

2008 The Health-Related Behavior Survey (PRELIMINARY, 7/6/09)

Background

The 2008 Health-Related Behavior (HRB) Survey is based on the more than 28,500 military personnel, including officers, non-commissioned officers, and enlisted personnel in the U.S. Army, Air Force, Navy, Marines, and Coast Guard. Fleishman-Hillard Research analyzed the HRB Survey database to assess whether the *That Guy* campaign is linked to any positive behavioral or attitudinal outcomes, related to binge drinking, among the campaign's target audience – junior-enlisted service members. For the purpose of this analysis, this target audience is defined as:

- Enlisted personnel (E1 to E3)¹
- Age 17 to 24²

The 2008 HRB Survey includes slightly more than 5,000 service members who meet these characteristics, and the results were weighted using the DOD survey weights to adjust for disproportionate representation across segments of the military population (Table 1).

Table 1.
Target Audience by Branch of Military
(Actual Survey Sample Sizes)

Total	Marines	Army	Air Force	Navy	Coast Guard
5,084	1,402	1,213	1,157	920	392

Survey Sampling Procedures

The 2008 HRB Survey marks the first time, out of the 16 surveys going back to 1980, that the study has included the Coast Guard. We have **not** included the Coast Guard in our analysis and reporting of the 2008 survey results for two reasons:

- Much of the analysis and reporting is done in comparison to the 2005 HRB Survey results (where Coast Guard members were not included).
- The campaign worked to actively engage the Coast Guard **after** fielding the 2008 HRB survey.

The total number of personnel on which this report is based on is 4,692.

¹ The target audience for the campaign is pay grades E1 to E4. The dataset only groups E1 to E3. E4s are excluded because they are grouped with, and cannot be separated from, E5 and E6 personnel.

² The target audience for the campaign is persons 18 to 24 years of age. The survey answer categories begin at 17-18 years of age (and 17-year-olds cannot be separated from the 18-year-olds).

Treated Installations Versus Control Installations

The personnel represented in this analysis are or were (at the time of the survey) located on a total of 65 military installations. These 65 military installations were segregated into “treated” (40) and “control” (25) facilities.

- The **treated facilities** represent installations that were actively engaged in adopting and promoting the *That Guy* campaign via any one (or a combination) of eight different activities:
 - *Market advertising*: advertisements outside of installation, including billboards, convenience store ads, etc.
 - *Google advertising*: Google Geotargeting online advertising to specific military markets.
 - *Campaign materials*: ordered promotional materials such as coasters, playing cards, posters, key chains, etc.
 - *Community activities*: campaign promoted in local bars and restaurants or through community advertising.
 - *Video PSA market*: markets that ran video PSAs on installation or in community.
 - *Radio PSA market*: markets that ran radio PSAs on installation or through community radio stations.
 - *Events*: events where campaign was integrated, such as Wii Warrior Challenges, Texas Hold ‘em, sports events, MWR events, etc.
 - *Campaign partnership*: engaged through a central organization or program such as MWR, BOSS, SMP, MCCS, ACSAP, etc.
- The **control facilities** represent those that were not actively engaged in the *That Guy* campaign.

Table 2.
Target Audience by Branch of Military:
Treated Versus Control Installations
(Actual Survey Sample Sizes)

Branch	Treated	Control	Total
Marines	1,399	3	1,402
Army	994	219	1,213
Air Force	628	529	1,157
Navy	551	369	920
Total	3,572	1,120	4,692

Given the small number of Marine personnel from control installations, treated versus control comparisons for this branch of the military have not been made. However, the three Marines represented in the control column (Table 2) are grouped together with the Army, Air Force, and Navy control personnel for the overall treated versus control analysis.

Confidence Interval

In general, the differences in survey findings needed among or between different groups of respondents, at a 95 percent confidence level, in order to state that these differences are statistically significant are:

- 2 to 3 percentage points when comparing treated versus control installations, overall.
- 5 to 8 percentage points when comparing treated versus control installations within the Army.
- 4 to 7 percentage points when comparing treated versus control installations within the Navy.
- 4 to 6 percentage points when comparing treated versus control installations within the Air Force.

2005 Versus 2008 HRB Results

2008 survey data show that binge drinking decreased **among the target audience**, overall, relative to the 2005 level. This represents a statistically significant drop in binge drinking.

- In **2005**, **51%** of personnel participated in binge drinking during the past 30 days.
- In **2008**, that figure dropped to **46%**.

The biggest change when comparing the 2005 results to 2008 is the percentage of those who report they did **not** drink in the past 30 days. In 2005, 30% reported they had not had a drink in 30 days; in 2008 that figure rose to 38%. Insights as to why this may have occurred appear later within this report.

Branch of Service

Overall, the incidence of binge drinking:

- Increased from 2005 to 2008 among Navy and Marine junior enlisted (plus two percentage points each);
- Fell slightly among Air Force junior enlisted (minus one percentage point); and
- Fell dramatically within the Army junior enlisted (minus eighteen percentage points). The increase in those who say they do **not** drink is primarily driven by the Army (Table 3).

Table 3.
2005 Versus 2008 Binge Drinking: by Branch of Military

	Army		Air Force		Navy		Marines	
	2005	2008	2005	2008	2005	2008	2005	2008
Did not drink	27%	47%	38%	41%	31%	33%	24%	27%
Drink, not binge drink	16%	14%	21%	20%	24%	21%	18%	14%
Binge drink	57%	39%	41%	40%	45%	47%	58%	60%

The primary factor that is driving the drop in incidence levels of binge drinking among Army personnel and subsequent increase in the number of Army personnel who reported they have **not** had a drink in the past 30 days appears to be the sizable number of service members within the Army represented by two training installations that were included in the list of treated facilities. This is discussed further in the 2008 treated versus control data section that follows.

Comparing the 2008 and 2005 data by gender and age reveals (Table 4):

- Among underage men (17-20), the incidence of binge drinking in 2005 was 45%. This figure dropped dramatically to 39% in 2008.
- Among men 21 to 24 years of age, the incidence level of binge drinking remained steady at 65%.
- The incidence of binge drinking among underage women increased from 20% in 2005 to 24% in 2008.
- The incidence among women of legal drinking age (21-24) has remained steady at slightly more than one in three.

Table 4.
Incidence of Binge Drinking: By Age, Gender, and Year

	Men				Women			
	17-20		21-24		17-20		21-24	
	2005	2008	2005	2008	2005	2008	2005	2008
Did not drink	41%	48%	13%	16%	60%	63%	25%	29%
Drink, not binge drink	14%	13%	22%	20%	20%	13%	39%	36%
Binge drink	45%	39%	65%	65%	20%	24%	36%	35%

2008 HRB Results: Treated Versus Control

Branches of service

The 2008 data from the treated and control installations suggest progress toward reducing the incidence of binge drinking in the Army and Air Force treated installations. Results from the treated Navy installations do not show statistically significant improvement over the control data (although the results do show a lower rate of binge drinking within the Navy treated installations versus the control installations), and the control sample for the Marines is too small (only three respondents) to compare with results from the treated installations.

However, comparing the results from all of the treated installations across the four branches of service to those of all control installations, the findings suggest a **lower incidence of binge drinking exists among the treated installations** (Table 5).

Table 5.
Binge Drinking Among Treated Versus Control Installations: by Branch

	Total		Army		Air Force		Navy		Marines	
	Treated (n=3,556)	Control (n=1,111)	Treated (n=988)	Control (n=217)	Treated (n=626)	Control (n=527)	Treated (n=551)	Control (n=364)	Treated (n=1,391)	Control (n=3)*
Did not drink	40%	32%	51%	29%	48%	34%	34%	31%	27%	--
Drink, not binge drink	15%	20%	13%	16%	18%	22%	21%	20%	14%	--
Binge drink	45%	49%	36%	56%	35%	45%	45%	49%	59%	--

* Control sample is too small to use for comparison with the treated sample

NOTE: The actual sample size shown (n=xxx) for each group differs for each survey question because those who did not respond to the question are not included in RTI's tabulations.

Given that the Marines have the highest incidence of binge drinking among the four branches of service, there is a possibility that the overall results may be even better than is reported in Table 5. However, without a sufficient sample size of respondents from Marines' control installations, Fleishman-Hillard is unable to determine if this is the case.

To help explain why there is a substantial increase in the number of Army personnel from the treated installations who reported they do not drink, Fleishman-Hillard reviewed the specific installations represented by the Army treated and control installations and realized that two of the treated installations are recruit training installations (both representing relatively large numbers of service members within the survey), whereas none of the Army's recruit training installations were included within the group of control installations. This is important because junior-level personnel at training installations who are undergoing basic training or "boot camp" have few, if any, opportunities to drink (and the reported incidence levels of binge drinking within these two installations are, indeed, very low). As a result, including these training installations in the pool of treated installations may have artificially increased the percentage of personnel who reported they did not drink.

The combined incidence of binge drinking of both basic training installations is well under 20%. The incidence of binge drinking on the Army's treated installations, with the two training installations removed, increases the binge rate to 48%, but this figure is still lower (by a statistically significant amount) than the incidence level of binge drinking at the Army's control installations (56%).

Results of binge drinking among males in each of the branches of service, as well as in control and treated installations, reveal some improvement among men at treated installations within the Army and Air Force (Table 6). As discussed earlier, part of the improvement in the Army figures may be attributed to the inclusion of the two (relatively large) training installations among the treated installations.

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Table 6.
Binge Drinking Rates Among Males:
by Branch of Service and Treated Versus Control

Male Personnel										
	Total		Army		Air Force		Navy		Marines	
	Treated (n=2,267)	Control (n=833)	Treated (n=682)	Control (n=153)	Treated (n=355)	Control (n=383)	Treated (n=306)	Control (n=294)	Treated (n=924)	Control (n=3)*
Did not drink	37%	30%	48%	26%	46%	31%	32%	30%	26%	--
Drink, not binge drink	14%	19%	13%	16%	15%	22%	19%	19%	13%	--
Binge drink	48%	51%	39%	58%	39%	47%	49%	51%	61%	--

* Control sample is too small to use for comparison with the treated sample

NOTE: The actual sample size shown (n=xxx) for each group differs for each survey question because those who did not respond to the question are not included in RTI's tabulations.

Age

As shown, binge drinking rates among adults of legal drinking age (21-24) is substantially higher than that of underage adults (17-20). But these earlier results were of combined treated and control data. In order to assess whether the *That Guy* campaign is correlated with lower binge drinking levels among the 21-24 year olds, Fleishman-Hillard compared data from the treated installations with that of the control installations.

The results show that (Table 7):

- Among those of legal drinking age, there is no difference in the levels of binge drinking at the treated versus control installations.
- Among minors, the incidence of binge drinking is lower among those located at the treated installations.

Table 7.
Binge Drinking Rates at Treated and Control Installations: by Age

	17-20		21-24	
	Treated (n=1,735)	Control (n=505)	Treated (n=1,821)	Control (n=606)
Did not drink	52%	43%	19%	14%
Drink, not binge drink	12%	16%	21%	26%
Binge drink	36%	41%	60%	60%

NOTE: The actual sample size shown (n=xxx) for each group differs for each survey question because those who did not respond to the question are not included in RTI's tabulations.

Attitudes Toward Drinking

“Please indicate how much you agree or disagree with each of the following statements: Others in my pay grade at this installation believe drinking to the point of losing control is acceptable.”

One quarter (25%) of the target group agree with the statement, “Others in my pay grade at this installation believe drinking to the point of losing control is acceptable.”

Q.49i *Others in my pay grade at this installation believe drinking to the point of losing control is acceptable.*

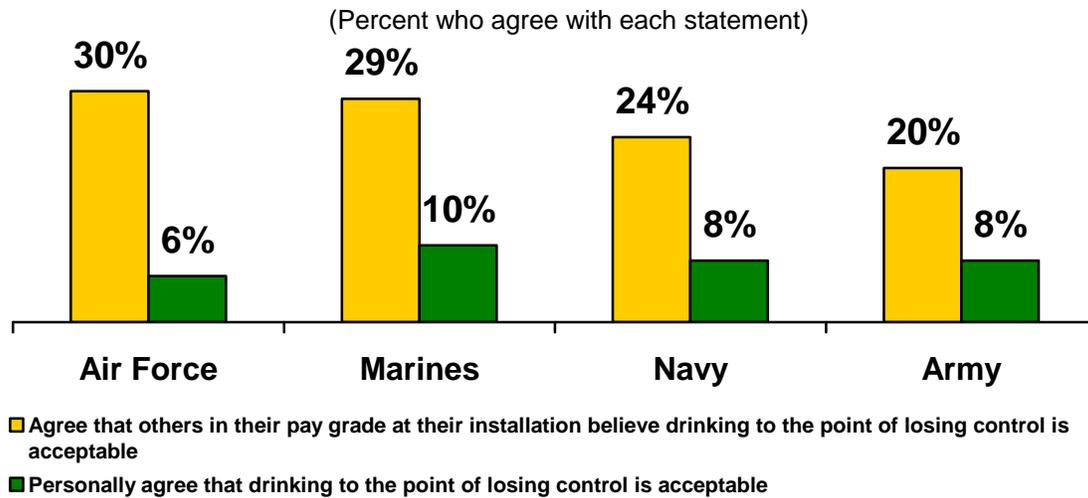
8%	Strongly agree	} 25%
17%	Agree	
23%	Disagree	
30%	Strongly disagree	
19%	Don't know	

Interestingly, only 8% of personnel agree or strongly agree that it's acceptable to drink to the point of losing control (a separate question, Q49h, that assessed respondents' **own** personal perspective), but they are more likely to agree or strongly agree (25%) that their peers (those of the same pay grade within their installation) believe it's acceptable to drink to the point of losing control. Clearly there is a difference in perception between what personnel say their attitude toward excessive drinking is versus what they think their peers' attitudes are toward drinking.

Branch of service

Junior-enlisted Marines are most likely to agree that drinking to the point of losing control is acceptable – be it their own perspective (10%) or their perception of what their peers think (29%). (Figure 1.) This reinforces the finding that Marines have the highest incidence of binge drinking among junior-enlisted personnel.

Figure 1.
**Percent of Each Branch of Service Who Agrees/
 Strongly Agrees With Attitude Statements**



Personnel from treated installations are *less likely* than personnel from control installations to agree that their peers believe drinking to the point of losing control is acceptable. This finding may indicate that the *That Guy* campaign is helping to change perceptions that the military culture accepts this type of behavior (Table 8).

Table 8.
Percent Who Agree With the Statement
“Others in my pay grade at this installation believe drinking to the
point of losing control is acceptable”
by Branch and Treated Versus Control

	Army		Air Force		Navy		Marines	
	Treated	Control	Treated	Control	Treated	Control	Treated	Control
<i>(Percent who agree)</i>								
<i>(n=)</i>	795	178	544	465	454	318	1,214	2
Strongly agree	7%	10%	8%	9%	6%	9%	9%	--
Agree	12%	15%	18%	25%	15%	18%	20%	--
Total	19%	25%	26%	34%	21%	27%	29%	--

NOTE: The actual sample size shown (n=xxx) for each group differs for each survey question because those who did not respond to the question are not included in RTI's tabulations.