOGY .....</b>	<b>3</b>
<i>Focus Group Component.....</i>	<i>3</i>
<i>Survey Component.....</i>	<i>4</i>
<b>FINDINGS.....</b>	<b>7</b>
<i>Context.....</i>	<i>7</i>
<i>Qualitative Findings .....</i>	<i>9</i>
Teacher Focus Groups.....	9
Student Focus Group .....	13
<i>Baseline Quantitative Findings .....</i>	<i>16</i>
<i>Post-Prom Quantitative Findings.....</i>	<i>23</i>
Consuming Alcohol .....	23
Securing Alcohol .....	24
Drinking Situations .....	25
Drinking Decisions.....	26
<i>Impact of MADD Think.Prom.....</i>	<i>28</i>
Impact of the Pledge Signing.....	28
Impact of the MADD DVDs.....	29
<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>30</b>
<b>APPENDICES.....</b>	<b>33</b>
<i>Focus Group Protocol .....</i>	<i>34</i>
<i>Focus Group Questionnaire .....</i>	<i>36</i>
<i>Pre-Survey .....</i>	<i>37</i>
<i>Post-Prom Survey .....</i>	<i>40</i>

## **EXECUTIVE SUMMARY**

While alcohol use by underage drinkers might be problematic at any time, it is especially so during “prom season” – April, May, and June. According to the National Highway Traffic Safety Administration (NHTSA), more than one-third of youth under age 21 who were killed in alcohol-related fatalities died during these months.”<sup>1</sup> In an effort to ensure the safety and wellbeing of their students, this year the administrators at Humble Independent School District (Humble ISD) partnered with Mothers Against Drunk Driving (MADD) to pilot the MADD “THINK.Prom” program during their 2007 prom season. THINK.Prom is part of MADD’s THINK program, a year-round alcohol-use prevention program that empowers students to pledge to be alcohol-free. Schools participating in the THINK.Prom program receive a pledge pack that includes a giant pledge signing banner, individual pledge sheets, a DVD that can be shown in classrooms or at large assemblies of students, alcohol awareness posters, ID cards, an event hand stamp, and giveaways such as penny stickers, party mints, and review-mirror tags.

Because the risks associated with adolescent alcohol use can be so devastating, it is essential to determine the effectiveness of any program that addresses this issue. Therefore, the administrators at Humble ISD decided to do something most school districts are reluctant to do. They decided to set up a quasi-experimental design in which one of their high schools – Humble High School (HHS) – would participate in the MADD program while another of their high schools – Kingwood High School (KHS) – would not. MADD and Humble ISD then contacted the Public Policy Research Institute (PPRI) at Texas A&M University to conduct the actual research that would determine the impact of the THINK.Prom program in the school district.

### **Evaluation Design**

In order to evaluate the MADD-THINK program’s success at curtailing underage drinking the evaluation design used two elements: (1) a qualitative design using focus groups with selected participants, and (2) a quasi-experimental design using pre- and post-prom surveys.

**Focus Groups** – In order to obtain more information about the atmosphere and attitudes at HHS and KHS in relation to underage drinking, teachers were asked to participate in focus groups. A designated staff member at each of these schools recruited between 8 – 15 teachers representing all discipline areas. At the end of the focus group the teachers were asked to complete a short questionnaire that solicited their opinion about effective ways to curtail underage drinking. The questionnaire also asked the teachers to rate the severity of prom-related drinking at their school this year and to rate the perceived effectiveness of pledge signing as a way to curtail this drinking. While the teachers at HHS were aware of the MADD program and the pledge-signing event, the teachers at KHS were not aware that this activity had taken place within their district. During the course of discussions about underage drinking and prom, students at a third Humble ISD high school – Quest High School (QHS) – viewed the MADD video that was part of the THINK.Prom package. Administrators at Humble ISD then asked PPRI if an additional focus group could be conducted at QHS to obtain student views. This focus group took place on the same day as the teacher focus group at KHS and used a similar protocol. Focus groups were tape-recorded and written notes were taken. After the completion of all three focus groups a constant-comparative method was used to analyze the data.

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<sup>1</sup> About.com: Alcoholism and Substance Use. *Prom and Graduation Time Increase Alcohol Fatalities*. <http://alcoholism.about.com/cs/teens/a/blcc030514.htm>

**Surveys** – Students at HHS and KHS completed identical pre- and post-prom surveys. Both surveys were titled “High School Experiences with Alcohol Use”, were anonymous, and were self-administered. The pre-survey included a total of 13 questions related to demographics, past school year and current use of alcohol, average number of drinks consumed, binge drinking, driving under the influence, plans for attending the prom, and plans for consuming alcohol at the prom. This survey was designed to serve two purposes: (1) to understand the rates of underage drinking at both high schools and (2) to provide data about the attitudes of students related to consuming alcohol as a part of the prom experience. The post-prom survey contained a total of 22 questions including demographics, attendance at prom, drinking at prom, type of alcohol consumed, amount of alcohol consumed, and if the respondent was a pledge-signing participant. This survey focused on drinking behaviors at prom, with questions about consumption of alcohol before prom, during prom, and after prom. The pre- and post-prom surveys were in a format that could be scanned optically, similar to that used for standardized testing. Upon receipt at PPRI the instruments were logged in, coded and scanned by staff, and unusable instruments were eliminated. A Pearson’s chi-square test was used to compare variables and to determine statistical significance.

## **Findings**

**Focus Groups** – The remarks of the teachers were similar at both schools. When they were asked about underage drinking, their comments conformed to two distinct conceptual frameworks – that of zero tolerance and that of harm reduction. Regardless of these two viewpoints, the teachers were basically of one voice when it came to drinking at prom and prom-related activities. For the most part they believed that any special event increased pressure and opportunity to drink. The teachers also felt that some students who were non-drinkers would probably continue to be alcohol-free at prom, but others would see prom as an opportunity to take their first drink.

For the most part teachers believed that schools should be a supplemental source of information about drinking and that parents should be the primary source. They saw the school’s role as mainly one of educating students about the perils of alcohol use. The teachers thought the best way to do this was to bring in former students – especially those who attended prestigious colleges – to talk to current students about the dangers of drinking. Most agreed that some “scare tactics” might be effective (such as showing students vehicles that had been involved in drunk driving accidents or staging a drunk driving accident at the school), but thought that total reliance on scare tactics would not produce the desired results. They also thought that class discussions about alcohol might have some merit, and several teachers believed that one-on-one discussions with specific students might also be somewhat successful. The teachers also suggested that the school should sponsor, or promote, more alcohol and drug-free after-prom activities.

Finally, the teachers were asked to rate: (a) the extent to which drinking was a problem this year at their school’s prom, and (b) their perception of the effectiveness of a pledge-signing campaign in which students promised not to drink. As with their comments during the focus groups, there was no difference between the ratings of the teachers based on their school. The ratings used scales of one to five, with one being the lowest rating and five being the highest. Overall, the teachers rated drinking at prom this year at a level of three – not overly problematic, but also not totally controlled. They rated the effectiveness of a pledge-signing campaign at two – not particularly effective.

The QHS students who took part in the student focus group were adamant that underage drinking was not related to peer pressure regardless of how much adults believed this to be true. They felt that underage drinking was more attributable to the larger issues of how parents raised their children, what was acceptable or unacceptable at home, and the kinds of role models that were provided in the home. They also believed that, in some instances,

underage drinking was related to self-control. They went on to explain that the illegality of underage drinking appealed to the risk-taking behavior of teens and that it was almost like taking a dare to drink. The students also cautioned that teens would always drink and the only realistic way to deal with it was to educate them about responsible practices and to encourage them to limit their use.

**Surveys** – The two schools in Humble ISD that participated in the study of the MADD THINK.Prom program – Humble High School (HHS) and Kingwood High School (KHS) – had very different population demographics. KHS was almost twice as large as HHS, with a fall 2006 enrollment of 4,079 compared to the HHS enrollment of 2,766. On the other hand, HHS had a relatively large minority population (34% Hispanic, 32% African-American, and 3% Asian) as compared to KHS (9% Hispanic, 4% African-American and 4% Asian). These demographics roughly mirrored the demographics of the students who completed the pre-survey.<sup>2</sup> However, differences in demographics between the two schools had almost no impact on the responses of students. A statistical test revealed that minor variations between the two schools were not statistically significant.

The impact of the MADD THINK.Prom program was analyzed two ways. First, the percentage of students who signed the pledge, who attended prom, and who did not drink was compared to the percentage of students who did not sign the pledge, who attended prom, and also who did not drink. This type of analysis was used to show the direct impact of the pledge signing. Second, the percentage of students at HHS who drank during prom night was compared to the percentage of students at KHS who drank during prom night. Because this second analysis was not dependent on the pledge signing itself it was used to show the impact of showing the MADD DVDs.

Of the students who signed the pledge and who attended the prom, 72% did not consume alcohol during prom night. While this was an encouraging finding, it was not significantly different than the 71% of students who attended the prom, who did not sign the pledge, but who also did not consume alcohol. However, there were some descriptive differences in demographics related to who signed the pledge and who drank on prom night. Pledge signing appeared to have had more of an effect on female students than on male students. Only 18% of female students who signed the pledge drank alcohol as compared to 27% of female students who did not sign the pledge. On the other hand, pledge signing appeared to have the opposite effect on male students. Forty-six percent of males who signed the pledge drank alcohol on prom night as compared to 29% of males who did not sign the pledge. Ethnicity might also have been a factor in the effectiveness of the pledge signing. Only 17% of White students who signed the pledge drank alcohol on prom night as compared to 34% of White students who did not sign the pledge. Again pledge signing seemed to have the opposite effect on African-American students. Thirty-one percent of African-American students who signed the pledge drank alcohol on prom night as compared to 24% of African-American students who did not sign the pledge.

HHS and KHS students were asked on the pre-survey if they intended to drink on prom night. At that time 38% of the HHS students and 36% of KHS students indicated they intended to do so. After the prom, 28% of the HHS students and 27% of the KHS students indicated they actually had consumed alcohol on prom night. Unfortunately, this difference was not statistically significant. There was also no significant difference in the change between reported expected drinking before the prom and reported actual drinking at the prom (10% change at HHS and 9% change at KHS). Therefore, there was no detectable impact associated with the HHS students' viewing of the MADD DVDs.

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<sup>2</sup> 2006=07 Frequently Requested Demographic and Program Data by Campus, Humble ISD Accountability Fall 2006 PEIMS Resubmission

Additional descriptive data from the pre- and post-prom surveys showed that:

- HHS students were slightly more likely to drink than their KHS counterparts, but when KHS students did drink, they drank more than HHS students;<sup>3</sup>
- Most students had a few friends who drank and very few students had all friends who drank;
- Almost 20% of the students who had drivers licenses indicated that, in the past year, they had consumed alcoholic beverages and then driven a vehicle;
- Most students who consumed alcohol on prom night obtained that alcohol from friends or family; and
- Most students indicated that they drank on prom night because it was a special occasion.

## Conclusions and Recommendations

This study shows that the MADD THINK.Prom program had little impact on the drinking behavior of Humble ISD students on prom night. The self-reported drinking of prom attendees was virtually the same for those HHS students who signed the pledge as compared to those HHS students who did not sign the pledge. In addition, there was no difference between prom night drinking at HHS and KHS even though KHS students did not see the MADD DVDs nor did they have the opportunity to sign the pledge

A major problem with the study is the change in sample size between the pre- and the post-prom surveys. The pre-survey sample was quite robust, with an initial count of 832 surveys from HHS and 1558 from KHS. After surveys were examined for elimination from analysis because of obvious exaggeration, incompleteness of data (i.e., less than half the survey was completed) or other obvious distortions of responses, eight surveys were removed from HHS, for a total of 823 usable surveys and 20 surveys were removed from KHS, for a total of 1538 usable surveys. However, the story was quite different for the post-prom surveys. Even though the number of completed post-prom surveys was still relatively robust (485 from HHS and 1180 from KHS), this number represented a sharp drop from the pre-survey sample size. This change alone in the sample could potentially be responsible for a lack of decisive findings. In addition, the number of usable post-prom surveys was actually much smaller. Of the 485 scannable surveys received from HHS, 64 were removed for lack of data (i.e., less than half the questions answered), 58 were removed for grossly exaggerated responses, and 165 were removed for analyses that required attendance at the prom. Of the 1180 scannable surveys received from KHS, 397 were removed for lack of data or for answering “yes” to questions related to participation in MADD THINK.Prom, 112 were removed for grossly exaggerated responses, and 445 were removed for analyses that required attendance at the prom.

Another factor contributing to the lack of impact of the data might have been the timeline under which THINK.Prom was implemented. MADD’s THINK program is intended to be a year-round alcohol-use prevention program. THINK.Prom is one key aspect of this program, but it is not the only aspect. Because the Humble ISD program was implemented at the end of the school year, a decision was made to only include (and evaluate) the components of THINK.Prom. Since comprehensive long-term interventions have historically had more impact than single-focus short-term interventions, the lack of impact could, in part, be attributed to the fact that the intervention being studied was extremely short-term.<sup>4</sup>

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<sup>3</sup> Differences between the schools were not statistically significant

<sup>4</sup> Stigler, M.H., Perry, C.L., Komro, K.A., Cudeck, R., Williams, C.L. (2006). Teasing Apart a Multiple Component Approach to Adolescent Alcohol Prevention: What Worked in Project Northland. *Society for Prevention Research*.

Findings of no-impact for THINK.Prom are consistent with findings from other studies of alcohol and substance use prevention programs. A 2006 examination of programs that relied on providing information about the adverse effects of alcohol and other drugs showed that these programs had little or no effect on actual use.<sup>5</sup> Another study showed that a clearly delivered message – regardless of whether it be formulated from a zero tolerance or a harm reduction perspective – could have some impact in lowering levels of alcohol use at schools but the impact would be difficult to measure because of the number of known influences on students' decisions to use alcohol, drugs, and/or tobacco.<sup>6</sup> And a third study concluded that school-based prevention programs could only account for some of the risk factors that influence the decisions of underage drinkers to drink, therefore these programs would always be limited in their impact.<sup>7</sup>

On the other hand, findings from the qualitative portion of this study provide some useful insights into possible ways to curtail underage drinking. Teachers and students in Humble ISD bridged the common belief that prevention strategies must follow one route or another (i.e. zero tolerance or harm reduction.) Their comments laid forth circumstances in which both strategies could be employed in a complementary fashion – with zero tolerance as an overall policy to curtail underage drinking and/or to diminish overt acts that would, or could, lead to irreparable damage; and with harm reduction as a select strategy that individual teachers and administrators could discuss with students and parents in one-on-one or group exchanges.

The focus groups also brought to light a possible gap in Humble ISD strategies for addressing drinking at special events – that of ensuring that these events have supplemental, fun, alcohol and drug-free alternatives for students. In the best scenario, these alternatives would be planned and promoted by the students themselves.

The suggestions of the teachers and students also have implications for MADD and for improvement/expansion of their THINK program. Regardless of the current effectiveness of the strategy, there is good reason to believe that its impact would be enhanced if it were brought to schools as a “work in progress” rather than as a completed package. In effect, the expertise of MADD could become a guiding resource that would lead the schools through a process of developing and implementing a unique program to curtail underage drinking in their district. This program could start with products developed by MADD, and could expand upon these through the use of comprehensive teams (including students, parents, teachers, administrators, and community members) that would create district-specific videos/DVDs, educational programs, and informational messages about underage drinking. This team could also help to develop and promote alternative alcohol-free events and could sponsor student rallies during which time students would be encouraged to pledge to be alcohol-free.

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<sup>5</sup> Goldberg, M.E., Niedermeier, K.E., Bechtel, L.J., Gorn, G.J. (2006). Heightening Adolescent Vigilance Toward Alcohol Advertising to Forestall Alcohol Use. *American Marketing Association* 25 No. 2. 147-159

<sup>6</sup> Evans-Whipp, T.J., Bond, L, Toumbourou, J.W., Catalano, R.F. (2007). School, Parent, and Student Perspectives of School Drug Policies. *The Journal of School Health* 77 no. 3. 138-146.

<sup>7</sup> Wolfsberg, J.S. (2006). Integrating Underage Drinking and Drug Use Prevention. *The Education Digest* 72 No. 3 52-54.

# **MADD “THINK.PROM:”**

## **RESULTS FROM HUMBLE ISD PROM SEASON 2007**

### **INTRODUCTION**

On the surface the issue of underage drinking seems to be relatively straightforward. In fact, in a society of reasonable, law-abiding citizens, it seems that it should not be an issue at all. Not only is underage drinking illegal, but it is also dangerous. Underage drinking is more likely to kill young people than all other illegal drugs combined and it contributes to elevated rates of violence, sexual assault, and high-risk sex amongst teens.<sup>8</sup> Even if it were not illegal, it would seem that concerned parents would stop their children from drinking just as they stop them from running into on-coming traffic.

However, the issue of underage drinking is anything but straightforward. The laws are specific, but attitudes toward the laws are ambivalent and consequences for breaking the laws are often minimal. Public awareness campaigns are abundant and are broadcast on all forms of media, but often use tactics that de-sensitize viewers rather than enlighten them. Producers of alcoholic products are required to direct their marketing towards legal consumers, but often use advertising techniques that are more enticing to youth than to adults and/or sponsor sporting and recreational events that attract large youth audiences. A myriad of programs that directly target underage drinkers have been developed for use by schools and youth groups, but these programs often talk at their target audience rather than with them and typically do not take into account an inherent tendency of youth to take risks and to rebel against societal norms. Therefore, it is not surprising that one national survey of alcohol use concluded that more than 10.8 million youth between the ages of 12 and 21 consume alcohol at least once a year.<sup>9</sup>

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<sup>8</sup> National Institute on Alcohol Abuse and Alcoholism (2003), *Alcohol Alert* No. 59, National Institutes of Health

<sup>9</sup> 2005 National Survey on Drug Use and Health. [http://www.centurycouncil.org/underage/65\\_data.html](http://www.centurycouncil.org/underage/65_data.html)



While alcohol use by underage drinkers might be problematic at any time, it is especially so during “prom season” – April, May, and June. According to the National Highway Traffic Safety Administration (NHTSA), more than one-third of youth under age 21 who were killed in alcohol-related fatalities died during these months.”<sup>10</sup> In an effort to ensure the safety and wellbeing of their students, this year the administrators at Humble Independent School District (Humble ISD) partnered with Mothers Against Drunk Driving (MADD) to pilot the MADD “THINK.Prom” program during their 2007 prom season. THINK.Prom is part of MADD’s THINK program, a year-round alcohol-use prevention program that empowers students to pledge to be alcohol-free. Schools participating in the THINK.Prom program receive a pledge pack that includes a giant pledge signing banner, individual pledge sheets, a DVD that can be shown in classrooms or at large assemblies of students, alcohol awareness posters, ID cards, an event hand stamp, and giveaways such as penny stickers, party mints, and review-mirror tags.

Because the risks associated with adolescent alcohol use can be so devastating, it is essential to determine the effectiveness of any program that addresses this issue. Therefore, the administrators at Humble ISD decided to do something most school districts are reluctant to do. They decided to set up a quasi-experimental design in which one of their high schools – Humble High School (HHS) – would participate in the MADD program while another of their high schools – Kingwood High School (KHS) – would not. MADD and Humble ISD then contacted the Public Policy Research Institute (PPRI) at Texas A&M University to conduct the actual research that would determine the impact of the THINK.Prom program in the school district. This document is the final report of that study. It includes the following sections:

- Methodology for qualitative (focus group) and quantitative (survey) methods used to evaluate the program;
- Findings related to teacher and student opinion about underage alcohol use;
- Findings related to pre-prom and post-prom self-report surveys;
- Conclusions about the effectiveness of the MADD THINK.Prom program and recommendations about possible directions for future program strategies; and
- Appendices containing copies of study instruments and protocols.

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<sup>10</sup> About.com: Alcoholism and Substance Use. *Prom and Graduation Time Increase Alcohol Fatalities*. <http://alcoholism.about.com/cs/teens/a/blcc030514.htm>

## **METHODOLOGY**

In order to evaluate the MADD-THINK program's success at curtailing underage drinking the evaluation design used two elements: (1) a qualitative design using focus groups with selected participants, and (2) a quasi-experimental design using pre- and post-prom surveys.

### **Focus Group Component**

High school teachers at HHS and KHS were asked to participate in short focus groups. A designated staff member at each of these schools recruited between 8 – 15 teachers representing all discipline areas. In both schools the focus groups took place the week after their school's prom. HHS teachers met in the morning and were provided breakfast. KHS teachers met at mid-day and were provided lunch. Each focus group lasted about 40 minutes. The focus group protocol is included in the appendices.

At the end of the focus group the teachers were asked to complete a short questionnaire that solicited their opinion about effective ways to curtail underage drinking (included in appendices). The questionnaire also asked the teachers to rate the severity of prom-related drinking at their school this year and to rate the perceived effectiveness of pledge signing as a way to curtail prom-related drinking. While the teachers at HHS were aware of the MADD program and the pledge-signing event, the teachers at KHS were not aware that this activity had taken place within their district.

During the course of discussions about underage drinking and prom, students at a third Humble ISD high school – Quest High School (QHS) – viewed the MADD video that was part of the THINK.Prom package. Administrators at Humble ISD then asked PPRI if an additional focus group could be conducted at QHS to obtain student views. This focus group took place on the same day as the teacher focus group at KHS and used a similar protocol.

Focus groups were tape recorded and written notes were taken. After the completion of all three focus groups a constant-comparative method was used to analyze the data.

### **Survey Component**

Students at HHS and KHS completed identical pre- and post-prom surveys. Both surveys were titled “High School Experiences with Alcohol Use”, were anonymous, and were self-administered.

The pre-survey included a total of 13 questions related to demographics, past school year and current use of alcohol, average number of drinks consumed, binge drinking, driving under the influence, plans for attending the prom, and plans for consuming alcohol at the prom. This survey was designed to serve two purposes: (1) to understand the rates of underage drinking at both high schools and (2) to provide data about the attitudes of students related to consuming alcohol as a part of the prom experience. The post-prom survey contained a total of 22 questions including demographics, attendance at prom, drinking at prom, type of alcohol consumed, amount of alcohol consumed, and if the respondent was a pledge-signing participant. This survey focused on drinking behaviors at prom, with questions about consumption of alcohol before prom, during prom, and after prom. Copies of the pre- and post-prom surveys are included in the appendices.

The pre-surveys were administered on the same day at HHS and KHS and were distributed by the teachers during students’ advisory period. Survey administration guidelines and procedures were provided and emphasized the voluntary nature of the survey and the anonymity of all responses. The teachers were instructed to: (a) read the instructions to the students, (b) monitor the class during the survey administration, and (c) emphasize to all students that no identifying information should be written on any surveys. The teachers collected the surveys in a manner that allowed the students to return them without the teacher or other students seeing the responses. They were then sealed into envelopes. The only identifying information on each envelope was the name of the high school. After all surveys were collected they were returned to PPRI for processing. Any returned envelopes that appeared to have been tampered with were destroyed.

PPRI received a total of 2361 pre-surveys that were usable for analysis. These included 823 surveys from HHS (30% of the student body) and 1538 surveys from KHS (38% of the student body). A small number of surveys were considered unusable for analysis because of extreme

exaggeration of alcohol use and/or failure to complete more than half the questions. The demographic breakdown of respondents, based on usable pre-surveys, is detailed on Table 1.

Table 1. Pre-Survey Participant Sex, Ethnicity, and Grade-Level		
	<i><b>Humble High School</b></i>	<i><b>Kingwood High School</b></i>
<b>Total Sample Size</b>	823	1538
<b>Male</b>	51%	49%
<b>Female</b>	48%	50%
<b>White</b>	33%	79%
<b>African-American</b>	28%	3%
<b>Hispanic or Latino</b>	28%	9%
<b>Asian American</b>	4%	3%
<b>Native American</b>	1%	1%
<b>Other</b>	5%	5%
<b>9<sup>th</sup> Grade</b>	1%	0%
<b>10<sup>th</sup> Grade</b>	2%	38%
<b>11<sup>th</sup> Grade</b>	33%	39%
<b>12<sup>th</sup> Grade</b>	64%	22%

Eight weeks after the pre-surveys were administered the students at HHS were shown the THINK DVD. After the DVD was shown, students were able to sign individual pledge sheets at lunchtime. The pledge signing was available for three consecutive days. By signing the THINK.Prom pledge, students promised they would abstain from alcohol and drug use at prom.

Because HHS and KHS had their proms on different days, the post-prom surveys were administered on different days. However, in both instances this was during the week following prom. The same guidelines and procedures were followed for the post-prom surveys as the pre-surveys.

PPRI received a total of 1665 post-prom surveys (485 from HHS and 1180 from KHS); however, only 424 were usable for analysis (198 from HHS and 226 from KHS). Unlike the small number of pre-surveys that were unusable, almost 59% of the HHS post-prom surveys and 81% of the KHS post-prom surveys were eliminated from the final analysis. Of the 485 post-prom surveys completed at HHS, 64 surveys were eliminated because of incomplete responses (less than half of the survey was completed), 58 more surveys were eliminated because of grossly exaggerated responses, and 165 surveys were eliminated because the students did not attend

the prom. Of the 1180 post surveys completed at KHS, 397 were eliminated because of incomplete responses and/or answering “yes” to questions about participation in the THINK.Prom program; 112 more were eliminated because of grossly exaggerated responses; and 445 were eliminated because the students did not attend the prom.

The demographic breakdown of respondents, based on usable post-prom surveys, is included on Table 2. The post-prom survey participants resemble the pre-survey participants in terms of ethnicity. However, the proportion of females among the post-prom survey participants was greater compared to that in pre-survey participants. Also, the proportion of 12<sup>th</sup> graders was greater and the proportion of 10<sup>th</sup> and 11<sup>th</sup> graders was smaller among the post-prom survey participants compared to the pre-survey participants. None of these differences are statistically significant.

Table 2. Pre-Survey and Post-Prom Survey Participant Sex, Ethnicity, and Grade-Level				
	<i><b>Humble High School</b></i>		<i><b>Kingwood High School</b></i>	
	<i><b>Pre-Survey</b></i>	<i><b>Post-Prom Survey</b></i>	<i><b>Pre-Survey</b></i>	<i><b>Post-Prom Survey</b></i>
<b>Total Sample Size</b>	823	363	1538	671
<b>Male</b>	51%	48%	49%	41%
<b>Female</b>	48%	52%	50%	59%
<b>White</b>	33%	34%	79%	79%
<b>African-American</b>	28%	26%	3%	3%
<b>Hispanic or Latino</b>	28%	27%	9%	7%
<b>Asian American</b>	4%	6%	3%	5%
<b>Native American</b>	1%	1%	1%	1%
<b>Other</b>	5%	5%	5%	4%
<b>9<sup>th</sup> Grade</b>	1%	1%	0%	0%
<b>10<sup>th</sup> Grade</b>	2%	0%	38%	32%
<b>11<sup>th</sup> Grade</b>	33%	31%	39%	44%
<b>12<sup>th</sup> Grade</b>	64%	69%	22%	25%

The pre- and post-prom surveys were in a format that could be scanned optically, similar to that used for standardized testing. Upon receipt at PPRI the instruments were logged in, coded and scanned by staff, and unusable instruments were eliminated. A Pearson's chi-square test was used to compare variables and to determine statistical significance. Copies of the pre- and post-prom surveys are included in the appendices.

## **FINDINGS**

The following sections provide detailed findings related to teacher and student opinions about curtailing underage drinking (qualitative findings) and to the effectiveness of the MADD program in Humble ISD (quantitative findings). As a pre-cursor, contextual information is provided about Humble ISD and about the similarities / differences between the student body at HHS and KHS.

### **Context**

In order to better understand the findings related to this study, it is helpful to first understand a little about the area, the school district and the students' experience with alcohol. Humble Texas is a city of about 15,000 residents located in the northeast quadrant of Harris County immediately adjacent to Houston and the George Bush Intercontinental Airport. The Humble school district was established over 100 years ago as a one-room schoolhouse with 12 students, one teacher, and a four-month school term. The boundaries of the district extended beyond the city limits into areas that were mainly rural. However, the area's proximity to Houston and the district's reputation of providing a quality education caused record growth and Humble ISD is currently listed as one of the 25 fastest growing school districts in Texas. Today the district has 32 schools, more than 30,000 students and over 1,800 teachers.<sup>11</sup>

The two schools in Humble ISD that participated in the study of the MADD THINK.Prom program – Humble High School (HHS) and Kingwood High School (KHS) – had very different population demographics. KHS was almost twice as large as HHS, with a fall 2006 enrollment of 4,079 compared to the HHS enrollment of 2,766. On the other hand, HHS had a relatively large minority population (34% Hispanic, 32% African-American, and 3% Asian) as compared to KHS (9% Hispanic, 4% African-American and 4% Asian). [Note: These demographics roughly mirrored the demographics of the students who completed the pre-survey.] The proportion of economically disadvantaged students, at-risk students, and gifted and talented students was also very different at the two schools. Approximately 39% of the HHS students were considered economically disadvantaged, as compared to 5% at KHS; 57% of the HHS students were considered at-risk, as compared to 22% at KHS; and 5% of the HHS students participated in gifted and talented programs, as compared to 15% at KHS.<sup>12</sup>

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<sup>11</sup> Humble ISD web page <http://www.humble.k12.tx.us/insidehumbleisd.htm>

<sup>12</sup> 2006=07 Frequently Requested Demographic and Program Data by Campus, Humble ISD Accountability Fall 2006 PEIMS Resubmission

Because of the differences in demographics between the two schools, it was decided to ask students at both schools some basic questions about their alcohol use. These baseline responses could then be used to control for the effect of demographic differences in the comparison of pre- and post-prom surveys. To that end, the pre-survey included questions related to when alcohol was used, how often it was used, the amount of alcohol typically consumed, the number of times binge drinking occurred, if friends used alcohol, and the number of times driving occurred under the influence of alcohol.

### **Qualitative Findings**

In addition to the pre- and post-prom surveys at HHS and KHS, one focus group was conducted with teachers at both schools. Each of these focus groups lasted about 40 minutes. Students at Humble ISD's Quest High School (QHS) also participated in a focus group based on similar questions as those posed to the teachers.

#### **Teacher Focus Groups**

The remarks of the teachers were very similar, regardless of the school at which they taught. When the teachers were asked about underage drinking, their comments conformed to two distinct conceptual frameworks – that of zero tolerance and that of harm reduction.

It is beyond the purview of this study to examine the viability of these two approaches, but a short digression from the topic of underage drinking might provide some useful insights into the mindsets behind these perspectives. Zero tolerance is typically associated with issues that are relatively clear-cut and often have legal consequences. For example, as a society we have zero tolerance for heinous crimes such as child abuse, child pornography, and cold-blooded murder. In these instances the acts in question are not only taboo, but if committed, can cause irreparable damage. Therefore resources are focused on total prevention and certain punishment for transgression. On the other hand, harm reduction is typically associated with issues in which one set of actions can mediate another set of actions. For example, harm reduction is often part of a medical treatment for chronic conditions such as diabetes, high cholesterol, or high blood pressure where the condition may not be eliminated, but can be made less threatening if people understand how their actions (i.e. diet, exercise, use of medication) can change the severity of their condition. Therefore, resources are split between discouraging actions that might be harmful while, at the same time, providing information that might increase actions that might be helpful.

In recent years use of illicit substances (including, but not limited to underage drinking) have had proponents from both perspectives, and this was the case in Humble ISD. The opinions of teachers who adhered to a zero tolerance approach viewed all drinking by youth as problematic and were appalled by parents who provided their children with alcoholic beverages. On the other hand, teachers who adhered to a harm reduction approach made a distinction between



problem drinking and “tasting” and felt that youth should learn how to drink responsibly in case they drank now and because eventually it would not be illegal for them to do so.

Regardless of these two viewpoints, the teachers were basically of one voice when it came to drinking at prom and prom-related activities. For the most part they believed that any special event increased pressure and opportunity to drink (it was also pointed out that this heightened drinking behavior was not limited to youth because adults also seemed to drink more on special occasions). The teachers also felt that some students who were non-drinkers would probably continue to be alcohol-free at prom, but others would see prom as an opportunity to take their first drink.

When asked about specific drinking behaviors that occurred at the 2007 prom and prom-related activities for their school, teachers thought that –

- Drinking before prom was lower this year than it had been in the past for several reasons –
  - As in past years, pre-prom drinking usually did not occur when families got together to admire prom-goers and to take pictures,
  - Both proms took place in Humble this year rather than at a hotel in Houston, so students had less time to drink during the drive to the event,
  - More teachers and administrators were at the prom and were turning students away if they appeared to have been drinking;
- Drinking during the prom was also minimal because of the vigilance of adult chaperones;
- Drinking after prom was the most problematic –
  - Some students made arrangements to rent beach houses in which drinking would occur,
  - Some adult limo drivers were spotted securing alcohol for prom-goers,
  - Some parents provided alcohol for after-prom parties,
  - There were no well-publicized non-drinking after-prom activities.

For the most part, teachers believed that schools should be a supplemental source of information about drinking and that parents should be the primary source. They saw the school’s role mainly one of educating students about the perils of alcohol use. The teachers thought the best way to do this was to bring in former students – especially those who attended

prestigious colleges – to talk to current students about the dangers of drinking. Most agreed that some “scare tactics” might be effective (such as showing students vehicles that had been involved in drunk driving accidents or staging a drunk driving accident at the school), but thought that total reliance on scare tactics would not produce the desired results. They also thought that class discussions about alcohol might have some merit, and several teachers believed that one-on-one discussions with specific students might also be somewhat successful. The teachers also suggested that the school should sponsor, or promote, more alcohol and drug-free after-prom activities.

When asked about the most effective thing their school did this year to curtail drinking at the prom, the teachers mentioned the following:

- Talking to students about this topic during their advisory period;
- Talking to students individually and in small groups about the consequences of drinking;
- Having school administrators positioned at the doors during the prom to monitor students as they entered;
- Communicating specific expectations and behavioral standards to students about drinking before, during, or after prom;
- Showing students the MADD video; and
- Having more chaperones at the prom.

Several teachers indicated that their school could have done more. Their suggestions included:

- Having a school-wide campaign about the perils of drinking;
- Showing more videos about the possible effects of drinking;
- Providing speaking points for teachers so they could do a better job talking to students about drinking;
- Having school personnel talk directly to parents and community members;
- Putting out positive messages about self-responsibility;
- Providing positive, safe, fun alcohol and drug-free alternatives;
- Providing positive peer examples;
- Having a “Project Prom” instead of (or in addition to) a “Project Graduation;” and
- Providing information to students about the perils of drinking for the entire month before prom.

The teachers also believed that curtailing drinking at prom would be more successful if there was more community involvement. Suggestions about what the community could do included:

- Encouraging parents to become more involved with stopping youth from drinking;
- Having business establishments that sell alcohol do more to stop the youth from purchasing it;
- Providing more community-based education for parents about underage drinking;
- Having neighborhoods monitor and stop youth who had been drinking;
- Writing letters to the editor about underage drinking;
- Reporting violations related to underage drinking;
- Holding people accountable when they sponsored drinking parties or provided alcohol to their children and the children of others;
- Providing alternative, drug and alcohol-free activities;
- Providing more information to the community about the kinds of things that go on after prom;
- Communicating community expectations to students;
- Having a city-wide alert and more traffic stops on prom night;
- Providing a positive environment for youth; and
- Providing opportunities for high school students to interact with role models who could talk about real-life experiences related to underage drinking.

Finally, the teachers were asked to rate the extent to which drinking was a problem this year at their school's prom and their perception of the effectiveness of a pledge-signing campaign in which students promised not to drink. As with their comments during the focus groups, there was no difference between the ratings of the teachers based on their school. The ratings used scales of one to five, with one being the lowest rating and five being the highest. Overall, the teachers rated drinking at prom this year at a level of three – not overly problematic, but also not totally controlled. They rated the effectiveness of a pledge-signing campaign at two – not particularly effective.

### **Student Focus Group**

QHS is a Humble ISD magnet school with a maximum enrollment of 400 students. Any high school student who is a resident of the district and who has not received a GED or high school diploma and is 21 years old or younger may attend QHS. Students interested in attending complete an application and meet with an interview team of staff members and the student's parents to discuss and clarify what the school can provide and what the student wants from the school. QHS is also part of a national initiative – “First Amendment Schools” – that purposively model and teach the rights and responsibilities of citizenship and civic life in a democracy.

The students at QHS viewed the MADD videos during one of their classes but did not take part in THINK.Prom or a pledge-signing campaign. After viewing the videos several students asked if they could participate in a focus group about underage drinking. One of their teachers then agreed to allow the focus group to be conducted during his class session. Even though this was not part of the original study design it seemed like too good of an opportunity to miss. The insights of these students are detailed below and could prove valuable in the design of programs to curtail underage drinking.

The QHS students were adamant that underage drinking was not related to peer pressure regardless of how much adults believed this to be true. They felt that underage drinking was more attributable to the larger issues of how parents raised their children, what was acceptable or unacceptable at home, and the kinds of role models that were provided in the home. They also believed that, in some instances, underage drinking was related to self-control. They went on to explain that the illegality of underage drinking appealed to the risk-taking behavior of teens and that it was almost like taking a dare to drink.

The QHS students felt that drinking was less of a problem at their school because QHS students were more mature than students at the other Humble ISD high schools. They also felt that the prom (or any other special event) would not substantively change the drinking behavior of many students. If a student did not drink, they believed that this student would not drink at prom (including pre- and post-prom). However, they also believed if a student did drink, then this student might drink more at prom (also including pre- and post-prom), just as this student might drink more on the weekend than during the school week.

When students who indicated they did not drink were asked why, they were very forthcoming and mentioned several personal reasons. Their comments included the following:

- [Drinking has] messed up my family, therefore I won't drink;
- My mother drinks responsibly and teaches me to make good decisions;
- I do not want to have an addiction to something;
- I don't have an opportunity to drink;
- Alcohol is around my family a lot, therefore it makes it not a big deal;
- I was raised not to drink and was always told it was bad – that made me want to drink more; and
- My parents did not tell me to drink or not to drink, I am neutral to drinking.

Several QHS students felt that curtailing underage drinking was not a school issue, but that it was a family and societal issue and schools could not do much. But they did believe that they would benefit from learning responsibility, learning to be safe, and learning to make good choices. They also believed that many of their parents needed to be educated about how to teach their children these skills and about how these skills could relate to underage drinking.

QHS students also believed that graphic pictures of what might happen if you drank were not effective. However, they had several suggestions for things that they thought might work.

These included:

- Having debates and open discussions about drinking, especially after videos about the consequences of drinking were shown;
- Allowing students to design anti-drinking campaigns;
- Emphasizing the fact that all the bad things associated with drinking could happen to each of them;
- Creating videos of Humble ISD students talking about why they do, or do not drink, and using these as part of the campaign at high schools and/or middle schools; and
- Doing things that were “real” rather than using paid actors or packaged programs.

When asked if they had anything else to say about underage drinking, the students cautioned that teens would always drink and the only realistic way to deal with it was to educate them about responsible practices and to encourage them to limit their use. They also reiterated that they were tired of hearing adults attribute underage drinking to peer pressure. They believed that the decision to drink or not to drink was personal and that each teen considered several factors before making this decision, most of which were not related to pressure from peers.

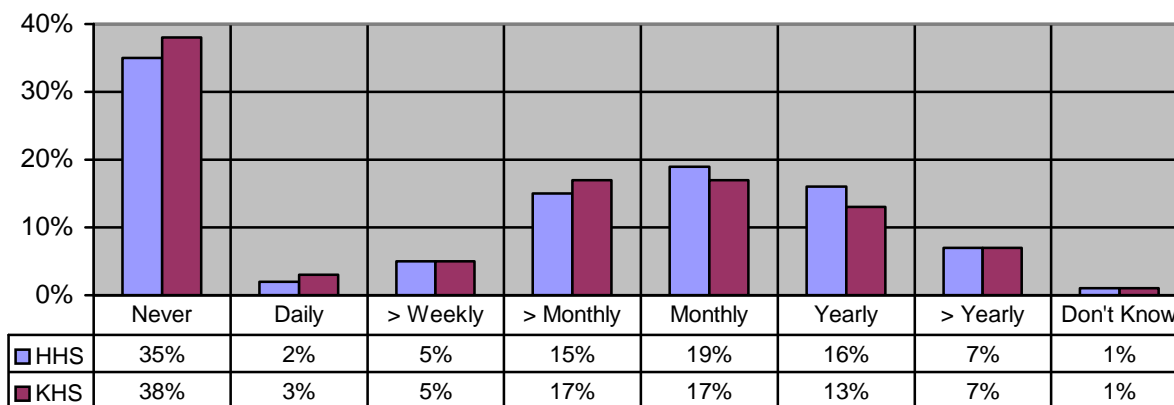
### **Baseline Quantitative Findings**

The information below is based on responses from 823 usable pre-surveys from HHS (30% of the student body) and 1538 usable pre-surveys from KHS (38% of the student body).

Interestingly, the differences in demographics between the two schools had almost no impact on the responses to the baseline questions. A statistical test of significance revealed that minor variations between the two schools were not statistically significant.

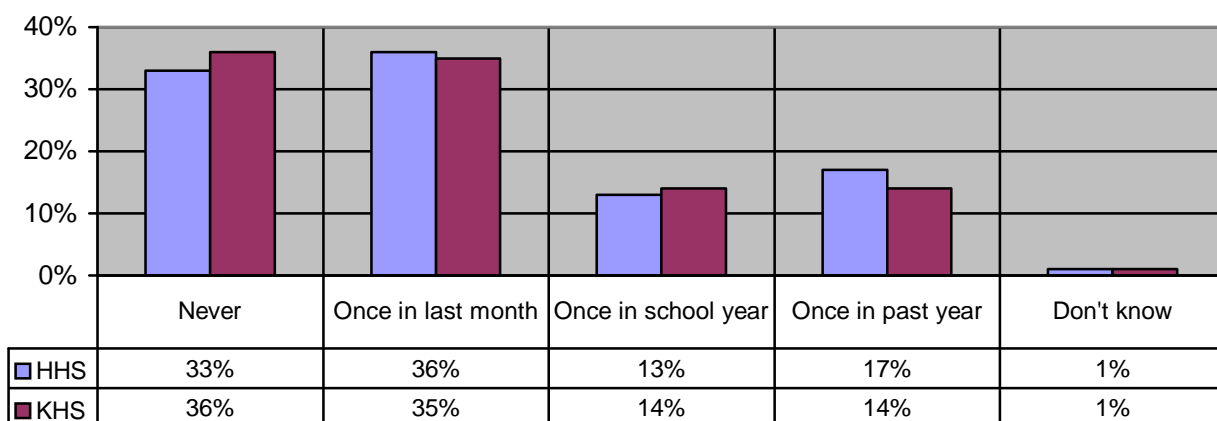
The similarity between the schools can be seen most clearly in an examination of the reported frequency and recency of alcohol use (Figures 1 and 2). Slightly more than one-third of the students at both schools indicated they did not drink (35% at HHS and 38% at KHS), and the same percentage at each school indicated that they drank more than weekly (5%) or less than yearly (7%). Similar percentages of students also indicated they drank daily (2% at HHS and 3% at KHS), more than monthly (15% at HHS and 17% at KHS), monthly (19% at HHS and 17% at KHS), or yearly (16% at HHS and 13% at KHS).

**Figure 1. Frequency of Drinking**



Self-reported recency of use indicated that 36% of the HHS students and 35% of the KHS students had consumed at least one alcoholic beverage in the past month; 13% of HHS students and 14% of KHS students had consumed at least one alcoholic beverage since the start of the school year, and 17% of HHS and 14% of KHS students had consumed at least one alcoholic beverage in the last year.

**Figure 2. Recency of Drinking**

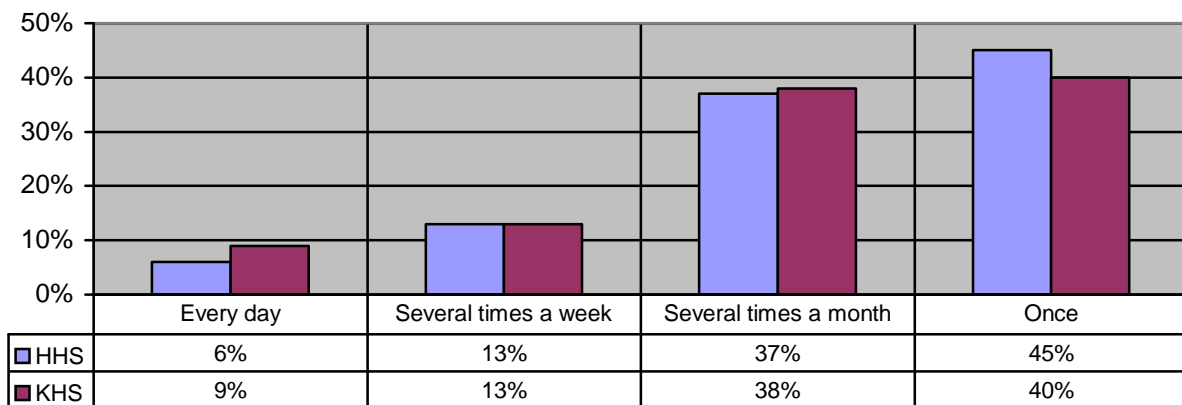


Minor (and statistically insignificant) differences between the two schools were also apparent in self-reported data related to alcohol consumption in the last 30 days, typical number of drinks at one time, and binge drinking in the last 30 days. Even though these differences were not significant, taken as a whole, they showed a consistent pattern of students at HHS being slightly more likely to drink than their counterparts at KHS. However, in most instances the drinking behavior of HHS students appeared to be more restrained than the drinking behavior of KHS students. When KHS students did drink, they drank more than the students at HHS. This pattern is detailed in Figures 3 through 5.



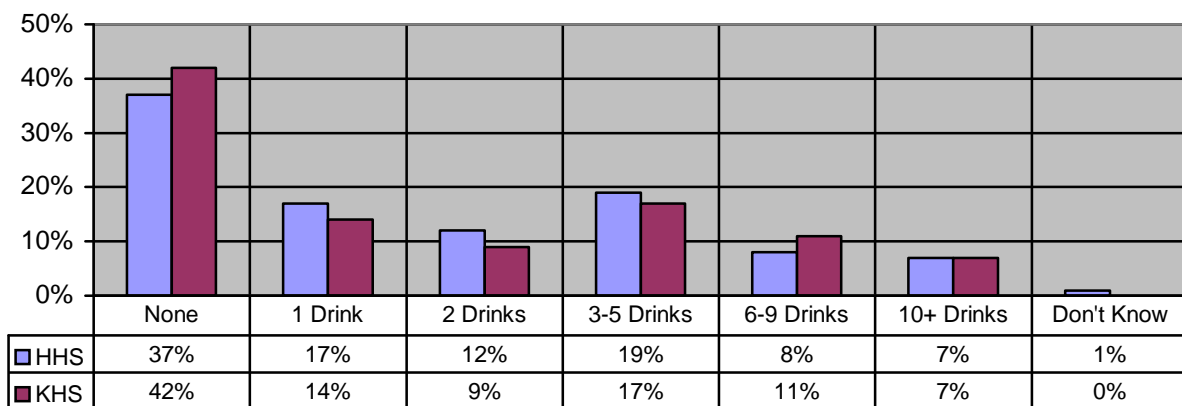
As per Figure 3, of those students who reported drinking alcohol in the past 30 days, HHS students were slightly more likely to have consumed alcohol once (45% at HHS and 40% at KHS), but KHS students were slightly more likely to have consumed alcohol every day than their counterparts at HHS (9% at KHS and 6% at HHS).

**Figure 3. Alcohol Consumption in the Last 30 Days**



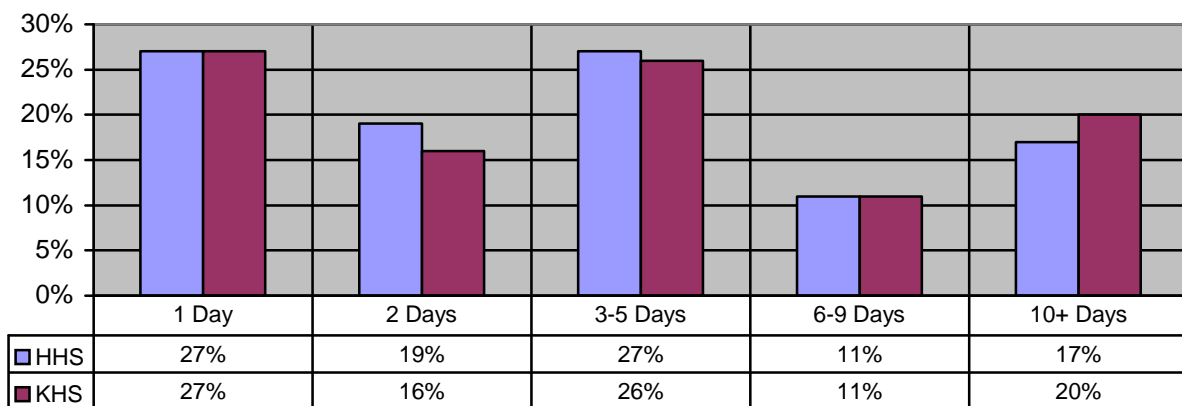
As per Figure 4, a slightly higher percentage of KHS students were inclined to have no drinks (42% at KHS as compared with 37% at HHS), but a higher percentage were also inclined to drink to excess, i.e., 6 – 9 drinks (11% at KHS as compared to 8% at HHS). On the other hand, a higher percentage of HHS students were inclined to only drink one drink (12% at HHS as compared to 9% at KHS), or to drink 3 – 5 drinks at one time (19% at HHS as compared to 17% at KHS).

**Figure 4. Typical Number of Drinks At One Time**



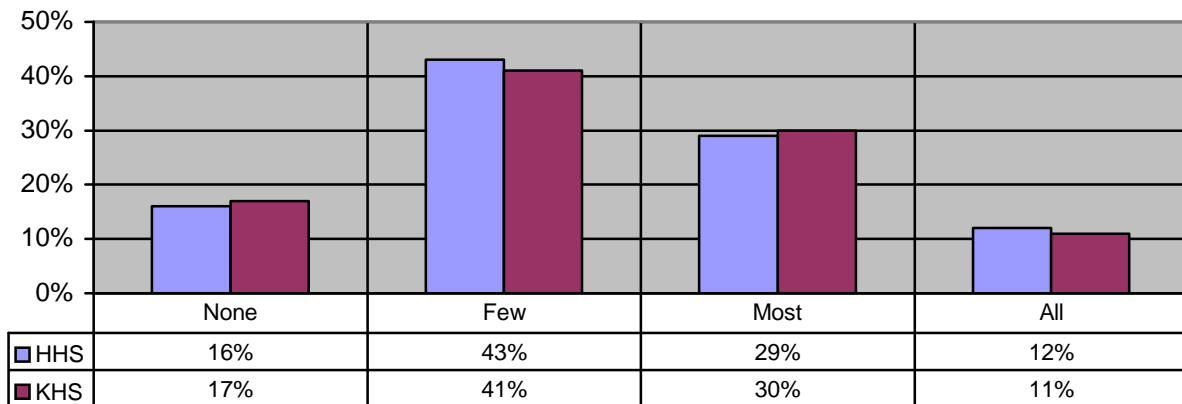
As per Figure 5, the pattern of more restrained drinking at HHS and more extreme drinking at KHS held true when students were asked about their binge drinking (five or more drinks at one time) within the last 30-day period. Of those students who indicated that they engaged in binge drinking, a higher percentage of HHS students said they did so on two occasions (19% at HHS as compared to 16% at KHS) while a higher percentage of KHS students said they did so on ten or more occasions (20% at KHS as compared to 17% at HHS).

**Figure 5. Binge Drinking in the Past 30 Days**



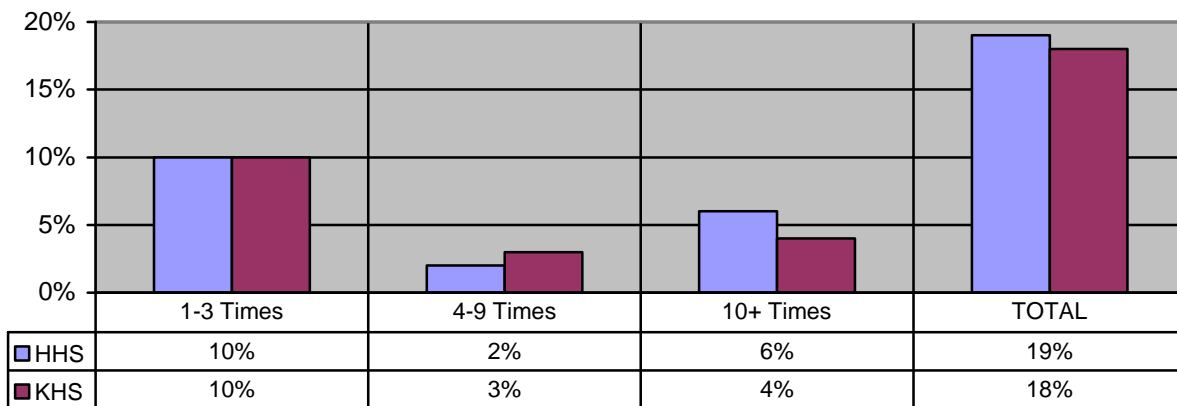
The similarities between HHS and KHS were also evident in students' response to a question about how many of their close friends drank (see Figure 6). In both instances, the highest percentage of students indicated that only a few of their friends drank (43% at HHS and 41% at KHS) and the lowest percentage of students indicated that all of their friends drank (12% at HHS and 11% at KHS). The percentage of students who indicated that most of their friends drank was also very similar between the schools (29% at HHS and 30% at KHS), as was the percentage who indicated that none of their friends drank (16% at HHS and 17% at KHS).

**Figure 6. Have Close Friends That Drink**



Students who had driver's licenses were asked if they had ever driven a car after they had drunk an alcoholic beverage (see Figure 7). Nineteen percent of the students at HHS, and 18% of the students at KHS indicated that they had done this at least once during the past year.

**Figure 7. Licensed Students Who Drove a Car While Drinking**



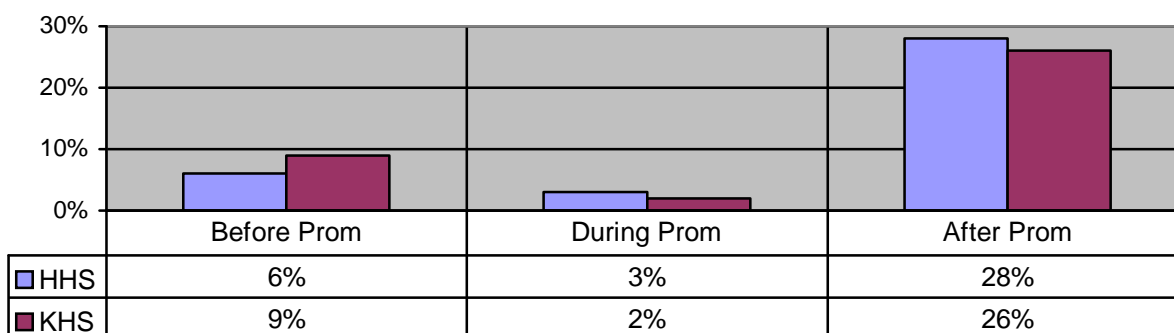
### **Post-Prom Quantitative Findings**

Several descriptive and comparative analyses were used to examine the drinking behavior and the impact of MADD's THINK.Prom program in relation to drinking on prom night (before and/or during and/or after prom). The following sections detail the findings from these analyses.

#### **Consuming Alcohol**

Twenty-eight percent of students at HHS and 27% of students at KHS indicated that they drank alcohol, before, during or after prom. Several students indicated they consumed alcohol during more than one time period (before, and/or during, and/or after prom); however most students who drank did so after the prom. The percentages of students who indicated they drank at any point during prom night are reflected on Figure 8. Please note that these percentages will total to more than the aggregate (28% at HHS and 27% at KHS) because of students who drank during multiple time frames.

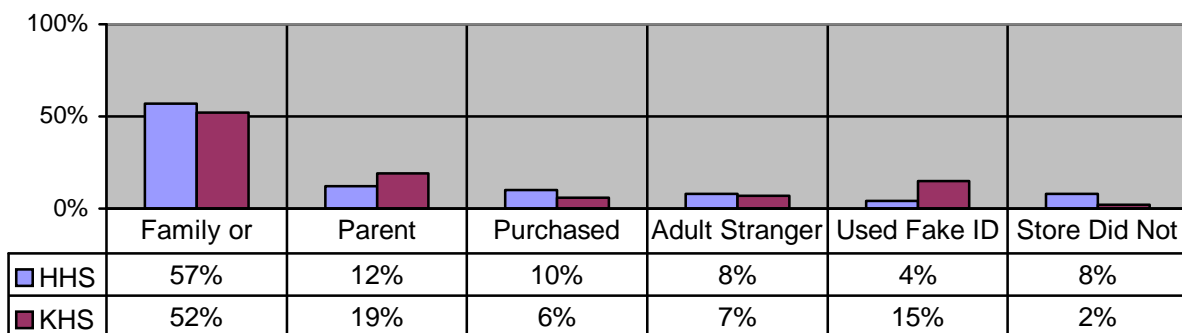
**Figure 8. Consuming Alcohol Before, During or After Prom**



## Securing Alcohol

Students who drank on prom night used several different means to secure alcohol (see Figure 9). The two most common means were to obtain the alcohol from a family member or friend who was over 21 and/or to have a parent purchase it. Approximately 57% of students at HHS and 52% of students at KHS indicated that a family member or friend made the purchase for them and 12% of HHS students and 19% of KHS students indicated that their parent made the purchase. In descending order, other sources of alcohol for HHS students were: purchasing it themselves (10%), having an adult stranger purchase it (8%), purchasing it from a store that did not check their ID (8%), and using a fake ID (4%). The descending order was slightly different for KHS, with 15% using a fake ID (as compared to 4% at HHS), having an adult stranger purchase it (7%), purchasing it themselves (6%), and purchasing it from a store that did not check IDs (2%).

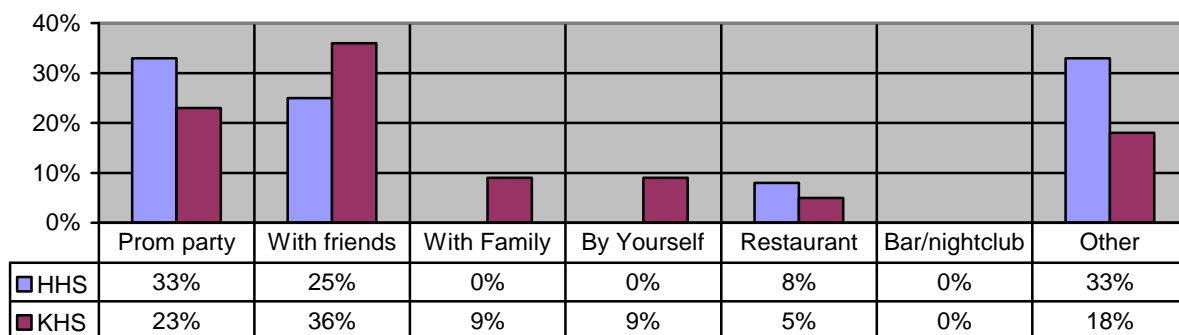
**Figure 9. How Secured Alcohol**



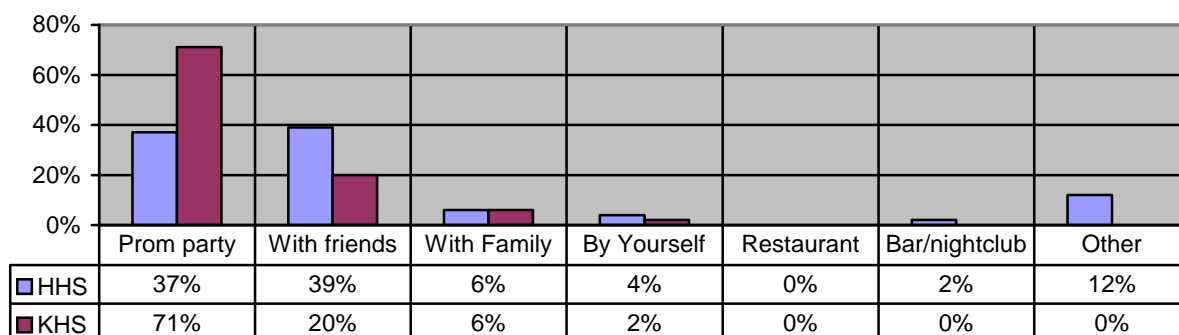
## Drinking Situations

Most of the students who indicated they drank on prom night did so with friends (see Figures 10 and 11). Approximately 33% of HHS students and 23% of KHS students indicated that they drank with friends at a pre-prom party and 25% of HHS students and 36% of KHS students indicated that they drank with friends before the prom but not at a party. Additionally, 37% of HHS students and 71% of KHS students indicated they drank with friends at an after-prom party and 39% of HHS students and 20% of KHS students indicated they drank with friends after the prom but not at a party. Very few students indicated that they drank with their family, by themselves, at a restaurant, or at a bar or nightclub.

**Figure 10. Pre-Prom Drinking Situation**



**Figure 11. Post-Prom Drinking Situation**





## Drinking Decisions

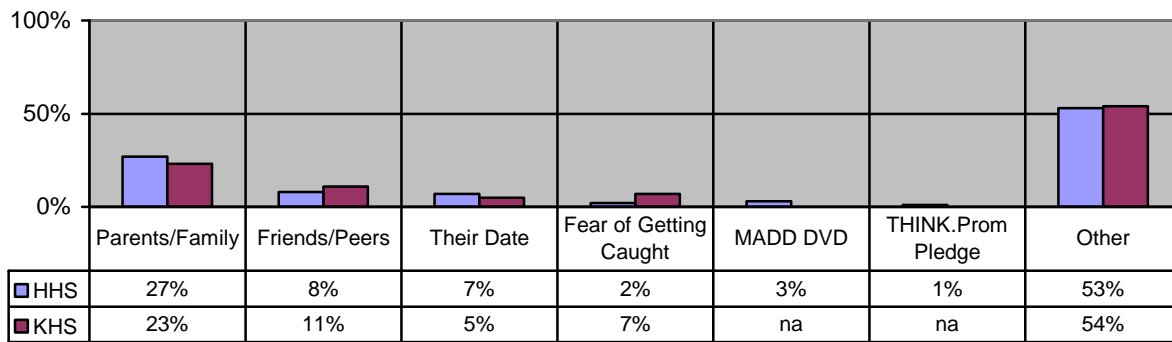
The post-prom survey also asked students to divulge some of their thoughts about why they either did, or did not drink (see Figures 12 and 13). In order to standardize responses the students were provided with specific options to choose between. Of those students who chose not to drink, 27% of HHS students and 23% of KHS students indicated that their parents and family influenced this decision. Conversely, only 8% of HHS students and 0% of KHS students indicated that parents and family influenced their decision to drink.

Most students who did drink during prom night indicated that they did so because it was a special occasion (43% at HHS and 34% at KHS). KHS students also indicated that they drank because alcohol was available (26% as compared to only 6% at HHS).

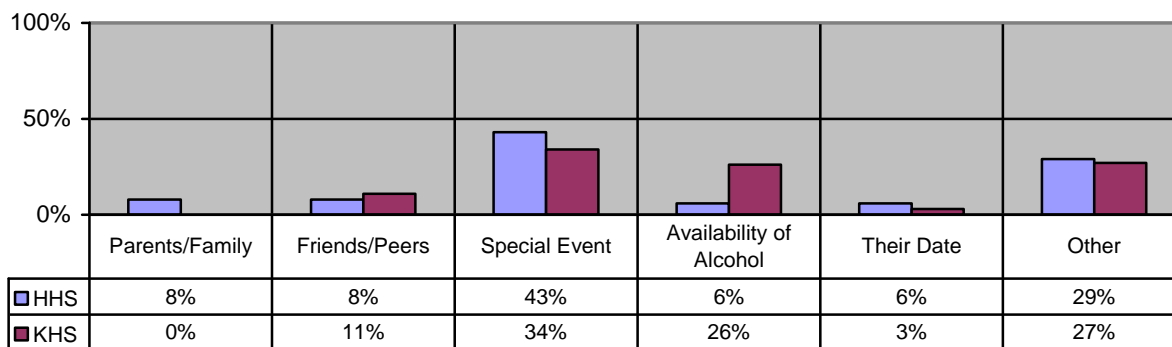
Other specified responses for why someone did, or did not drink showed only a slight influence on behavior. These included the following:

- Influence of friends and peers -
  - 8% of HHS students indicated they did not drink because of friends and peers, but 8% also indicated they did drink because of friends and peers,
  - 11% of KHS students indicated they did not drink because of friends and peers, but 11% indicated they did drink because of friends and peers;
- Influence of their date –
  - 7% of HHS students indicated they did not drink because of their date, but 6% indicated they did drink because of their date,
  - 5% of KHS students indicated they did not drink because of their date, but 3% indicated they did drink because of their date.

**Figure 12. Reasons Did Not Drink**



**Figure 13. Reasons Did Drink**



### **Impact of MADD THINK.Prom**

The impact of the MADD THINK.Prom program was analyzed two ways. First, the percentage of students who signed the pledge, who attended prom, and who did not drink was compared to the percentage of students who did not sign the pledge, who attended prom, and also who did not drink. This type of analysis was used to show the direct impact of the pledge signing. Second, the percentage of students at HHS who drank during prom night was compared to the percentage of students at KHS who drank during prom night. Because this second analysis was not dependent on the pledge signing itself, it was used to show the impact of showing the MADD DVDs.

### **Impact of the Pledge Signing**

The students at HHS were shown the MADD THINK.Prom DVD and were given the option of signing a pledge to remain alcohol-free during prom night. Of the 363 viable HHS post-prom surveys returned to PPRI, only 10% of the students (n=35) indicated that they had signed the pledge and that they had attended prom.

Of the students who signed the pledge and who attended the prom, 71% did not consume alcohol during prom night. While this was an encouraging finding, it was not significantly different than the 72% of students who attended the prom, who did not sign the pledge, but who also did not consume alcohol.

There were some descriptive differences in demographics related to who signed the pledge and who drank on prom night; however, they were not statistically significant. Given this caveat, the pledge signing might have had more of an effect on female students than on male students. Only 18% of female students who signed the pledge drank on prom night as compared to 27% of female students who did not sign the pledge. On the other hand, pledge signing appeared to have the opposite effect on male students. Forty-six percent of males who signed the pledge drank alcohol on prom night as compared to 29% of males who did not sign the pledge. Ethnicity might also have been a factor in the effectiveness of the pledge signing. Only 17% of White students who signed the pledge drank on prom night as compared to 34% of White students who did not sign the pledge. Again pledge signing seemed to have had the opposite effect on African-American students. Thirty-one percent of African-American students who signed the pledge drank alcohol on prom night as compared to 24% of African-American

students who did not sign the pledge. A detailed demographic breakdown of alcohol use among students who signed the pledge and did not sign the pledge is included on Table 3.

Table 3. Percent Alcohol Use by Pledge-Signing and Demographics		
	<b>Signed Pledge</b>	<b>Did Not Sign Pledge</b>
<b>Total</b>	29%	28%
<b>Male</b>	46%	29%
<b>Female</b>	18%	27%
<b>White</b>	17%	34%
<b>African-American</b>	31%	24%
<b>Hispanic or Latino</b>	-	27%
<b>Asian American</b>	-	-
<b>Native American</b>	-	-
<b>Other</b>	-	-
<b>9<sup>th</sup> Grade</b>	-	-
<b>10<sup>th</sup> Grade</b>	-	-
<b>11<sup>th</sup> Grade</b>	-	10%
<b>12<sup>th</sup> Grade</b>	27%	30%

### **Impact of the MADD DVDs**

HHS and KHS students were asked on the pre-survey if they intended to drink on prom night. At that time 38% of the HHS students and 36% of KHS students indicated they intended to do so. After the prom, 28% of the HHS students and 27% of the KHS students indicated they actually had consumed alcohol on prom night. Unfortunately, this difference was not statistically significant. There was also no significant difference in the change between reported expected drinking before the prom and reported actual drinking at the prom (10% change at HHS and 9% change at KHS). Therefore, there was no detectable impact associated with the HHS students' viewing of the MADD DVDs.

## **CONCLUSIONS AND RECOMMENDATIONS**

This study shows that the MADD THINK.Prom program had little impact on the drinking behavior of Humble ISD students on prom night. The self-reported drinking of prom attendees was virtually the same for those HHS students who signed the pledge as compared to those HHS students who did not sign the pledge. In addition, there was no difference between prom night drinking at HHS and KHS even though KHS students did not see the MADD DVDs nor did they have the opportunity to sign the pledge. However, one relevant item to note is the difference in the behavior of females/males and White/African-American HHS students who signed the pledge. Female and White HHS students who signed the pledge appeared less likely to drink on prom night than female and White HHS students who did not sign the pledge. On the other hand, male and African-American HHS students who signed the pledge seemed more likely to drink on prom night than male and African-American HHS students who did not sign the pledge. However, these differences were not statistically significant.

A major problem with the study is the change in sample size between the pre- and the post-prom surveys. The pre-survey sample was quite robust, with an initial count of 832 surveys from HHS and 1558 from KHS. After surveys were examined for elimination from analysis because of obvious exaggeration, incompleteness of data (i.e., less than half the survey was completed) or other obvious distortions of responses, eight surveys were removed from HHS, for a total of 823 usable surveys and 20 surveys were removed from KHS, for a total of 1538 usable surveys. However, the story was quite different for the post-prom surveys. Even though the number of completed post-prom surveys was still relatively robust (485 from HHS and 1180 from KHS), this number represented a sharp drop from the pre-survey sample size. This change alone in the sample could potentially be responsible for a lack of decisive findings. In addition, the number of usable post-prom surveys was actually much smaller. Of the 485 scannable surveys received from HHS, 64 were removed for lack of data (i.e., less than half the questions answered), 58 were removed for grossly exaggerated responses, and 165 were removed for analyses that required attendance at the prom. Of the 1180 scannable surveys received from KHS, 397 were removed for lack of data or for answering “yes” to questions related to participation in MADD THINK.Prom, 112 were removed for grossly exaggerated responses, and 445 were removed for analyses that required attendance at the prom.

Another factor contributing to the lack of impact of the data might have been the timeline under which THINK.Prom was implemented. MADD's THINK program is intended to be a year-round alcohol-use prevention program. THINK.Prom is one key aspect of this program, but it is not the only aspect. Because the Humble ISD program was implemented at the end of the school year, a decision was made to only include (and evaluate) the components of THINK.Prom. Since comprehensive long-term interventions have historically had more impact than single-focus short-term interventions, the lack of impact could, in part, be attributed to the fact that the intervention being studied was extremely short-term.<sup>13</sup>

In an attempt to find another source of information that could provide data about drinking behavior on prom night, the evaluators contacted the Humble ISD police and asked about incident reports related to prom-related drinking. Unfortunately, the police had no incident reports for prom night at either high school. Nor did they have incident reports related to drinking at prom during previous years.

Findings of no-impact for THINK.Prom are consistent with findings from other studies of alcohol and substance use prevention programs. A 2006 examination of programs that relied on providing information about the adverse effects of alcohol and other drugs showed that these programs had little or no effect on actual use.<sup>14</sup> Another study showed that a clearly delivered message – regardless of whether it be formulated from a zero tolerance or a harm reduction perspective – could have some impact in lowering levels of alcohol use at schools but the impact would be difficult to measure because of the number of known influences on students' decisions to use alcohol, drugs, and/or tobacco.<sup>15</sup> And a third study concluded that school-based prevention programs could only account for some of the risk factors that influence the decisions of underage drinkers to drink, therefore these programs would always be limited in their impact.<sup>16</sup>

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<sup>13</sup> Stigler, M.H., Perry, C.L., Komro, K.A., Cudeck, R., Williams, C.L. (2006). Teasing Apart a Multiple Component Approach to Adolescent Alcohol Prevention: What Worked in Project Northland. *Society for Prevention Research*.

<sup>14</sup> Goldberg, M.E., Niedermeier, K.E., Bechtel, L.J., Gorn, G.J. (2006). Heightening Adolescent Vigilance Toward Alcohol Advertising to Forestall Alcohol Use. *American Marketing Association* 25 No. 2. 147-159

<sup>15</sup> Evans-Whipp, T.J., Bond, L., Toumbourou, J.W., Catalano, R.F. (2007). School, Parent, and Student Perspectives of School Drug Policies. *The Journal of School Health* 77 no. 3. 138-146.

<sup>16</sup> Wolfsberg, J.S. (2006). Integrating Underage Drinking and Drug Use Prevention. *The Education Digest* 72 No. 3 52-54.

On the other hand, findings from the qualitative portion of this study provide some useful insights into possible ways to curtail underage drinking. Teachers and students in Humble ISD bridged the common belief that prevention strategies must follow one route or another (i.e. zero tolerance or harm reduction.) Their comments laid forth circumstances in which both strategies could be employed in a complementary fashion – with zero tolerance as an overall policy to curtail underage drinking and/or to diminish overt acts that would, or could, lead to irreparable damage; and with harm reduction as a select strategy that individual teachers and administrators could discuss with students and parents in one-on-one or group exchanges.

The focus groups also brought to light a possible gap in Humble ISD strategies for addressing drinking at special events – that of ensuring that these events have supplemental, fun, alcohol and drug-free alternatives for students. In the best scenario, these alternatives would be planned and promoted by the students themselves.

The suggestions of the teachers and students also have implications for MADD and for improvement/expansion of their THINK program. Regardless of the current effectiveness of the strategy, there is good reason to believe that its impact would be enhanced if it were brought to schools as a “work in progress” rather than as a completed package. In effect, the expertise of MADD could become a guiding resource that would lead the schools through a process of developing and implementing a unique program to curtail underage drinking in their district. This program could start with products developed by MADD, and could expand upon these through the use of comprehensive teams (including students, parents, teachers, administrators, and community members) that would create district-specific videos/DVDs, educational programs, and informational messages about underage drinking. This team could also help to develop and promote alternative alcohol-free events and could sponsor student rallies during which time students would be encouraged to pledge to be alcohol-free.

## **APPENDICES**



## ***Focus Group Protocol***

### **Information Sheet Humble ISD Focus Group**

#### **Purpose**

You have been asked to participate in a focus group that is going to discuss the issue of underage drinking in Humble ISD and strategies aimed at lowering drinking among high school teenagers. You were selected randomly from secondary school teachers in the district. A total of thirty teachers have been asked to participate in the study.

#### **Procedure and Duration**

The discussion is expected to take approximately 60 minutes, but you do not have to comment on any particular topic, and may withdraw from the discussion at any time without consequence. In addition to the focus group, you will be asked to provide written responses to five short questions.

#### **Discomforts, Risks, and Benefits**

There are not any foreseeable inconveniences, discomforts, or risks involved with participation. There are no direct benefits for you to participate in the discussion.

#### **Privacy/Confidentiality**

The study is confidential, and your identity will be protected. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. Research records will be securely stored and only the researchers conducting the project will have access to the records.

Your decision whether or not to participate will not affect your current or future relations with Texas A&M University. If you decide to participate, you are free to refuse to answer any of the questions that may make you uncomfortable. You can withdraw participation at any time. You can contact Dr. Jim Dyer at the Public Policy Research Institute, Texas A&M University, (979) 845-8800 or by email at [jim@ppri.tamu.edu](mailto:jim@ppri.tamu.edu) with any questions about this study.

The research study has been reviewed and approved by the Institutional Review Board – Human Subjects in Research, Texas A&M University. For research related problems or questions regarding subjects rights, the Institutional Review Board may be contacted through Ms. Melissa McIlhaney, IRB Program Coordinator, Office of Research Compliance (979) 458-4067 or by email at [mcilhaney@tamu.edu](mailto:mcilhaney@tamu.edu).

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the information sheet for your records.

### Focus Group Questions

1. How much of a problem is underage drinking at your school?
  - (a) in general
  - (b) at prom or other special events
2. What do you think your school's role should be in addressing this/these problem(s)?
3. What did you school do this year in relation to drinking at prom?
  - a. (HHS) What were the students' reactions/feelings about the MADD-THINK program?
4. How effective were these strategies?
  - a. (HHS) How effective was the MADD-THINK program?
5. In addition to the things your school did this year, what other strategies do you think would be effective in mitigating the problem of underage drinking?
6. What obstacles / barriers do you foresee that could make it difficult to implement these strategies?
7. What could be done to increase community involvement in helping to mitigate underage drinking?

**Focus Group Questionnaire**

**Focus Group Questionnaire**

1. What was the most effective thing **your school** did this year to curtail drinking at the prom?

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2. What else could the **school/school district** have done?

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3. What is the most important thing **the community** can do in the future to help curtail underage drinking?

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4. On a scale of 1 – 5, with one being low and 5 being high, how much of a problem was drinking at prom this year for your school?

1                      2                      3                      4                      5

5. On a scale of 1 – 5, with 1 being low and 5 being high, how effective do you believe pledge signing works as a way to curtail drinking at prom?

1                      2                      3                      4                      5

## ***Pre-Survey***

### High School Experiences With Alcohol Use

## INTRODUCTION

Before answering the survey questions, please read the following:

- The survey questions ask about alcohol use and related issues;
- You do not have to take this survey and can skip any question that you choose not to answer for any reason without consequences; and
- There is no way for anyone to find out how you answered.

This research study has been reviewed and approved by the Institutional Review Board--- Human Subjects in Research, Texas A&M University. For research-related questions regarding subjects' rights, the Institutional Review Board may be contacted through Ms. Angelia Raines, Director of Research Compliance, Office of the Vice President for Research at (979) 458-4067 or email at [araines@vprmail.tamu.edu](mailto:araines@vprmail.tamu.edu).

## DIRECTIONS

- DO NOT write your name anywhere on this booklet
- Use a NUMBER 2 PENCIL only
- Fill in only ONE BUBBLE for each part of the question
- Be sure to read each question carefully

1. Are you:

a.	<input type="checkbox"/>	Male
b.	<input type="checkbox"/>	Female

2. What grade are you in:

a.	<input type="checkbox"/>	9
b.	<input type="checkbox"/>	10
c.	<input type="checkbox"/>	11
d.	<input type="checkbox"/>	12

3. Are you:

a.	<input type="checkbox"/>	White
b.	<input type="checkbox"/>	African American
c.	<input type="checkbox"/>	Hispanic or Latino
d.	<input type="checkbox"/>	Asian American
e.	<input type="checkbox"/>	Native American
f.	<input type="checkbox"/>	Other

4. How recently, if ever, have you used any alcoholic beverages even one time: (beer, wine cooler, wine, liquor, etc.)

a.	<input type="checkbox"/>	Never heard of it/Never used it
b.	<input type="checkbox"/>	Used at least once in the past month
c.	<input type="checkbox"/>	Used at least once since school began in the fall
d.	<input type="checkbox"/>	Used at least once in the past year

5. IN THE PAST 30 DAYS, how many times (if any) have you used any alcoholic beverages:

a.	<input type="checkbox"/>	Never
b.	<input type="checkbox"/>	Every day
c.	<input type="checkbox"/>	Several times a week
d.	<input type="checkbox"/>	Several times in the month
e.	<input type="checkbox"/>	Once

6. When you drink alcoholic beverages, how many drinks do you usually have, AT ONE TIME, on average:

(drink = a 12 oz. beer, 5 oz. wine or 1.5 oz. liquor)

a.	<input type="checkbox"/>	None
b.	<input type="checkbox"/>	1 drink
c.	<input type="checkbox"/>	2 drinks
d.	<input type="checkbox"/>	3 to 5 drinks
e.	<input type="checkbox"/>	6 to 9 drinks
f.	<input type="checkbox"/>	10 or more drinks

7. IN THE PAST 30 DAYS, on how many days have you had 5 or more drinks of alcohol, AT ONE TIME:

a.	<input type="checkbox"/>	Never had 5 or more drinks at one time
b.	<input type="checkbox"/>	None
c.	<input type="checkbox"/>	1 day
d.	<input type="checkbox"/>	2 days
e.	<input type="checkbox"/>	3 to 5 days
f.	<input type="checkbox"/>	6 to 9 days
g.	<input type="checkbox"/>	10 or more days

8. How often do you normally drink alcoholic beverages:

a.	<input type="checkbox"/>	Never drink alcoholic beverages
b.	<input type="checkbox"/>	Every day
c.	<input type="checkbox"/>	Several times a week
d.	<input type="checkbox"/>	Several times a month
e.	<input type="checkbox"/>	About once a month
f.	<input type="checkbox"/>	About once a year
g.	<input type="checkbox"/>	Less than once a year

9. DURING THE PAST 12 MONTHS, how many times (if any) have you driven a car when you've used alcoholic beverages:

a.	<input type="checkbox"/>	Never driven a car while under the influence of alcohol
b.	<input type="checkbox"/>	None
c.	<input type="checkbox"/>	1-3 Times
d.	<input type="checkbox"/>	4-9 Times
e.	<input type="checkbox"/>	10+ Times

10. About how many of your close friends drink alcoholic beverages:

a.	<input type="checkbox"/>	Never heard of/None
b.	<input type="checkbox"/>	A few
c.	<input type="checkbox"/>	Most
d.	<input type="checkbox"/>	All

11. Do you have a driver's license:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

12. Do you plan on going to prom:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

13. If yes, do you plan to drink alcoholic beverages before, during, or after prom:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

## ***Post-prom survey***

### High School Experiences With Alcohol Use

#### INTRODUCTION

Before answering the survey questions, please read the following:

- The survey questions ask about alcohol use and related issues;
- You do not have to take this survey and can skip any question that you choose not to answer for any reason without consequences; and
- There is no way for anyone to find out how you answered.

This research study has been reviewed and approved by the Institutional Review Board--- Human Subjects in Research, Texas A&M University. For research-related questions regarding subjects' rights, the Institutional Review Board may be contacted through Ms. Angelia Raines, Director of Research Compliance, Office of the Vice President for Research at (979) 458-4067 or email at [araines@vprmail.tamu.edu](mailto:araines@vprmail.tamu.edu).

#### DIRECTIONS

- DO NOT write your name anywhere on this booklet
- Use a NUMBER 2 PENCIL only
- Be sure to read each question carefully

1. Are you:

a.	<input type="checkbox"/>	Male
b.	<input type="checkbox"/>	Female

3. Are you:

a.	<input type="checkbox"/>	White
b.	<input type="checkbox"/>	African American
c.	<input type="checkbox"/>	Hispanic or Latino
d.	<input type="checkbox"/>	Asian American
e.	<input type="checkbox"/>	Native American
f.	<input type="checkbox"/>	Other

2. What grade are you in:

a.	<input type="checkbox"/>	9
b.	<input type="checkbox"/>	10
c.	<input type="checkbox"/>	11
d.	<input type="checkbox"/>	12

4. Did you go to prom:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

5. Did you drink alcohol before prom (beer, wine, wine cooler, liquor, etc.):

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

6. Did you drink alcohol during prom:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

7. Did you drink alcohol after prom:

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

8. If you did not drink at all, what affected your decision to not drink the most:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Parents/Family
b.	<input type="checkbox"/>	Friends/Peers
c.	<input type="checkbox"/>	THINK Prom Pledge Signing Event
d.	<input type="checkbox"/>	MADD-Think DVD
e.	<input type="checkbox"/>	Your date
f.	<input type="checkbox"/>	Fear of getting caught
g.	<input type="checkbox"/>	Other

9. If you did drink, what affected your decision to drink, the most:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Parents/Family
b.	<input type="checkbox"/>	Friends/Peers
c.	<input type="checkbox"/>	Special Occasion
d.	<input type="checkbox"/>	Availability of alcohol
e.	<input type="checkbox"/>	Your date
f.	<input type="checkbox"/>	Other



10. If you did drink before the prom, what type of alcohol did you drink:  
(DARKEN ONE BUBBLE FOR ALL THAT APPLY)

a.	<input type="checkbox"/>	Beer
b.	<input type="checkbox"/>	Wine
c.	<input type="checkbox"/>	Wine Coolers
d.	<input type="checkbox"/>	Liquor

11. How many alcoholic beverages did you drink before the prom:  
(drink = a 12 oz. beer, 5 oz. wine, or 1.5 oz. liquor)  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	None
b.	<input type="checkbox"/>	1 drink
c.	<input type="checkbox"/>	2-3 drinks
d.	<input type="checkbox"/>	4-6 drinks
e.	<input type="checkbox"/>	7-9 drinks
f.	<input type="checkbox"/>	10+ drinks

12. If you did drink before the prom, in what type of situation did you drink:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Did not drink
b.	<input type="checkbox"/>	At a prom party
c.	<input type="checkbox"/>	With friends (not at a party)
d.	<input type="checkbox"/>	With family
e.	<input type="checkbox"/>	By yourself
f.	<input type="checkbox"/>	At a restaurant
g.	<input type="checkbox"/>	At a bar or nightclub
h.	<input type="checkbox"/>	Other

13. If you did drink during the prom, what type of alcohol did you drink:  
(DARKEN ONE BUBBLE FOR ALL THAT APPLY)

a.	<input type="checkbox"/>	Beer
b.	<input type="checkbox"/>	Wine
c.	<input type="checkbox"/>	Wine Coolers
d.	<input type="checkbox"/>	Liquor

14. How many alcoholic beverages did you drink during the prom:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	None
b.	<input type="checkbox"/>	1 drink
c.	<input type="checkbox"/>	2-3 drinks
d.	<input type="checkbox"/>	4-6 drinks
e.	<input type="checkbox"/>	7-9 drinks
f.	<input type="checkbox"/>	10+ drinks

15. If you did drink after the prom, what type of alcohol did you drink:  
(DARKEN ONE BUBBLE FOR ALL THAT APPLY)

a.	<input type="checkbox"/>	Beer
b.	<input type="checkbox"/>	Wine
c.	<input type="checkbox"/>	Wine Coolers
d.	<input type="checkbox"/>	Liquor

16. How many alcoholic beverages did you drink after the prom:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	None
b.	<input type="checkbox"/>	1 drink
c.	<input type="checkbox"/>	2-3 drinks
d.	<input type="checkbox"/>	4-6 drinks
e.	<input type="checkbox"/>	7-9 drinks
f.	<input type="checkbox"/>	10+ drinks

17. If you did drink after the prom, in what type of situation did you drink:  
(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Did not drink
b.	<input type="checkbox"/>	At a prom party
c.	<input type="checkbox"/>	With friends (not at a party)
d.	<input type="checkbox"/>	With family
e.	<input type="checkbox"/>	By yourself
f.	<input type="checkbox"/>	At a restaurant
g.	<input type="checkbox"/>	At a bar or nightclub
h.	<input type="checkbox"/>	Other

18. If you did drink alcohol before, after, and/or during the prom, how did you get your alcohol:

(DARKEN ONE BUBBLE FOR ALL THAT APPLY)

a.	<input type="checkbox"/>	You purchased
b.	<input type="checkbox"/>	Your parent purchased
c.	<input type="checkbox"/>	Family or friend over 21
d.	<input type="checkbox"/>	Adult stranger
e.	<input type="checkbox"/>	Fake ID
f.	<input type="checkbox"/>	Did not check my ID

19. About how many of your close friends had alcoholic beverages to drink before, during, and/or after the prom:

(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	None
b.	<input type="checkbox"/>	A few
c.	<input type="checkbox"/>	Most
d.	<input type="checkbox"/>	All

20. Did you participate in the "THINK Prom Pledge Signing" event:

(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

21. Have you participated in a pledge signing event before at another school:

(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Yes
b.	<input type="checkbox"/>	No

22. If yes, which one:

(DARKEN ONLY ONE BUBBLE)

a.	<input type="checkbox"/>	Prom Promise
b.	<input type="checkbox"/>	Other

