Reviewer's report

Title: Evaluation of drinking patterns and their impact on alcohol-related aggression: a national survey of adolescents behaviours

Version: 2 Date: 14 June 2013

Reviewer: Anna-Karin Danielsson

Reviewer's report:

The manuscript targets important issues regarding adolescent alcohol consumption and aggressive behavior. However, in its present form, it has some minor and major issues that may prevent it from being published.

Major Compulsory Revisions

1. Introduction: This section consists of method, description of the measures used, as well as the study objective separately described in two different paragraphs. The authors need to structure the introduction and focus on the measures being used.

2. It is unclear whether this is a pure validation study (comparing different consumption measures) or in fact a study on risk factors for alcohol and aggression.

3. Also, the certain risk and protective factors presented under “Other variables” are not mentioned; thus raising the question of why these specific factors were chosen. Furthermore, those particular factors have been extensively studied and are already well documented.

4. Method: It is not clear how this measure was summarized, i.e., except for the binge-question, the authors only report questions on frequency- what about volume of alcohol having been consumed?

5. The section about Alcohol-related aggression is unclear; is “experienced physical fighting” equal to having been in a fight or can it also compose those individuals who have been watching a fight?

6. Considering the response categories being 0-40+ times, the dichotomization raises the question of distribution and mean?

7. It is unclear how the “other variables” were categorized.

8. Results: Figure 1; the authors state that “Perception of intoxication occurred infrequently (2%) but increased to 16% when associated with binge drinking” – this could be clarified. When looking at the figure it seems that out of the 16 % reporting perceived intoxication (a remarkably low number?), only 2 % report this without binge-drinking? And; were there 27 % or 41 % who reported binge-drinking?

9. The section about “Drinking patterns”, as well as Figure 2, could be clarified; for example the authors state that “DI pattern exhibited 21% variance and also a
negative correlation with alcohol consumption, a positive high correlation with perceived intoxication and a small negative correlation with binge drinking”. It is a bit difficult to understand how the DI pattern can be negatively correlated with alcohol consumption and binge drinking.

Minor Essential Revisions
10. Method: The participants-section lacks information about retention rates.
11. Results: Regarding alcohol consumption and aggression; it seems natural that a positive association with alcohol-related aggression was found for all the indicators. It is by definition “alcohol-related aggression”, so this a bit of a circular reasoning.
12. Discussion: In general, the authors need to relate and discuss their results in relation to previous research, as well as recognizing their study limitations, to a greater extent.
13. The risk and protective factors are only mentioned briefly, as is previous research in this area.

Discretionary Revisions
14. Abstract: the authors mention previous epidemiological studies in young adults. This is a bit confusing considering the fact that their study is about adolescents.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests