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Correlates of Drinking Problems and Knowledge of Alcohol among Collegians over Time: Implications for Education

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Introduction

Over the past ten years there has been increased attention in the area of college students drinking.[10,12] There have been several studies concerning college students drinking patterns and problems during this decade.[1,4,6,14-19] A few reports concerning student's knowledge about alcohol and drinking myths during this time period have also been carried out.[3,5,11,17]

Reports over the past decade have indicated that various demographic factors such as sex, race, GPA, year in school, major, importance of religion and religion are related to drinking patterns and problems[1,4,6-9,14-18]. Only a few of these reports have investigated these variables in relationship to knowledge of alcohol and trends in drinking patterns and problems over time[3,5,14,15]. Information concerning patterns of drinking and myths concerning drinking, particularly in terms of various demographic variables over time, would be useful for college alcohol educators to help ascertain what populations of students might need extra educational targeting and what myths might need additional educational focus. This information would also be useful to college administrators as an aid in developing drinking policy and program planning.

Thus the purpose of this report is to compile and discuss data analyzed by the authors concerning the drinking patterns, problems and knowledge of alcohol among a sample of college students from throughout the United States in 1984-1985 compared with a sample drawn from the same universities and colleges in 1982-1983.[14-16,20]

Methodology

An anonymous pre-coded instrument The Student Alcohol Questionnaire [2] which has been used in previous studies concerning college student drinking patterns and knowledge about alcohol was used. The instrument includes demographic items, questions regarding consumption of alcohol and 36 alcohol knowledge questions. Instructions explaining the voluntary nature of participation in the study as approved by the Indiana

University Human Subjects Committee was also included on the instrument.

The statistical procedures of t-test and Chi square analysis were accomplished by using the SPSS(Statistical Package for the Social Sciences)

Sample

The questionnaire was administered to students at 72 of the 82 colleges (87.8%) from throughout the United States that had participated in a similar study conducted about two years earlier by the authors.[10] Thus the same instrument was used in both time periods at the same 72 colleges.

The sample was drawn, as was done about two years earlier, from in-class administration in survey type sociology and health or physical education courses that had a high probability of containing students from every academic major and class year.

Results

Demographic Composition

The response rate exceeded 98% and, with the exception of females, the demographic composition of the resulting samples closely approximated that of students attending four-year institutions of higher learning in the United States[19]. Sixty-four percent were females and 36% were males, while 92% were whites and 8% blacks. Eighty-nine percent attended public and 11% attended private institutions. The regional distribution was as follows; North East, 29%; North Central, 26%; South, 25%; and West, 20%. Academic majors were social science (including pre-professional), 22%; arts and humanities, 8%. education, 20%, health related majors, 16%; science and engineering, 76%; business, 18%; and other majors 8%. While females were over-represented, their proportion in both samples in the two time periods were similar (63% vs 60%). The other demographic characteristics were also highly comparable. The total number of students completing the questionnaire in 1983 was 4885 and in 1985, 4226

General

There were no significant changes in the percentage of drinkers or heavy drinkers over time.(Table I) There was, however, a significant ($p < .05$) decrease in the mean number of problems (3.0 vs 2.8) out of the 18 consequences of drinking as listed in table II.[a]

There was a significant ($p < .05$) decrease in the percentage of students who exhibited four drinking related

problems including two drinking and driving issues. (See Table II).

Out of 36 possible correct answers, between the two time periods, a mean of 20.9 for the 1983 group and 21.3 for the 1986 group was found. This represented a significantly higher ($p <$ time period.[20]

Many students adhered to common myths about alcohol. However, for eight, or 22%, of the items there was a significant increase in the percentage of students who correctly answered them during the second time period (see Table III).[20]

Sex

There was no significant change over time concerning the quantity and frequency of drinking among males (Table I) nor was there any change in the mean number of problems between the two time periods(3.9 vs 3.8).

There was a significant decrease ($p < .05$) in five alcohol related problems including all three drinking and driving items(Table II).[16] There was a significant ($p < .01$) increase in the total mean score for males between the two time periods(21.5 vs 22.1).[20]

For Females there was no significant change in drinking patterns between the two time periods (Table I). Likewise, there was no change in the mean number of drinking related problems experiences by females between the two time periods (2.5 vs 2.4).

There was, however, a significant decrease ($p < .05$) in two alcohol related problems during the time periods (Table II[b]).[16] There was no difference in the mean knowledge score between the two time periods (20.5 vs 20.8).[20]

Race

Among Whites there was no significant difference between quantity-frequency drinking patterns between the two time periods (Table I). There was a significant ($p < .05$) decrease in the mean number of alcohol problems experienced over time however.(3.3 vs 3.1).

Among Whites there was a significant decrease in the percentage of students who exhibited four alcohol related problems including the three drinking and driving related items (Table II[b]).[16] There was a significantly higher ($p < .01$) mean alcohol knowledge score at the second time period for whites(21.4 vs 21.7)[20]

Class

For all four class levels there was no significant change in quantity-frequency drinking patterns (Table I). For Freshmen there was a significant decrease ($p < .01$) between the time periods (3.0 vs 2.7) in the mean number of problems which they had experienced but not for the other class groups.

For each class level there were some significant decreases in the percentage who exhibited problem behaviors, namely, four for Freshmen, three for Sophomores, two for Juniors and two for Seniors. Freshmen over the two time periods had a decrease in all three drinking problem items (Table II).[14]

There was a significantly higher ($p < .05$) mean score for Juniors at the second time period but not for the other class levels (21.9 vs 22.2).[20]

Grade Point Average

Students with GPA's of 4.0 had significantly ($p < .05$) different drinking patterns between the two time periods. However, there was no difference within the other GPA levels. There was a significant ($p < .01$) decrease in the mean number of problems between the two time periods for GPA 4.0, 3.5, and 3.0.

Other than for the 3.0 GPA students who had a significant ($p < .001$) decrease in all three drinking and driving related issues there were only a few decreases for the 3.5 and 2.5 GPA levels.[16] There was no significant difference between the two time periods for the mean alcohol knowledge score between any of the GPA levels.[20]

Importance of Religion

There was a significant decrease ($p < .05$) in heavy drinking among those to whom religion was not important. There was no significant difference ($p < .05$) in the mean number of problems for either group.

Among those for whom religion was important there was a significant decrease ($p < .05$) in all three drinking and driving related problems.(Table II[a])[15]

There was no significant difference in mean alcohol knowledge score between the two time periods for students to whom religion was and was not important.[20]

Religion

There was a significant decrease ($p < .05$) for Protestants for whom drinking is allowed and significant increase ($p < .05$) among Jews for heavy drinking between the two time periods.(Table I). There was a significant decrease among Protestants to whom drinking is allowed (3.3 vs 3.0) and among Jews in the mean

number of problems reported between the two time periods.

Only among Roman Catholics and Protestants to whom drinking is allowed was there a significant decrease ($p < .05$) in problem drinking items. Both of these groups had a decrease in the percentage which had become involved with all three drinking and driving items(Table II) [15] Between the time two period there was only a significant difference between mean scores among Roman Catholic students (21.4 vs 21.8).[20]

Discussion and Recomendations

Among the total sample of students there appears to be little difference in the drinking patterns between the two time periods. Among the 18 alcohol related problems there was a decrease in the three drinking and driving variables namely: driving a car after drinking, driving after knowing they had too much to drink and drinking while driving. There was an increase in the proportion of drinkers who reported cutting class because of drinking or a hangover. There was no change between the two time periods for the other items. There was however an increase in alcohol knowledge between the two time periods and in particular for several drinking and driving related items.

For Blacks and those with a 4.0 GPA there was an increase in heavy drinking. There was a decrease in heavy drinking among those to whom religion was not important and protestants who drink. There were no other changes between the two time periods for the other sub-groups. For specific problems related to drinking there was a decrease, primarily in the drinking and driving items among males, whites, Roman Catholics, those to whom religion is not important, Protestants who do drink, Freshmen and those with 3.0 GPA's.

It is interesting to note that the most heavily drinking sub-groups increased their knowledge concerning alcohol, and in particular drinking and driving myths, and exhibited a decrease in drinking and driving related problems over the same time period whereas there was little change in the other groups. However, it needs to be kept in mind that this group already had a higher level of alcohol knowledge as measured by the questionnaire compared to the other groups. It appears on the surface that this group, because they acquired more knowledge concerning drinking, decreased their negative drinking and driving patterns. However, these results bring up more questions than answers as research over the years in health education has consistently shown that gain in knowledge does not necessarily change behavior.

It is interesting to speculate why this dramatic change occurred among the more heavy drinking group for the drinking and driving items only. Perhaps educational programs both on the campus and in the mass media were aimed at these groups specifically, and in particular white males who have the most problem. Other factors in the student's environment including

campus policy and programming which often include negative sanctions, peer pressure and the prohibition of alcohol on campus may also have had an effect. The continuous bombardment by the mass media over the past five years aimed at the drinking driver may have also contributed to this change in these sub-groups group alone and did not effect the groups less likely to exhibit the behavior.

In view of the fact that Blacks and Jews and those who had a GPA of 4.0 had an increase in heavy drinking, it is suggested that more effort needs to be made with this population. This increase could be due to a couple of factors. The sample size of these populations were only a few hundred students which may have resulted in a statistical significant difference due to more apparent variations. The high GPA students may heavy drink to relieve stress, and an increase of heavy drinking among Jewish and Black students may be the result of increased assimilation into the dominant white culture which already has much heavier drinking patterns. More research needs to be carried out on these groups to ascertain if they are continiously increasing their heavy drinking patterns.

In view of the results of this study it is recommended that further research be carried out to target specific problem drinking groups to ascertain the most effective combination of methods which not only affect knowledge but behavior.

It is also recomended that educators concerned with college and university alcohol programming and policies, as part of their baseline data collection in the "needs assessment" phase of the program, also, include a knowledge portion along with behavior data. A change in levels of knowledge could be used as one of the indicators as to the effectiveness of their campus program and policy. A knowledge survey could also help to ascertain the most prevalent drinking myths on the campus to which concentrated effort to change them then could be made.

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TABLE I: Quantity Frequency of alcohol consumption over time among various demographic variables in Percent

"Abstainer" = Has not consumed alcohol within the past year or ever. "Heavy Drinker" = Drinks 6 or more drinks at least once a week or 3 or 4 drinks every day

	Abstainers		Heavy Drinkers	
	1983	1985	1983	1985
SEX				
Males	13.2	13.3	33.5	32.8
Females	19.3	20.6	13.1	13.8
RACE				
Whites	14.1	15.2	22.9	22.2
Blacks	41.5	39.5	4.4	12.5+
CLASS				
Freshmen	18.8	22.2	24.7	23.0
Sophomores	16.4	17.8	21.4	24.6
Juniors	17.3	15.9	19.5	20.2
Seniors	14.0	13.1	17.3	14.3
GPA				
4.0	27.6	22.3	12.1	30.7+
3.5	22.1	22.6	12.3	11.8
3.0	15.5	17.1	20.6	18.4
2.5	14.3	15.4	23.9	25.2
2.0	19.0	16.8	29.1	27.5
<2.0	12.9	16.5	38.7	41.8
IMPORTANCE OF RELIGION				
Very	21.0	20.8	17.7	20.0
Not	7.1	10.5	29.5	23.6*
RELIGION				
R. Catholic	8.8	9.9	25.5	27.6
Prot-Drink	12.3	13.8	23.6	19.6+
Prot-No Drink	42.2	39.7	10.6	10.6
Jews	9.1	14.8	12.8	22.6+
TOTAL	17.0	18.0	21.1	21.2

+ $p < .05$ * $p < .001$

Table II.[a] Percentage of students reporting drinking problems in two time periods by total group and importance of religion.

	Total		Importance of Religion			
			Very		Not	
Drinking Problems	1983	1985	1983	1985	1983	1985
Hangover	72.8	72.8	64.1	62.2	74.6	75.9
Vomited	45.7	46.8	38.8	39.9	45.6	48.6
Drive car after drinking	60.0	54.5*	49.7	46.6	62.1	55.5*
Drive car after knowing had too much to drink	41.2	37.2*	34.0	29.9	42.5	38.3+
Drink and drive at same time	48.2	39.6*	38.7	32.8+	49.0	40.9*
Came to class drunk	8.4	8.7	5.0	6.8	7.8	8.0
Cut class after drinking	9.0	10.4+	5.7	6.3	9.1	11.6
Missed class because of hangover	23.5	26.5	19.1	19.9	24.1	27.0
Arrested for DWI	1.4	1.2	1.2	1.6	1.4	0.9
Criticized by someone concerning your drinking	11.5	10.7	9.0	9.6	12.0	10.9
Trouble with the law	4.5	3.9	2.9	2.0	4.1	3.6
Lost job	0.6	0.3	0.6	0.6	0.6	0.3
Low grade	4.8	6.0+	3.0	4.7	5.4	5.8
Problems with school administration	2.2	1.8	1.5	1.8	2.1	1.5
Fight after drinking	16.9	12.0	9.4	8.5	12.3	11.9
Think have problem	9.5	8.1+	7.6	5.4	8.4	8.1
Damage to university property	9.6	9.5	6.8	7.3	10.3	9.3

+ = $p < .05$ * = $p < .001$ Adapted from Information in Reference #15

TABLE 11[b]

Percentage of Students Reporting Drinking Problems in Two Time Periods by Sex and Race

	Sex				Race			
	Male		Female		White		Black	
Drinking Problem	1983	1985	1983	1985	1983	1985	1983	1985
Hangover	76.2	78.2	70.4	69.4	75.2	74.8	43.3	46.2
Vomited	49.6	51.7	42.9	43.8	47.3	48.2	26.9	26.3
Drove car after drinking	72.2	67.7+	51.4	46.2+	62.4	56.0+	32.2	31.6
Drove car after knowing had too much to drink	53.9	48.9+	32.2	29.9	43.3	38.7+	19.2	14.0
Drunk while driving	63.1	54.0+	37.8	30.5+	50.3	40.7+	27.2	24.0
Come to class after drinking	12.2	13.0	5.8	6.0	8.5	8.7	6.1	7.0
Cut class because of drinking	12.3	14.7	6.6	7.7	9.1	10.6	4.9	8.2
Missed class because of drinking	26.1	31.1+	21.6	23.7	24.6	27.7+	9.8	10.5
Stopped for DWI	2.0	1.7	.8	.9	1.3	1.1	1.2	0.0
Criticized by friend for drinking too much	15.1	13.9	8.9	8.8	11.7	10.8	9.1	8.8
Had trouble with law	8.3	7.1	1.8	1.9	4.7	4.0	2.5	1.2
Received lower grade	5.9	7.8	3.9	4.8	4.9	6.0	2.5	4.7
Problems with school administration	3.4	3.0	1.2	1.0	2.1	1.8	2.0	.6
Gotten into fight	16.8	18.1	8.4	8.2	12.3	12.1	7.3	10.5
Thought have drinking problem	13.2	11.0	6.8	6.3	9.7	8.1*	6.1	5.3
Lost job	.8	.2*	.4	.4	.5	.2	1.2	.6
Damaged school property	17.6	18.3	3.9	4.1	9.9	9.7	4.1	4.7

* $p < .05$ +$p < .01$

[b] Adpated from: Hanson, DJ, Engs, RC. Correlates of drinking problems among collegians. Coll Stud J. in press, Fall 1986

Table II[C]

	Class							
	Freshman		Sophomore		Junior		Senior	
	83	85	83	85	83	85	83	85
Hangover	71.7	71.3	74.5	74.4	73.2	72.5	73.5	73.8
Vomit	51.0	52.0	45.9	51.8+	43.9	40.2	39.1	40.9
Driv af dri	59.9	50.0*	59.6	56.0	60.6	57.3	61.2	55.6+
Driv aft kno dri too mu	43.2	34.7*	40.5	38.1	41.7	40.2	38.9	35.9
Drink & driv	50.6	38.5*	48.2	43.3+	47.2	38.9+	46.4	36.3*
Class drunk	9.3	10.8	5.9	7.7	9.3	8.1	9.5	7.3
Cut class aft dri	6.9	9.2	7.7	11.1+	11.5	11.4	11.7	10.3
Missed class - hangover	14.14	20.6*	27.5	30.0	29.1	28.3	27.0	28.1
Arrested DWI	1.4	.8	1.9	1.8	1.4	.8	.5	1.2
Criticized	13.4	13.4	11.2	11.4	11.7	9.2	8.4	8.0
Trouble with law	6.3	5.4	4.2	4.5	4.4	2.5	2.6	2.7
Lost job	1.1	0.0+	.4	.4	.5	.3	.4	.6
Low grade	4.2	6.2	5.3	8.1+	6.5	4.9	3.2	4.0
Problem with sch admin	3.1	3.0	2.0	2.4	1.6	1.5	1.5	1.7
Fight after drinking	14.2	14.3	11.8	14.5	12.5	10.1	8.4	7.6
Think have problem	8.4	8.9	9.0	7.1	11.4	7.9+	10.3	8.5
Damaged univ prop	11.5	11.0	10.0	11.2	8.2	8.3	7.5	6.8

* $p < .001$

+ $p < .05$

TABLE II[d]

Percentage of Students Reporting Drinking Problems in Two Time Periods by Grade Point Average

	4.0		3.5		3.0		2.5		2.0		2.0	
Drinking Problem	1983	1985	1983	1985	1983	1985	1983	1985	1983	1985	1983	1985
Hangover	71.1	52.9*	66.2	63.2	74.4	73.5	73.5	77.3*	76.5	77.0	70.9	73.0
Vomited	30.1	33.3	40.6	36.6	46.5	45.3	46.6	52.3+	49.9	53.9	58.2	61.9
Drove car after drinking	51.8	35.6	55.2	49.3	60.6	51.5+	62.0	60.7	62.0	63.6	69.6	63.5
Drove car after knowing had too much to drink	34.9	24.1	34.1	28.2*	40.8	34.3+	43.7	43.7	46.5	47.3	51.9	54.0
Drunk while driving	33.7	27.6	38.3	27.6+	47.9	35.8+	53.2	49.3	55.8	49.8	54.4	50.8
Come to class after drinking	9.6	10.5	7.5	5.7	7.9	8.6	9.1	9.5	8.6	10.6	13.9	14.3
Cut class because of drinking	3.6	6.9	5.3	7.1	8.0	8.6	11.0	13.6	13.2	14.5	13.9	15.9
Missed class because of drinking	10.8	20.9	15.8	16.9	21.5	24.2	29.4	31.8	31.9	35.0	30.4	44.4
Stopped for DWI	3.6	.0	1.7	1.0	.9	1.0	1.4	1.5	1.9	1.1	1.3	4.8
Criticized by friend for drinking too much	11.9	14.0	10.5	9.6	11.1	9.8	11.6	11.1	14.2	13.8	12.7	14.3
Had trouble with law	7.1	2.3	2.8	2.9	3.6	3.9	4.8	3.9	7.4	5.3	10.1	6.3
Received lower grade	4.8	3.5	3.0	1.9	3.5	5.0	5.6	8.1*	9.9	8.8	13.9	19.0
Problems with school administration	2.4	2.3	1.4	2.1	1.8	1.3	2.0	1.5	4.0	3.2	5.1	6.3
Gotten into fight	10.8	12.6	8.9	6.9	11.1	10.9	13.6	14.9	16.0	15.0	16.2	19.0
Thought have drinking problem	11.9	9.3	7.0	6.5	9.9	7.3+	9.1	8.6	11.4	8.5	16.5	28.6
Lost job	3.6	1.2	.8	1.0	.5	.3	.4	.1	.3	.0	1.3	.0
Damaged school property	8.5	4.7	7.0	6.5	9.0	8.5	9.9	11.3	14.1	14.1	17.7	14.3

* $p < .05$ + $p < .01$

[d] Adapted from: Hanson DJ, Engs RC. Correlates o drinking problems among collegians. Coll Stud J in press. Fall 1986

Table II[e]

	Religion									
	Roman Catholic		Protestant (Drinking)		Protestant (No Drinking)		Jewish		Other	
	83	85	83	85	83	85	83	85	83	85
Hangover	77.2	76.5	73.9	71.2	61.6	67.0	62.9	66.7	68.0	76.3
Vomit	47.4	51.1	46.9	43.3	39.5	44.0	45.9	38.5	40.8	49.3
Drive Car	61.7	54.6*	62.1	55.5+	54.8	50.2	50.6	51.3	56.0	57.3
Know Dri. Dr.	41.4	37.4+	43.3	39.1+	39.1	33.3	30.0	30.8	39.2	36.8
Drk. & Dri.	49.9	40.5*	50.1	38.9*	45.9	40.6	31.2	26.7	43.8	42.7
Class Drunk	8.2	8.8	8.3	8.9	6.6	7.8	12.4	5.0	12.0	11.0
Cut Class	9.1	11.7+	8.9	9.9	7.2	8.2	9.4	9.4	10.0	10.0
Missed Class	23.9	29.9*	25.3	25.2	20.1	21.3	20.6	23.9	18.5	25.1
DWI	1.1	1.3	1.2	.8	2.5	1.3	1.8	2.6	1.6	.9
Criticized	10.9	10.9	11.5	10.8	13.9	12.2	7.1	4.3	13.2	9.5
Law	4.1	4.1	4.3	3.6	5.9	3.1	3.6	3.4	7.0	5.5
Job	.5	.3	.3	.2	1.1	.7	1.2	0.0	1.2	.5
Grade	4.5	5.5	5.1	6.0	5.7	7.3	3.6	.9	3.9	8.2
Adm.	1.8	2.5	2.0	1.4	2.8	.9	2.4	.9	3.1	.9
Fight	11.3	12.8	12.5	11.3	11.4	11.1	9.4	5.1	15.9	15.5
Prob.	10.5	8.1+	9.2	8.6	8.2	7.3	8.3	4.3	8.5	8.7
Damage	9.7	10.4	9.5	9.8	7.4	7.4	10.7	6.0	12.0	8.7

* $p < .001$
\+ $p < .05$

TABLE III: Percent of students at both time periods indicating they agree with the statement. [a]

Question	1983	1985	X^2
Drinking milk slows absorption of alcohol.	**54.2**	**46.0**	**39.7***
Wines are made by fermenting grains.	26.4	27.3	.6
Alcoholic beverages do not provide weight increasing calories	4.4	4.6	.1
In America drinking is usually considered an important socializing custom.	92.0	92.1	1.7
Gulping of alcoholic beverages is a commonly accepted drinking pattern in this country.	48.5	49.8	1.2
Alcohol is usually classified as a stimulant.	**29.5**	**26.6**	**8.7***
Alcohol is not a drug.	**7.1**	**5.1**	**14.0***
A blood alcohol concentration of 0.1% is the legal definition of intoxication in most states.	**75.8**	**81.0**	**25.7***
Approximately 10% of fatal highway accidents are alcohol related.	49.2	47.7	1.2
Alcohol was used for centuries as a medicine in childbirth, sedation, and surgery.	91.2	90.7	.3
Table wines contain from 2-12% alcohol by volume.	**90.3**	**88.3**	**5.7***
Approximately 85% of the adult Americans who drink misuse or abuse alcoholic beverages.	65.2	64.8	.1
Many people drink to escape from problems, loneliness and depression.	97.0	97.0	.0
Liquor mixed with soda pop will affect you faster than liquor drunk straight.	17.1	16.9	.0
The most commonly drunk alcoholic beverages in the U.S. are distilled liquors (whiskey, gin).	**36.2**	**31.7**	**11.9***
To keep his blood alcohol concentration below the legally intoxicate level, a 150 pound person would have to drink less than 3 beers in an hour.	76.2	78.4	3.6
A person cannot become an alcoholic by just drinking beer.	5.4	4.3	4.9

[a] Adpated from: Engs RC,Hanson DJ. Correlates of Alcohol Knowledge Among College Students: 1983-1985

	1983	1985	X^2
Drinking of alcohol has been common in the U.S. since the Puritans settled here.	77.6	76.8	.4
Alcohol has only been used in a very few societies throughout history.	6.1	5.7	.1
Liquor taken straight will affect you faster than liquor mixed with water.	82.4	80.3	4.6

* $p < .05$

	1983	1985	X^2
To prevent getting a hangover one should sip his drink slowly, drink and eat at the same time, space drinks over a period of time, and don't over drink for your limit.	**88.5**	**90.3**	**6.2***
Responsible drinking can result in relaxation; enhanced social interactions, and a feeling of well being.	84.0	82.2	4.1
Distilled liquors usually contain about 15-20% alcohol by volume.	**27.6**	**34.1**	**26.6***
Moderate consumption of alcohol beverages is generally not harmful to the body.	58.9	60.5	2.0
It takes about as many hours as the number of beers drunk to burn up the alcohol ingested.	65.7	68.2	3.5
An ounce of whiskey contains about 60 calories.	52.7	54.9	1.4
Many people drink for social acceptance, because of peer group pressures, and to gain adult status.	98.0	97.7	.9
A blood alcohol concentration of .02 causes a person to be in a stupor.	37.3	37.1	.9
Liquors such as gin, scotch, and whiskies are usually distilled from mashes made from fermenting grains.	93.5	93.6	.0
Proof on a bottle of liquor represents half the per cent of alcohol contained in the bottle.	49.1	50.6	1.2
The U.S. lacks a national consensus on what constitutes the responsible use of alcohol.	77.9	77.7	.0
There is usually more alcholism in a society which accepts drunken behavior than in a society which frowns on drunkeness.	**65.9**	**61.5**	**13.5***
Beer usually contains from 2-12% alcohol by volume.	84.4	82.5	3.6
Eating while drinking will have no effect on slowing down the absorption of alcohol.	11.5	11.8	.1
Drinking coffee or taking a cold shower can be an effective way of sobering up.	**30.9**	**22.1**	**81.1***
Wines have always been commonly drunk at religious ceremonies and family gatherings.	97.3	96.6	3.3