

**Hazardous alcohol consumption among third level students; what are the gender differences and second-hand effects associated with its use?**

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# Background

- ▶ Problem alcohol use is an on-going, worldwide phenomenon of considerable concern accounting for 3.2% of all deaths worldwide [1]
- ▶ Young adults aged between 18 and 25 report “high rates of alcohol consumption, including heavy episodic (binge) drinking” [2]
- ▶ The third-level student population represent a unique subsection of society within this population. Here a culture of hazardous alcohol consumption, defined as “a pattern of alcohol consumption that increases the risk of harmful consequences for the user or others” [3] exists

1. World Health Organisation. Management of Substance Abuse – The global burden. 2013 [Cited 2018 Jun September]; Available from: [http://www.who.int/substance\\_abuse/facts/global\\_burden/en/](http://www.who.int/substance_abuse/facts/global_burden/en/)

2. Carey KB, Scott-Sheldon LAJ, Carey MP, DeMartini KS: **Individual-level interventions to reduce college student drinking: A meta-analytic review.** *Addictive Behaviors* 2007, 32(11):2465–2494.

3. Babor TF, Higgins-Biddle JC, Saunders JB, Monteiro MG: **The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care.** In: Edited by Dependence DoMHAS, Second Edition, edn. Geneva, Switzerland: World Health

# Background

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- ▶ Hazardous alcohol use is not a solitary risk taking behaviour among students

- ▶ Drug use
- ▶ Smoking
- ▶ Sexual health



- ▶ Previously, research has found stark differences in the volume of alcohol consumed by men and women
- ▶ More recently however, a shift in norms has been observed with some studies finding women drinking as much as men

# In the news...

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*“Female University Students Bigger Binge Drinkers Than Males, Research Shows”* (Huffington Post, UK, 2013)

*Study: College Women Binge Drink More Often Than Men* (U.S. News, 2013)

*Universities ignoring binge drinking culture and failing to protect students' wellbeing, say teachers* (Independent, UK, 2013)

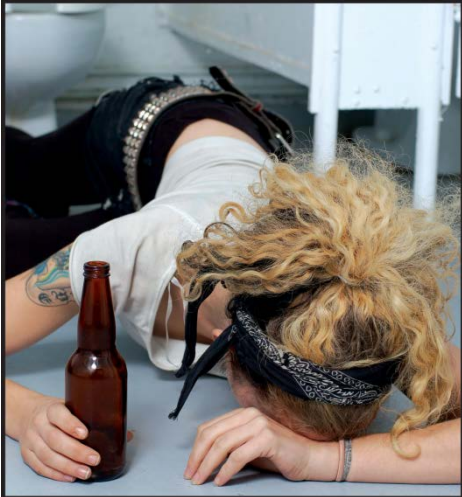
# Aim

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*As norms continue to be reconstructed, the aim of this study is to investigate the prevalence of hazardous alcohol consumption and the risk factors associated with its use among third level students. Particular interest is placed on gender differences among hazardous alcohol consumers given the conflicting evidence in the literature*



- ▶ Undergraduate students registered to one Irish university were eligible to take part in the study
- ▶ Cross-sectional study design
- ▶ Aailed of previously validated instruments

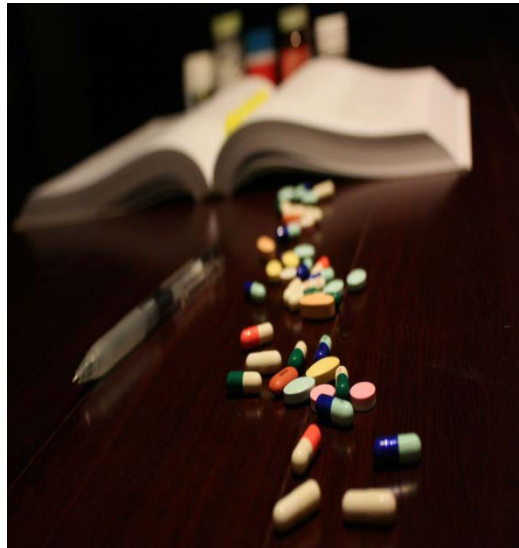


This isn't what they meant by "on-campus accommodation."

— You always have a choice —



For facts about alcohol, visit [healthysask.ca](http://healthysask.ca)



# Methods

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- ▶ Sample size calculation
  - ▶ 72.8% prevalence of hazardous alcohol consumption
  - ▶ 1.5% precision
  - ▶ 95% confidence intervals
- ▶ Lecturers contacted and a date and time agreed between the 12<sup>th</sup> and 23<sup>rd</sup> of March 2012
- ▶ Students initially briefed on aims, objectives along with its confidential, anonymous and voluntary nature
- ▶ A response rate for those in attendance and those registered was recorded



# Methods

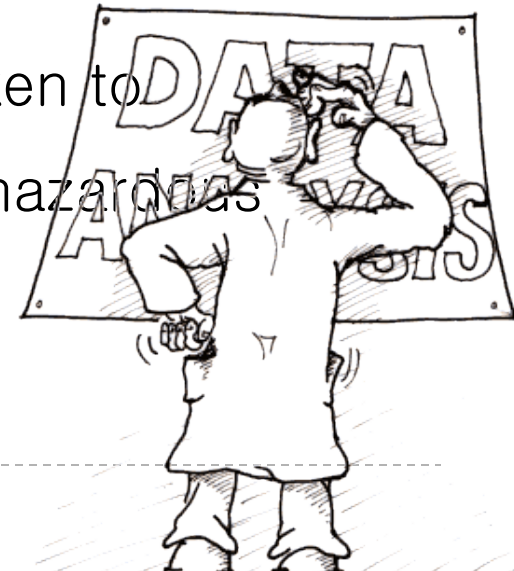
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- ▶ 2,332 students
- ▶ 51% response rate based on list registered to specific modules
- ▶ 84% response rate based on those in attendance
- ▶ Results from 2,275 undergraduate students included in analysis

# Statistical analysis

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- ▶ Scores were computed in accordance with guidelines:
  - ▶ AUDIT-C – Alcohol Use Disorders Identification Test for Consumption
    - ▶ Cut-off of 6 among males and 5 among females
  - ▶ BMI – Body mass index
  - ▶ IPAQ – International Physical Activity Questionnaire
- ▶ Multivariate logistic regression was undertaken to investigate the risk factors associated with hazardous alcohol consumption



# Results

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- ▶ The majority of respondents to the survey were female (>60%)
- ▶ On average **two-thirds (66.4%)** of those surveyed reported hazardous alcohol consumption.
- ▶ Male and female hazardous alcohol consumers differed across faculty, college year, type of accommodation, body mass index, smoking, drug use and number of sexual partners

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- ▶ HAC's were more likely to report a wide range of second-hand effects of their alcohol consumption than their non-HAC peers
    - 'Getting into a fight'
    - 'Missing days from work or college'
    - Unprotected/unintended sex

# Among hazardous alcohol consumers....

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## Males

- ▶ 27.4% reported 'getting into a fight'
- ▶ 40.5% reported 'drinking harmed their work or studies'
- ▶ 60.3% reported missing days from work/study due to alcohol consumption
- ▶ 16.8% reported unprotected sex
- ▶ 19.2% reported unintended sex
- ▶ 26.8% reported having a one night stand

## Females

- ▶ 19.9% reported 'getting into a fight'
- ▶ 42.7% reported 'drinking harmed their work or studies'
- ▶ 57.4% reported missing days from work/study due to alcohol consumption
- ▶ 13.8% reported unprotected sex
- ▶ 17.4% reported unintended sex
- ▶ 16.5% reported having a one night stand

Table 2: Multivariate Logistic Regression: Risk factors associated with hazardous alcohol consumption

		Controlling for age and Gender	
		OR	95% CI
<b>Smoker</b>	<i>No</i>	1.00	
	<i>Yes</i>	<b>3.10</b>	<b>2.41-3.98*</b>
<b>Drug use</b>	<i>No</i>	1.00	
	<i>Yes</i>	<b>2.47</b>	<b>1.99-3.06*</b>
<b>No. of sexual partners</b>	<i>None</i>	1.00	
	<i>1-3</i>	<b>3.42</b>	<b>2.70-4.34*</b>
	<i>4-5</i>	<b>5.57</b>	<b>3.90-7.95*</b>
	<i>6 or more</i>	<b>7.00</b>	<b>4.92-9.96*</b>
<b>Faculty</b>	<i>Science &amp; Engineering</i>	1.00	
	<i>Arts/Social Science/Education</i>	1.04	0.83-1.31
	<i>Law &amp; Business</i>	<b>2.18</b>	<b>1.63-2.92*</b>
	<i>Health &amp; Welfare</i>	1.20	0.89-1.62
	<i>Other</i>	1.50	0.70-3.23
<b>College Year</b>	<i>First</i>	1.00	
	<i>Second</i>	1.13	0.91-1.4
	<i>Third</i>	1.12	0.88-1.44
	<i>Fourth</i>	<b>1.72</b>	<b>1.19-2.50*</b>

\* Age, gender, accommodation type, college year, faculty, BMI, physical activity, smoking, drug use and no. of sexual partners entered into the initial model

# Conclusion

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- ▶ The findings highlight the high levels of alcohol consumption among third level students with two-thirds of students consuming alcohol at hazardous levels
- ▶ In contrast to previous research, the pattern of hazardous alcohol consumption was broadly similar in men and women

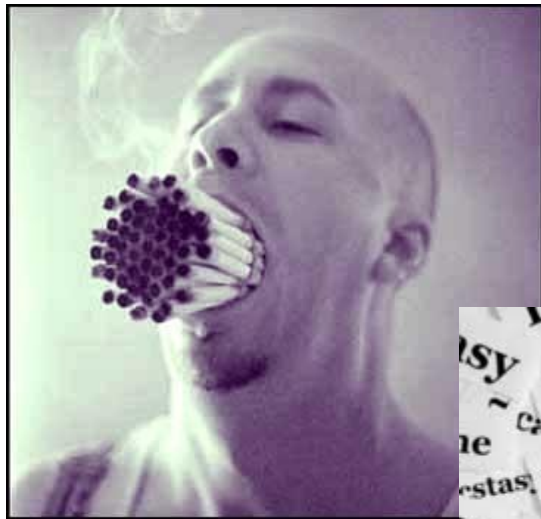


- ▶ Hazardous alcohol consumption leads to a significant number of second-hand effects





- ▶ Hazardous alcohol consumption is associated with smoking, recreational drug use and an increasing number of lifetime sexual partners



# Conclusion

- ▶ It is most likely that these figures underestimate the prevalence of hazardous alcohol consumption (4,5)



- ▶ Hazardous alcohol consumption among third-level students is an unrelenting issue, which has continued to increase throughout the past number of decades despite increased public health efforts

4. Kypri K, Stephenson S, Langley J: **Assessment of nonresponse bias in an internet survey of alcohol use.** *Alcoholism: Clinical and Experimental Research* 2004, **28**(4):630–634
5. Kypri K, Paschall MJ, Langley J, Baxter J, Cashell-Smith M, Bourdeau B: **Drinking and Alcohol-Related Harm Among New Zealand University Students: Findings From a National Web-Based Survey.** *Alcoholism: Clinical and experimental*

**THANK YOU**

**GRACIAS**  
**ARIGATO**  
**SHUKURIA**

**JUSPAXAR**  
**DANKSCHEEN**  
**SPASSIBO**  
**SNACHALHYA**  
**HORON**  
**CHALTU**  
**TASHAKKUR ATU**  
**YAQHANYELAY**  
**CHALTU**  
**YUSPAGABATAM**  
**SHANYABAD**  
**MADEEJA**  
**MAITKA**  
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**MAKTEZ**  
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**ENONU**  
**MAKTEZ**  
**MINMONCHAR**  
**BOLZIN**  
**MERCI**

**GRAZIE**  
**MEHRBANI**  
**PALDIES**  
**MAAKE**  
**KOMAPSUMNIDA**  
**HERASTAWNY**  
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**GOZAIMASHITA**  
**EFCHARISTO**  
**AGUYJE**  
**FAKAAJE**  
**BAUKA**  
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**SAKCO**  
**LAH**  
**HERASTAWNY**  
**AGUYJE**  
**FAKAAJE**

