

Alcohol usage, attitudes, and beliefs

An analysis of undergraduate students at
Case Western Reserve University

A Capstone Presentation
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Financial Interest Disclosure

I hereby disclose that I have no financial relationship with any commercial interest related to the research presented herein, as required by the Accreditation Council for Continuing Medical Education.

Who am I?

- Master of Public Health Candidate
 - Concentration: Population Health Research
- Background
 - Master of Arts, Bioethics, CWRU
 - Bachelor of Arts, Philosophy, CWRU
- Housing and Residence Life
 - Assistant Coordinator of Residence Education
 - Refuge Coordinator
 - Resident Assistant
 - Residential Program Centers Assistant

Objective

To describe alcohol usage and attitudes among undergraduate students at Case Western Reserve University

Why collegiate alcohol use?

- We all “know” about alcohol use in college, but what do we really know?
- As a residence life paraprofessional, I deal with alcohol usage on a daily basis.
- There is a difference between belief, fact, and anecdote.

Alcohol Usage Prevalence

- Drinking among college students is pervasive. National studies indicate:
 - Annual drinking prevalence of 85%
 - 30 day drinking prevalence of 70%
 - 14 day binge drinking prevalence of 40%
- Is this reflective of CWRU?

Effects of Alcohol Usage

- Estimates have suggested...
 - 1400 deaths
 - 500,000 injuries
 - 100,000 instances of sexual intercourse without consent
 - 630,000 instances of being assaulted, pushed, or hit...per year.
- All due to alcohol usage among the collegiate population.

Methods

- Survey Instrument (the AUBBS)
 - Alcohol Usage, Behaviors, and Beliefs Survey
- Survey administered online over two weeks in March 2009.
 - Students offered chance to participate via email invitation.
- Incentive drawing offered for ten \$20.00 gift cards to Starbucks or Chipotle.

The AUBBS

- 69 questions, approximately 10-15 minutes.
- Most questions are closed-response and multiple choice.
 - Students offered choice of non-response for all questions.
- Three main sections: Demographic Information, Alcohol Usage, and Policy and Enforcement.

Creating the AUBBS

- The AUBBS drew heavily from several sources, namely:
 - Campus Health Online Risk Evaluation Survey (CHORES)
 - Youth Risk Behavior Surveillance System (YRBSS)
 - National Collegiate Health Risk Behavior Survey (NCHRBS)
 - CAGE and AUDIT screening tools

Survey Population

- CWRU Undergraduate Program:
 - 4356 undergraduate students for 2008-2009
 - Students from 80 countries and all 50 U.S. states
 - Approximately 2800 students living on-campus
- Inclusion criteria:
 - Undergraduate student at CWRU
 - Age 18 or older

Response Rate

- 4021 students met the inclusion criteria and were invited to participate
- 1246 students began the survey (~30%)
- 1158 completed the survey (~93%)

Respondent Demographics

Sex

Male	52.4% (n=642)
Female	47.6% (n=584)

Residence

Dormitory or residence hall	62.5% (n=762)
Fraternity or sorority house	11.8% (n=144)
College-operated apartments	5.0% (n=61)
Off-campus housing	17.1% (n=209)
Parent or guardian's home	3.2% (n=39)
Other	.4% (n=5)

Greek

Yes	34.0% (n=412)
No	66.0% (n=800)

Respondent Demographics Part 2

Year in College	
1st	26.1% (n=320)
2nd	24.6% (n=302)
3rd	23.3% (n=286)
4th	23.0% (n=283)
≥5th	3.0% (n=37)

Average GPA	3.473 (n=1092)
GPA Range	2.000 - 4.000

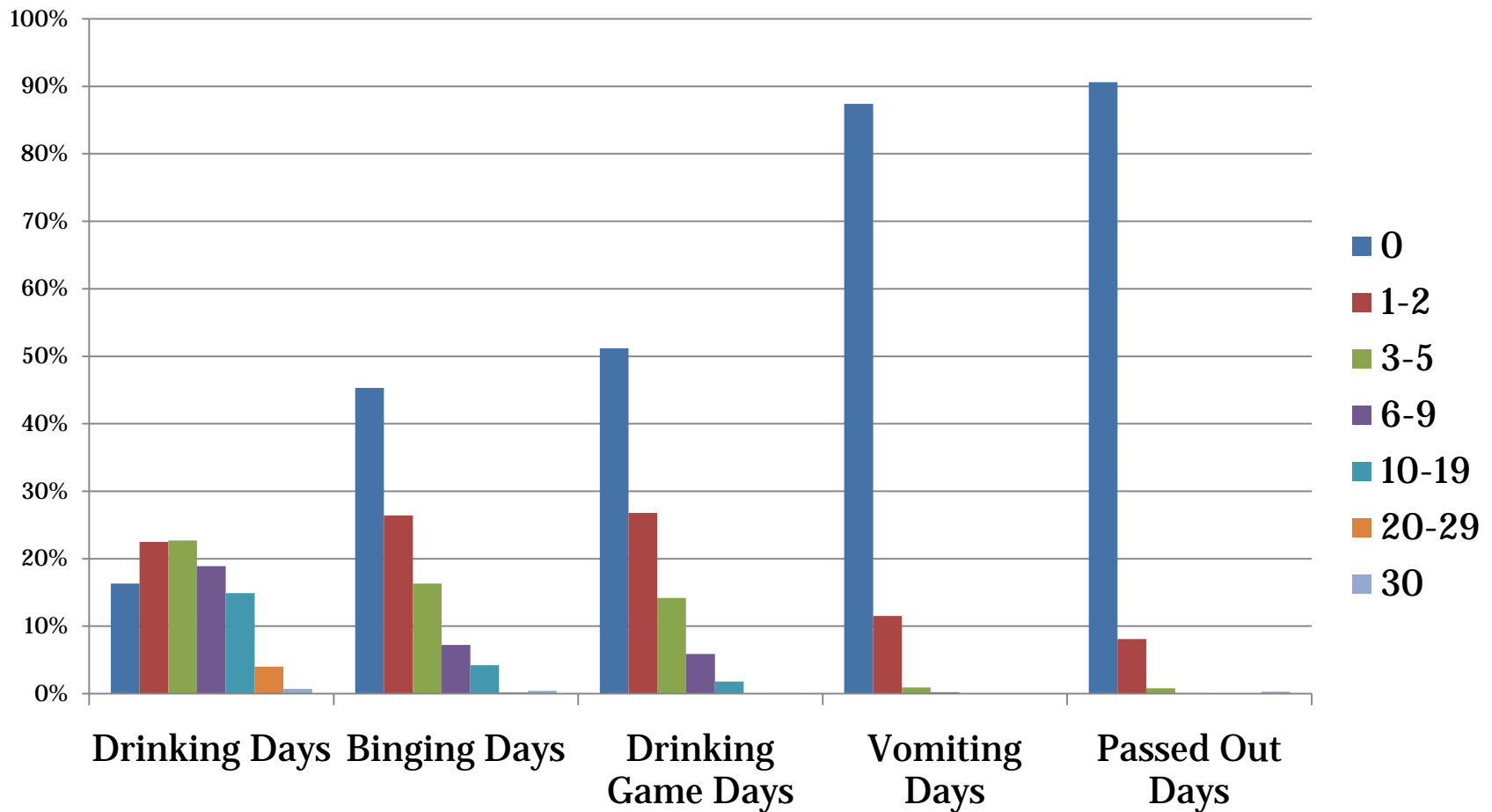
Average Credit Hours	16 (n=1162)
Credit Hour Range	0 - 29

Race and Ethnicity

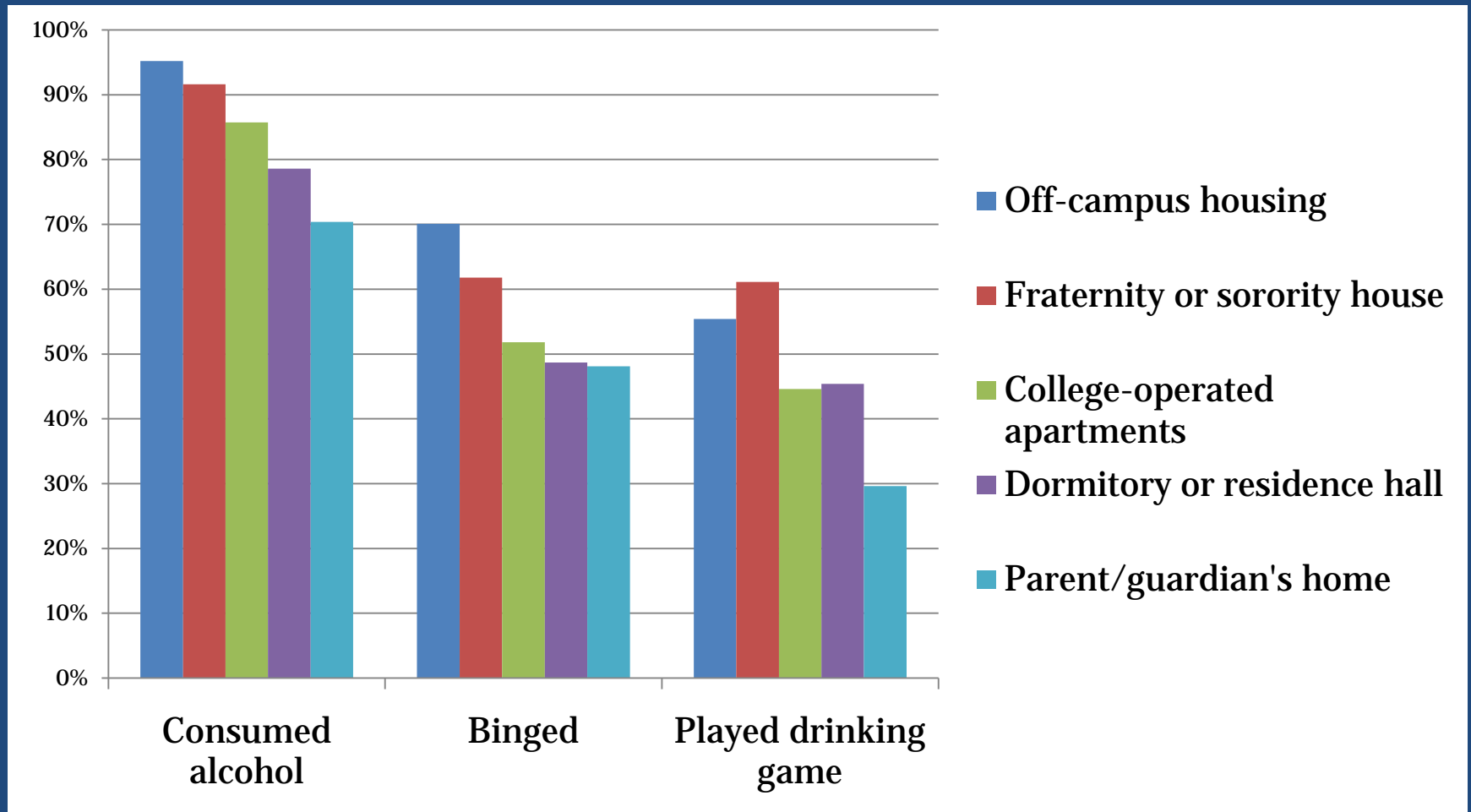
Racial/Ethnic Category	Survey Results	CWRU Demographic Information
White or Caucasian, non-Hispanic	76.96%	56.75%
Black or African American, non-Hispanic	2.52%	6.01%
Asian or Pacific Islander	14.80%	16.46%
Hispanic	2.19%	2.13%

- CWRU demographic information missing for ~600 students.
 - Possibly explains difference in percentages

Past 30 Day Drinking Behaviors



Residency effects on past 30 day drinking behaviors



Chi-square test result $p < .01$

Age effects on average drinking

Age	Percentage drinking two times per week or more on average	Percentage drinking five or more drinks per drinking day on average
18	13.90%	42.60%
19	23.20%	34.90%
20	22.30%	33.30%
21	41.10%	23.60%
≥22	42.70%	19.80%

Chi-square test result $p < .001$

AUDIT Results

- 36.7% of respondents (n=343) scored above the warning level on the AUDIT
- This level serves as an indicator “of hazardous and harmful alcohol use, as well as possible alcohol dependence”
- 11 students fell into AUDIT score range recommending immediate referral to specialist

Greek and non-Greek Drinking

Percentage of...	Overall	Among Greek students	Among non-Greek students	X² Sig
Students who regularly drink	65.6%	74.9%	60.1%	p<.001
Underage students who regularly drink	50.8%	66.7%	49.7%	p<.001

“Regular drinking” is defined as
2 times a month or more.

Greek Membership

- Greek chapter membership was associated with higher percentages of past 30 day participation in drinking, binge drinking, and drinking game participation ($p < .01$).
- This association was present even after excluding first-year students to attempt to control for age, but at lower significance ($p < .05$).

Other Greek Associations

- Greek students were more likely to:
 - disagree that underage drinking is an important issue ($p < .05$)
 - disagree that the institution should do more to stop underage drinking ($p < .01$)
 - have encountered an underage RA drinking at least once in their lifetime ($p < .001$)

Underage RA Drinking

- Student staff members at CWRU are known as Resident Assistants or RAs
- RAs are the primary enforcers of the alcohol policy at CWRU, but are also students themselves
- This can lead to RAs engaging in underage drinking

Underage RA Drinking Encounters

Encounters	On Campus	Off Campus
0	52.10%	58.40%
1-2	22.90%	17.60%
≥3	19.40%	17.50%

52.8% of the respondents had encountered an underage RA drinking at least once since enrollment

Open Response Answers to Underage RA Drinking

- “I often see RAs (both underage and otherwise) at parties.”
- “Happens all the time. They are human and want to have a life too.”
- “I’m an RA. This happens.”
- “RAs drink with their residents, but are much more responsible about it than school officials like to think.”
- “...the RAs frequently drank, including the alcohol they had confiscated from other students.”
- “I drink with one of my good friends who is an underage RA.”
- “Some of the people I regularly drink with are RAs.”
- One student reported the name of a current staff member, which is not reproduced here for ethics reasons.

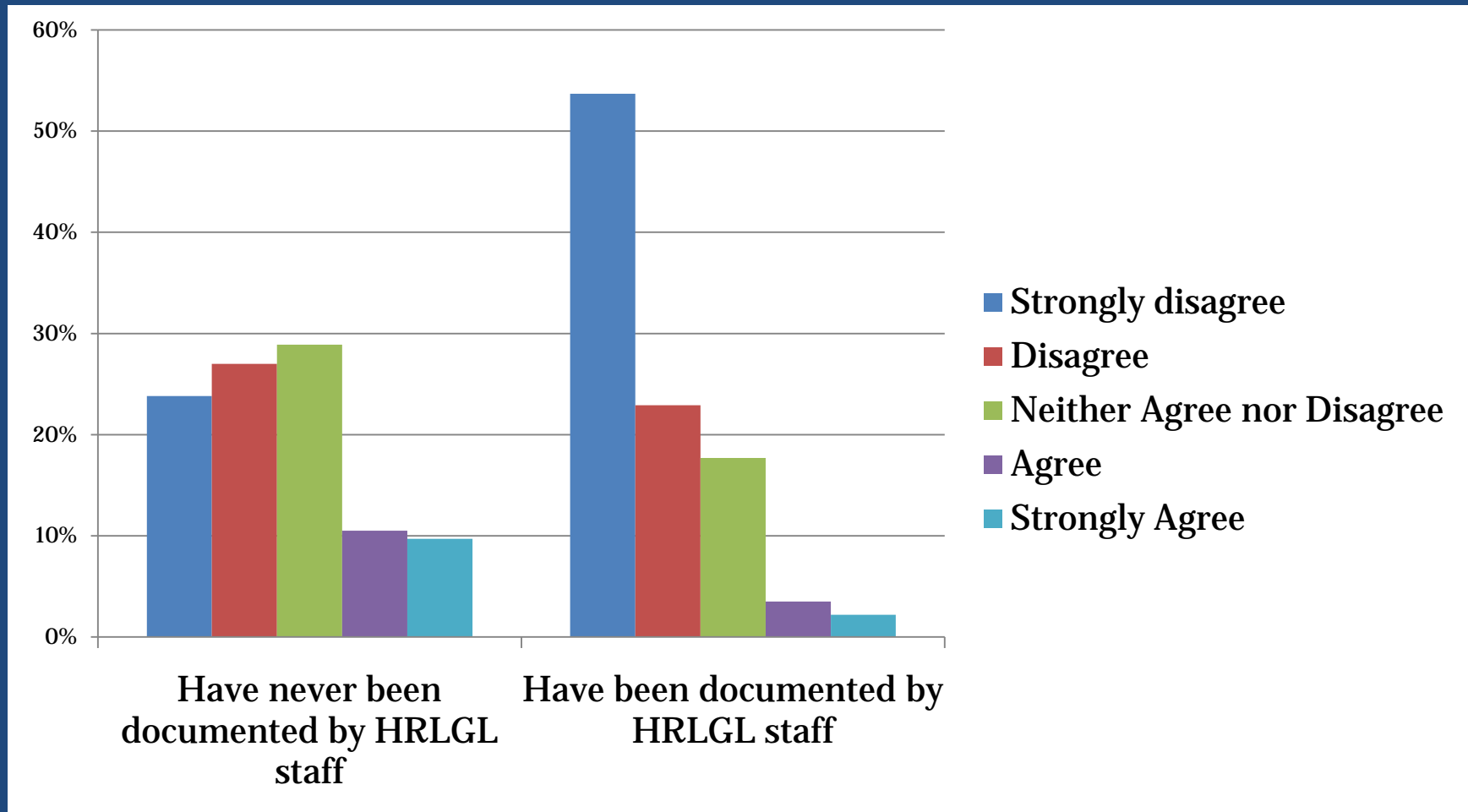
Past Underage RA Drinking Encounter

- Associated with year in college, Greek membership, and residency (all $p < .001$).
- Third-year students most likely (63.4% of third-year students, $n=163$)
- First-year students had the lowest percentage of encounter (37.5% of first-year students, $n=107$).

Attitudes on RA Ethics and Drinking

- “The best Resident Assistants engage in or permit underage drinking.”
 - Agree: 12.20%
 - Neutral: 34.50%
 - Disagree: 53.40%
- “A person can be a good Resident Assistant while engaging in or permitting underage drinking.”
 - Agree: 43.40%
 - Neutral: 25.70%
 - Disagree: 31.00%

Effect of being documented for alcohol consumption



“CWRU should do more to stop underage drinking”

Chi-square test result $p < .001$

Discussion

- The AUBBS is exploratory in nature
- The prevalence of students reporting encountering underage RAs drinking is ethically problematic at best
- Greek students and those living off-campus appear to use alcohol more frequently than their peers

Policy Implications

- Clear need for continued surveillance of the population
 - Beliefs and anecdotes make terrible policy
 - Impossible to assess any other policy changes or interventions without further data
 - Currently have incomplete information (the AUBBS can be improved)
 - Cannot establish temporal connections with a cross-sectional tool

Policy Implications

- More stringent selection process for RAs or more serious consequences for RA underage drinking
 - Treat RAs more like employees and less like students
 - Each RA has an individual narrative but giving this too much weight may damage our credibility
 - Seriously undermines effectiveness of interventions

Policy Implications

- The Greek community represents a special population in terms of alcohol usage
 - More stringent enforcement is possible, but at the cost of chapter autonomy
 - Greater education efforts are possible, but may have limited effectiveness
 - Greeks play a central role in drinking at CWRU
 - Specifically address them!

Strengths

- Sample size (n=1246)
- Preliminary measurement of social and institutional factors leading to alcohol usage
- Represents initial step at evaluating existing interventions (Resident Assistants and the Student Conduct System)

Limitations

- Timing
- Response bias
- Social desirability or undesirability bias
- Flawed definition of binge drinking

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Questions?