

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Hazardous alcohol consumption among university students in Ireland: a cross-sectional study
AUTHORS	Davoren, Martin; Shiely, Frances; Byrne, Michael; Perry, Ivan

VERSION 1 - REVIEW

REVIEWER	Richard Cooke Aston University, UK
REVIEW RETURNED	22-Jul-2014

GENERAL COMMENTS	<ol style="list-style-type: none"> 1. The title of this paper is uninformative. There are many papers that look at hazardous alcohol consumption in university students, the vast majority of which have used a cross-sectional design. I recommend identifying the location of research (i.e., Ireland) in the paper title to help differentiate this study from other papers in this area of research. 2. In the abstract and the 'What is already known on this subject section?' there is mention of anecdotal evidence. Please remove this phrase as there is plenty of actual evidence to support the authors' claims. 3. Given the use of hazardous drinking in the title of the paper I would remove all references to binge drinking throughout the paper. Hazardous drinking is already defined and it is confusing to switch between the two terms as they are not always used interchangeably by researchers. 4. The Introduction is quite general and seems to focus mostly on US data at the expense of European data. While there may not be much Irish data, what exists should be put into the foreground of this section, followed by European comparisons. Less focus on US data. 5. Where did the value of 72.8% prevalence of hazardous consumption come from in your sample size calculation? 6. Mention the 84% response rate in the strengths and limitations as opposed to the 51% per module rate. 7. Can you confirm that third-level institutions are universities? 8. Can you confirm that the 2.4% sampled from UCC were not also sampled in lecture theatres? 9. Why do you think that third year males and fourth year females were more likely to report HAC? There is no discussion of this finding in the discussion. <p>Typos & structure</p> <ol style="list-style-type: none"> 10. P5: 'The university student population represents a unique' 11. P5: The university student population represents a unique sub-section of society within this population; which population?
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	<p>12. P5: line 29: The sentence starting 'In U.S. studies...' is largely redundant as it reiterates results from the previous sentence. I recommend deleting this text.</p> <p>Interesting paper</p>
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REVIEWER	Melanie Kingsland The University of Newcastle, Australia
REVIEW RETURNED	25-Jul-2014

GENERAL COMMENTS	<p>1. Abstract – the use of the word anecdotal (line 5) is inappropriate and not necessary given that the authors have provided evidence from scientific studies to support growing evidence of a decreasing gap in risk of alcohol related harm between men and women (page 4, line 38).</p> <p>2. Abstract – line 39, the term “HAC pattern” is not defined and should be avoided.</p> <p>3. Abstract – line 47, “...the findings highlight the high prevalence of hazardous alcohol consumption amongst university students.” Compared to whom? Need comparisons groups – eg. general population, non-university students of similar age.</p> <p>4. Abstract – line 51, “...the true prevalence of HAS in this population is likely to be higher.” This may well be the case, but recommend removing assertions that are not evidence-based from the conclusions of the study.</p> <p>5. Strengths and limitations – line 43, please clarify whether you mean that the sample was representative on the university students from the university they were sampled from, or representative of university students more broadly – eg across Ireland, Europe, internationally.</p> <p>6. What is already know on the subject – line 56, to which younger age groups does this statement apply? Young people in Ireland, Europe, internationally?</p> <p>7. What is already know on the subject – (page 3) line 1, see comment one above regarding use of term anecdotal.</p> <p>8. Introduction – line 3, references 1-7 all relate to studies involving students and therefore are not appropriate to support a statement on worldwide alcohol use.</p> <p>9. Introduction – you need to include data on relative hazardous alcohol consumption rates amongst university students, young people who do not attend university and the overall population, to support the need for addressing hazardous alcohol consumption by university students.</p> <p>10. Introduction – line 40, “...reporting similar patterns in men and women.” Similar patterns of what? What measure? Also recommend including data to support such statements.</p> <p>11. Introduction – (page 5) line 5, what is the rational for study including two methods of data collection? There is no information provided in the introduction to support this aim. What is your related hypothesis? Given the limitations of the sample gained via the web-based method, recommend the authors reconsider the need for, and benefit of, including this data in the study.</p> <p>12. Introduction – overall the introduction does not provide evidence for a need for the study. Is the need based on an absence of data on hazardous drinking and associated factors amongst university students in Ireland, specifically? It is currently unclear.</p> <p>13. Methods and participants – line 42, just as the authors have compared the sample to the overall university population by gender</p>
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	<p>and degree programme, it would also be useful to compare the two groups by year in college given results showing association between this characteristic and hazardous alcohol consumption.</p> <p>14. Methods and participants – it is unclear as to whether individual students could have completed both the paper based and online survey. This needs to be clarified. If they could have completed both, then the internal validity of the study is compromised and this data should be excluded from the study.</p> <p>15. Results – line 19, are these results adjusted for age? If not, then recommend including adjusted results as well.</p> <p>16. Results – line 45, the results section should only include the results of the present study, leave any comparison to other studies until the discussion section.</p> <p>17. Results – (page 10)- line 34, the figures used to present the data for these measures are not very informative as they lack n values and precise percentages. Strongly recommend that this information be presented in tables with the full results of the analysis for each of the measures– at the moment only select data is provide.</p> <p>18. Results – Table 2, I do wonder if including the missing observations in the analysis whether this has affected the analysis and resultant p-values, making it difficult to interpret. What are the effects of removing these observations from the analysis?</p> <p>19. Results – Table 3, further analysis, such as stepwise logistic regression modelling, or multi-level modelling may assist in determining which of the many variables in the logistic regression are most strongly associated with the outcome of interest (hazardous drinking). Has such analysis been undertaken? If not, why not?</p> <p>20. Discussion – line 3, “These findings highlight the high prevalence of hazardous alcohol consumption...” As per comment 9 above, the authors need to include data on relative prevalence of hazardous alcohol consumption of other groups to support this statement.</p> <p>21. Discussion – line 5, the authors cannot claim that this study demonstrates a narrowing of the gender gap in relation to hazardous drinking and adverse consequences without providing data from a previous study in a comparable sample.</p> <p>22. Discussion – line 17, “It has been suggested that the threshold for hazardous drinking is too low.” and “...based on well-defined biological and behavioural effects of alcohol.” Please provide references and more detail to support your argument.</p> <p>23. Discussion – line 29, “Irish alcohol consumption is significantly higher than the OECD average, the United States and the United Kingdom”. Please provide references and data to support this statement, and please note that it would support your case for the need for this study to have some of this information provided upfront in the introduction, rather than waiting for the discussion.</p> <p>24. Discussion (third paragraph) – from line 40, you need to provide more information regarding the measures used in each of the studies that you mention here, in order to demonstrate that they are actually comparable to your study.</p> <p>25. Discussion – overall, the discussion lacks a “so what?” component – what does this study mean for policy and practice?</p> <p>The paper is generally well written and clear. The study is interesting, but whether it provides new information to fill a current gap in research evidence is unclear. The authors need to consider the need to include the web-based survey data as it does not appear to add anything to the paper, especially given its limitations. Further analysis of the data using stepwise logistic regression modelling or multi-level modelling would provide more depth to the results. The</p>
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	introduction and discussion are only half way there – more supportive evidence and policy/practice implication content need to be added.
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VERSION 1 – AUTHOR RESPONSE

Reviewer Name: Richard Cooke

Institution and Country: Aston University, UK

Please state any competing interests or state 'None declared': None declared

1. The title of this paper is uninformative. There are many papers that look at hazardous alcohol consumption in university students, the vast majority of which have used a cross-sectional design. I recommend identifying the location of research (i.e., Ireland) in the paper title to help differentiate this study from other papers in this area of research.

- The title has now been updated and reads "Hazardous alcohol consumption among university students in Ireland: a cross-sectional study"

2. In the abstract and the 'What is already known on this subject section?' there is mention of anecdotal evidence. Please remove this phrase as there is plenty of actual evidence to support the authors' claims.

- We accept this point. The phrase 'anecdotal' has now been removed.

3. Given the use of hazardous drinking in the title of the paper I would remove all references to binge drinking throughout the paper. Hazardous drinking is already defined and it is confusing to switch between the two terms as they are not always used interchangeably by researchers.

- The term binge drinking has been removed except from its use in the definition of hazardous drinking in AUDIT-C.

4. The Introduction is quite general and seems to focus mostly on US data at the expense of European data. While there may not be much Irish data, what exists should be put into the foreground of this section, followed by European comparisons. Less focus on US data.

- The authors note that they focused mostly on US data and have now reworded the introduction. In addition, we have referenced Irish and European research where available to highlight the breath of information in existence.

5. Where did the value of 72.8% prevalence of hazardous consumption come from in your sample size calculation?

- The prevalence was taken from an unpublished masters thesis at University College Cork. This now reads "We estimated the required sample size at 2,686 students, based on an undergraduate student population of 12,475, a required precision of 1.5% and an expected prevalence of hazardous alcohol consumption of 73%, based on an earlier unpublished masters dissertation."

6. Mention the 84% response rate in the strengths and limitations as opposed to the 51% per module rate.

- We have not fully implemented this recommendation as we feel the issue of response rate is not well addressed in existing literature. As this is critical to interpretation of the findings it should be highlighted in this section of the paper. We would hope in the future that all papers would provide data on response rates defined in terms of students registered and those in attendance at class. The strengths and limitations section now reads: "The overall response rate, defined in terms of students registered for specific modules was 51%. There was over-representation of first years and under-representation of fourth years. However, the response rate for those in attendance at lectures was 84%."

7. Can you confirm that third-level institutions are universities?

- Yes, in Ireland third-level institutions are universities and institutes of technology. The paper has been updated to reflect this.

8. Can you confirm that the 2.4% sampled from UCC were not also sampled in lecture theatres?

- The campus based survey was completed before the web-based survey. Students completing the web-based survey were advised not to return the questionnaire if they had previously completed the campus based survey. Thus it is unlikely that there is significant overlap between the web and campus based survey. It is clear that the core data upon which the paper is based has not been compromised by previous exposure to the web-based survey.

9. Why do you think that third year males and fourth year females were more likely to report HAC?

There is no discussion of this finding in the discussion.

- Thank you to the reviewer for this salient point. The second reviewer also noted this issue. The reason for this finding is unclear. However, there were as noted in the limitation section an under-representation of fourth year students in the survey which may have impacted on results.

Typos & structure

10. P5: 'The university student population representS a unique'

11. P5: The university student population represents a unique sub-section of society within this population; which population?

12. P5: line 29: The sentence starting 'In U.S. studies...' is largely redundant as it reiterates results from the previous sentence. I recommend deleting this text.

- Many thanks to the reviewers for these typos, tips and suggestions. The paper has now been updated to incorporate the above point.

Interesting paper

- Thank you for all your pertinent comments and constructive feedback.

Reviewer Name Melanie Kingsland

Institution and Country: The University of Newcastle, Australia

Please state any competing interests or state 'None declared': None declared

1. Abstract – the use of the word anecdotal (line 5) is inappropriate and not necessary given that the authors have provided evidence from scientific studies to support growing evidence of a decreasing gap in risk of alcohol related harm between men and women (page 4, line 38).

- This issue was also raised by the second reviewer. The article has been updated and the phrase 'anecdotal' removed.

2. Abstract – line 39, the term "HAC pattern" is not defined and should be avoided.

- The authors are in full agreement with the reviewer and have updated the text accordingly to define HAC pattern. It now reads as follows: "Students with a hazardous consumption pattern were more likely to report smoking, illicit drug use and one or more sexual partners in their lifetime".

3. Abstract – line 47, "...the findings highlight the high prevalence of hazardous alcohol consumption amongst university students." Compared to whom? Need comparisons groups – eg. general population, non-university students of similar age.

- The authors have now updated the article to the following: "The findings highlight the high prevalence of hazardous alcohol consumption among university students relative to the general population"

4. Abstract – line 51, "...the true prevalence of HAC in this population is likely to be higher." This may

well be the case, but recommend removing assertions that are not evidence-based from the conclusions of the study.

- This has now been removed from the conclusion

5. Strengths and limitations – line 43, please clarify whether you mean that the sample was representative on the university students from the university they were sampled from, or representative of university students more broadly – eg across Ireland, Europe, internationally.

- We have now updated the manuscript to clarify that the sample was representative of the university students they were sampled from stating: “In regard to gender and course of study, the study participants were broadly representative of the university undergraduate student population from which they were sampled”.

6. What is already know on the subject – line 56, to which younger age groups does this statement apply? Young people in Ireland, Europe, internationally?

- The text has now been updated to clarify this statement. The importance of contextualising the problem is crucial to good scientific writing. This now reads: “Internationally, levels of alcohol consumption among younger age groups have increased in recent decades”

7. What is already know on the subject – (page 3) line 1, see comment one above regarding use of term anecdotal.

- The article has been updated to remove the term anecdotal.

8. Introduction – line 3, references 1-7 all relate to studies involving students and therefore are not appropriate to support a statement on worldwide alcohol use.

- The authors have now updated the article to incorporate a more appropriate reference list. Thank you to the reviewer for this helpful comment.

9. Introduction – you need to include data on relative hazardous alcohol consumption rates amongst university students, young people who do not attend university and the overall population, to support the need for addressing hazardous alcohol consumption by university students.

- Thank you to the reviewer for this helpful advice. We have now updated the introduction to include information on relative hazardous alcohol consumption among university students, young people who do not attend university and the overall population. It now reads: “Previous research has reported lower levels of consumption among non university peers (36%) [11] and the general population (54%) [12]. In a number of countries, binge drinking has been identified as the number one substance abuse problem during university life [9, 13-15]”.

10. Introduction – line 40, “...reporting similar patterns in men and women.” Similar patterns of what? What measure? Also recommend including data to support such statements.

- The author has now updated the introduction to reflect a more contextually relevant background. This section now reads - “More recently however, international research has noted a shift in alcohol consumption among university students with some studies reporting similar patterns of hazardous drinking in men and women”

11. Introduction – (page 5) line 5, what is the rational for study including two methods of data collection? There is no information provided in the introduction to support this aim. What is your related hypothesis? Given the limitations of the sample gained via the web-based method, recommend the authors reconsider the need for, and benefit of, including this data in the study.

- We have included the web-based data on the request of the editors and in the revised manuscript we have expanded on this issue in the fourth paragraph.

12. Introduction – overall the introduction does not provide evidence for a need for the study. Is the

need based on an absence of data on hazardous drinking and associated factors amongst university students in Ireland, specifically? It is currently unclear.

- This section has now been extensively edited in line with reviewer comments, providing a more specific introduction for the reader. In particular we have flagged that it has been 10 years since the last definitive study of university drinking has been carried out and an update is required.

13. Methods and participants – line 42, just as the authors have compared the sample to the overall university population by gender and degree programme, it would also be useful to compare the two groups by year in college given results showing association between this characteristic and hazardous alcohol consumption.

- When year in college was compared to that of the institution sampled it was found that the study sampled had more first years (46.8% vs. 30.4%) and less fourth year students (7.7% vs 15.8%). These data have now been incorporated into the paper.

14. Methods and participants – it is unclear as to whether individual students could have completed both the paper based and online survey. This needs to be clarified. If they could have completed both, then the internal validity of the study is compromised and this data should be excluded from the study.

- The paper based survey was delivered to students via classroom before sending each registered student an e-mail link to their university e-mail account. All participants of the paper-based survey had been advised that a web-based survey would follow. This was further emphasised in e-mail correspondence to all students. This has been outlined as follows: “Students completing the web-based survey were advised not to return the questionnaire if they had previously completed the campus based survey.”.

15. Results – line 19, are these results adjusted for age? If not, then recommend including adjusted results as well.

- In the revised manuscript we have presented prevalence data for both surveys stratified by age.

16. Results – line 45, the results section should only include the results of the present study, leave any comparison to other studies until the discussion section.

- The authors agree that comparison to other studies should occur in the discussion. This reference has now been removed.

17. Results – (page 10)- line 34, the figures used to present the data for these measures are not very informative as they lack n values and precise percentages. Strongly recommend that this information be presented in tables with the full results of the analysis for each of the measures– at the moment only select data is provide.

- The authors recognise the need to informative tables and figures. We have now updated the figure to a table with numbers and percentages.

18. Results – Table 2, I do wonder if including the missing observations in the analysis whether this has affected the analysis and resultant p-values, making it difficult to interpret. What are the effects of removing these observations from the analysis?

- The missing data was not included in the analysis but instead included for the reader’s information. However, the authors now agree that this may make it difficult for the reader to interpret and have instead removed these observations from the paper.

19. Results – Table 3, further analysis, such as stepwise logistic regression modelling, or multi-level modelling may assist in determining which of the many variables in the logistic regression are most strongly associated with the outcome of interest (hazardous drinking). Has such analysis been undertaken? If not, why not?

- In response to this comment the authors have revised Table 3. The table now shows findings

adjusted for age, findings adjusted for university level effects and findings adjusted for other significant factors.

20. Discussion – line 3, “These findings highlight the high prevalence of hazardous alcohol consumption...” As per comment 9 above, the authors need to include data on relative prevalence of hazardous alcohol consumption of other groups to support this statement.

- The need to compare results to different groups is imperative and the authors have updated the opening page of the discussion to adopt your advice. It reads: “Alcohol consumption has been noted as the number one public health problem facing universities [45]. Previously, significant differences were observed among male and female students in the CLAN survey [9]. In a more recent study from University College Cork using the same screening tool this discrepancy between males (82%) and females (71%) was observed [31]. The current research suggests that the prevalence of alcohol consumption in Irish university students (based on self report) is broadly similar to levels observed in British students using the AUDIT scale [7] but significantly higher than those observed in the US [6]”.

21. Discussion – line 5, the authors cannot claim that this study demonstrates a narrowing of the gender gap in relation to hazardous drinking and adverse consequences without providing data from a previous study in a comparable sample.

- Highlighting the change in gender difference through comparison to a similar study is upmost importance. Thus, the authors have reference and detailed an unpublished master’s thesis carried out in the same institution, with the same measure in 2010. This research found a significant gender difference in hazardous alcohol consumption highlighting the changing norms among Irish university students.

22. Discussion – line 17, “It has been suggested that the threshold for hazardous drinking is too low.” and “...based on well-defined biological and behavioural effects of alcohol.” Please provide references and more detail to support your argument.

- The authors have now updated the article to include references to the articles which support our argument. Thank you to the reviewer for noting this shortcoming in the article.

23. Discussion – line 29, “Irish alcohol consumption is significantly higher than the OECD average, the United States and the United Kingdom”. Please provide references and data to support this statement, and please note that it would support your case for the need for this study to have some of this information provided upfront in the introduction, rather than waiting for the discussion.

- The authors have now updated both the introduction and discussion sections of the article to incorporate your comment. Irelands unique relationship with alcohol is evident in many European studies. As students exhibit higher levels of consumption than the general population it is important to monitor their prevalence.

24. Discussion (third paragraph) – from line 40, you need to provide more information regarding the measures used in each of the studies that you mention here, in order to demonstrate that they are actually comparable to your study.

- The authors agree with the importance of comparing equivalent research and have updated the text throughout the discussion section to reflect your advice.

25. Discussion – overall, the discussion lacks a “so what?” component – what does this study mean for policy and practice?

- Following discussion we have updated the discussion section and have concluded with “Hazardous alcohol consumption continues to be a public health issue in Irish university students, both in terms of immediate adverse consequences and long term risks to physical, mental and social health and wellbeing. Currently the Irish state is at a decision point with regard to policies on the promotion and marketing of alcohol. The findings from this study highlight the need for effective public policy

measures in response to this issue such as a minimum unit price for alcohol and a ban on sports sponsorship”.

The paper is generally well written and clear. The study is interesting, but whether it provides new information to fill a current gap in research evidence is unclear. The authors need to consider the need to include the web-based survey data as it does not appear to add anything to the paper, especially given its limitations. Further analysis of the data using stepwise logistic regression modelling or multi-level modelling would provide more depth to the results. The introduction and discussion are only half way there – more supportive evidence and policy/practice implication content need to be added.

VERSION 2 – REVIEW

REVIEWER	Melanie Kingsland The University of Newcastle, Australia
REVIEW RETURNED	16-Sep-2014

GENERAL COMMENTS	<p>1. Introduction (page 6, line 10): “...higher in younger age groups...” please provide data to support this statement.</p> <p>2. Introduction (page 6, line 17): “...culture of hazardous consumption...” please provide data to support this statement and to allow comparison to data provided for non-university peers and the general population in the proceeding sentences.</p> <p>3. Introduction (page 6, line 21): “...levels of consumption...” what measures are used to define levels of consumption? Number of drinks? Drinking at risky levels?</p> <p>4. Introduction (page 6, line 36): “...high levels of alcohol consumption...” as above, what measures are used to define levels of consumption? And please provide data to support your statement.</p> <p>5. Introduction (page 6, line 40): “...there is a need for contemporary data...” It would be helpful to include a statement here about why such data is required and how it could be used.</p> <p>6. Introduction (page 7, line 30): “...conflicting results across classroom based and web-based data collection procedures are observed.” So why do you want to use these two methods?</p> <p>7. Methods and Participants (page 9 line 17): “Students completing the web-based survey were advised not to return the questionnaire if they had previously completed the campus based survey.” This new information highlights more problems with the web-based data and my advice is to not including these data in the paper. The consent rate for the web-based survey was probably affected by the fact that a number of these students would have already completed the classroom based survey – but there is no way of you knowing this and reporting this information. In addition, as the two modes of survey delivery were not offered concurrently you are not testing mode preference nor are you able to accurately compare the two groups as you do in the results. It is unknown as to whether the web-based survey group are students that don’t attend class and therefore didn’t do the class-room based survey, or are students that are happy to fill out a web-based survey, but declined the classroom one. All of these unknown factors make it difficult to meaningfully assess the data.</p> <p>8. Methods and Participants (page 9 line 49): What is meant by sexual health? Safe sex practices like condom use or being sexually active which is what you report in your results?</p> <p>9. Results (Table 1 and page 12): as per comment 7 above, I recommend not including the web-based survey data and think that it is inappropriate to compare the two groups.</p>
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	<p>10. Discussion (Page 15, paragraph 2): The information in this paragraph is better suited to the introduction section as it does not actually consider the present study.</p> <p>11. Conclusion (Page 18): I think you need to include some 'so what?' implications of the findings in relation to characteristics associated with HAC, such as being sexually active, or the gap closing between male and female HAC.</p> <p>The authors have carefully considered reviewer comments and made many positive changes to the manuscript.</p>
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REVIEWER	Richard Cooke Aston University, UK
REVIEW RETURNED	18-Sep-2014

GENERAL COMMENTS	Happy with the changes made by authors
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VERSION 2 – AUTHOR RESPONSE

Reviewer Name Melanie Kingsland

Institution and Country: The University of Newcastle, Australia

Please state any competing interests or state 'None declared': None declared

1. Introduction (page 6, line 10): "...higher in younger age groups..." please provide data to support this statement.

We have reviewed this sentence. It now reads: "University students represent a unique subsection of society. [9] In this environment, there is a culture of hazardous alcohol consumption [10], defined as "a pattern of alcohol consumption that increases the risk of harmful consequences for the user or others" [11]. The findings from the 2002-03 College Lifestyle Attitudinal National Survey in Ireland indicated that at least 60 in every 100 drinking occasions among students involved hazardous alcohol consumption [10]. This suggests hazardous alcohol consumption is a cultural norm among university students in Ireland."

2. Introduction (page 6, line 17): "...culture of hazardous consumption..." please provide data to support this statement and to allow comparison to data provided for non-university peers and the general population in the proceeding sentences.

This has been dealt with in the sentence above and in the sentence which cites reference 8 and 12.

3. Introduction (page 6, line 21): "...levels of consumption..." what measures are used to define levels of consumption? Number of drinks? Drinking at risky levels?

This is measured using units with high levels of consumptions characterised as binge drinking. The second reviewer noted confusion between binge drinking and hazardous drinking so the article has refrained from the use of 'binge drinking' and been updated to read: "In Ireland, levels of harm caused by alcohol use have been found to be higher in younger age groups [9] with those aged between 18 and 25 reporting high volumes of alcohol consumption [4, 10, 11]."

4. Introduction (page 6, line 36): "...high levels of alcohol consumption..." as above, what measures are used to define levels of consumption? And please provide data to support your statement.

Referenced reports apply the AUDIT-C scale and making this a hazardous pattern of alcohol consumption. The article now reads "Previous research using the AUDIT-C scale has reported lower levels of hazardous consumption among non university peers (36%) [13] and the general population (54%) [8]."

5. Introduction (page 6, line 40): "...there is a need for contemporary data..." It would be helpful to include a statement here about why such data is required and how it could be used.
The paper has now been updated to expand on this point reading "However, these data were collected over 10 years ago and there is a clear need for contemporary Irish data as our government attempt to tackle this issue".

6. Introduction (page 7, line 30): "...conflicting results across classroom based and web-based data collection procedures are observed." So why do you want to use these two methods?
Following reviewer comments web-based data has been removed

7. Methods and Participants (page 9 line 17): "Students completing the web-based survey were advised not to return the questionnaire if they had previously completed the campus based survey." This new information highlights more problems with the web-based data and my advice is to not including these data in the paper. The consent rate for the web-based survey was probably affected by the fact that a number of these students would have already completed the classroom based survey – but there is no way of you knowing this and reporting this information. In addition, as the two modes of survey delivery were not offered concurrently you are not testing mode preference nor are you able to accurately compare the two groups as you do in the results. It is unknown as to whether the web-based survey group are students that don't attend class and therefore didn't do the classroom based survey, or are students that are happy to fill out a web-based survey, but declined the classroom one. All of these unknown factors make it difficult to meaningfully assess the data. The web-based data has now been removed and the aim of the paper reworded to "the aim of this study was to investigate the prevalence of hazardous alcohol consumption and the adverse consequences associated with its use among university students in Ireland, with particular reference to gender differences"

8. Methods and Participants (page 9 line 49): What is meant by sexual health? Safe sex practices like condom use or being sexually active which is what you report in your results?
The questionnaire collected information on both safe sex practices and number of sexual partners. The methods and participants section has now been updated to reflect this. It now reads "In addition, questions on smoking status [37], drug use [38], sexual practice and activity [11], diet and self-reported height and weight [38] were taken from the national survey on health and lifestyle in Ireland [38] and previous university research [11, 37]."

9. Results (Table 1 and page 12): as per comment 7 above, I recommend not including the web-based survey data and think that it is inappropriate to compare the two groups.
As stated above, we have now removed the web-based data on your recommendation. Both tables and text have been updated.

10. Discussion (Page 15, paragraph 2): The information in this paragraph is better suited to the introduction section as it does not actually consider the present study.
This paragraph has now been edited into the introduction section of the article. The first paragraph now reads "Problem alcohol use is an on-going, worldwide phenomenon of considerable concern [1-4]. Ireland displays a unique relationship with alcohol with significantly higher intakes than the OECD average [5], the United States [6] and the United Kingdom [7]. In addition, the Eurobarometer study noted that Irish adults reported hazardous drinking more frequently than any other EU country [2]. Recently it was reported that 54% of Irish adults reported HAC using the same screening tool as the current study [8]"

11. Conclusion (Page 18): I think you need to include some 'so what?' implications of the findings in

relation to characteristics associated with HAC, such as being sexually active, or the gap closing between male and female HAC.

In the revised manuscript we have highlighted the 'extremely' high prevalence of hazardous alcohol consumption in men and women and have expanded in more detail on the narrowing of the gender gap. These are importance practical issues that are of direct relevance to practice and policy.

We wish to thank Dr. Melanie Kingsland, Dr. Richard Cooke and Dr. Richard Sands for their detailed and constructive comments on this manuscript.

Martin P. Davoren

& on behalf of Dr Frances Shiely, Dr. Michael Byrne & Professor Ivan J. Perry