Reviewer’s report

Title: Predictors of binge drinking in adolescents: ultimate and distal factors - a representative study

Version: 2 Date: 18 August 2011

Reviewer: Monika Wadolowski

Reviewer's report:

Donath and colleagues have written an interesting study about the predictive factors associated with binge drinking in German adolescents. In the international context, binge drinking represents a universally important public health research issue. The study comprises a large sample of German adolescents and uses a comprehensive range of outcome measures to address specific study aims. The multivariate logistic regression shows low economic status and religiosity appear to be protective in this sample. In contrast, the authors find poor academic attendance and achievement, suicidal thoughts, and school violence to be risk factors for binge drinking in this sample. This study contributes to existing literature on predictive factors associated with adolescent binge drinking, which to date has largely been US-based. In turn, the results have the potential to contribute to informing the development of appropriate prevention strategies.

I found little of substance to criticise. One Minor Essential Revision is discussed below, as well as several Discretionary Revisions which are recommended to maximise the reach of this paper.

1. Minor Essential Revision

1.1 Sample Response Rate

The final sample surveyed is unclear in the Methods section. The authors state that “2,131 classes participated with a total of 44,610 students”, however Figure 1 shows the return rate of surveys was 88.0% in schools were the director approved. It is unclear if 44,610 students completed the survey, or if 44,610 were administered the survey and of these, 88% did not return their survey. Therefore, the final sample size is unclear.

2. Discretionary Revisions

2.1 Sample Representativeness

The study included 15-year olds only, which may have important implications for the representativeness of the results, as binge drinking is an issue across adolescence. The factors investigated may have different predictive relationships at different times in adolescence. Additionally, the authors demonstrate geographic representativeness of the sample, but do not discuss whether the sample is representative in terms of factors related directly to the study (adolescent alcohol use, socioeconomic status, parental separation). Including 15 year olds only, and the lack of clarity regarding sample representativeness,
may limit how results are applied to other adolescent ages, which should be noted in the discussion.

2.2 Sample Size
As this paper refers only to a cross-sectional survey, the need for such a large sample size is questioned for the study aims. Does this research form part of a longitudinal cohort study? Justification for why such a large sample size will help contextualise this study within this area of research.

2.3 Language
At times the language used by the authors is awkward. References to the phenomenon of teacher “mobbing” may be unclear to some audiences where this is less prevalent. Likewise, describing adolescents at risk as “peculiar” is somewhat ambiguous to the reader and may benefit from an alternative descriptor.

2.4 Discussion of Limitations
Discussion of the study’s limitations may be useful for outlining how this study can be expanded upon. Specifically, the cross-sectional methodology has important implications for interpreting the predictive relationships involved in binge drinking, yet this is not discussed. Likewise, whilst the authors have included a comprehensive range of predictive factors, why other known predictive factors could be briefly explained.

2.5 Inclusion of Table 4
Table 4 is presently very unclear, and its inclusion may be re-considered, as it appears to expand upon the content of Table 1. Editing Table 1 may eliminate the need for Table 4, which combined with Table 1, makes the paper (potentially unnecessarily) cumbersome.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

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