Reviewer's report

Title: Validating shortened versions of the AUDIT in a community-based survey of young people

Version: 2 Date: 14 November 2012

Reviewer: Gallus Bischof

Reviewer's report:

The present manuscript provides descriptive data from participants recruited at a music festival in Melbourne. Within the study, a self-selected sample of 640 Festival attenders filled out the complete AUDIT. Based on these data, the authors aimed to generate a shortened version of the AUDIT containing most of the information of the original 10-item solution. The authors identified several abridged versions of the AUDIT that showed very high correlations to the 10-item version. Several of these showed higher correlations to the total AUDIT-score compared to the already published abridged versions.

Overall, the topic of the paper is important, the paper is clearly written and serious limitations are mentioned in the discussion. Still, several issues appear critical:

Major Compulsory Revisions

1. The sample revealed apparently high rates of alcohol use and might be classified as a “high-risk”-group. It appears questionable if these findings might be replicated in a community sample of young people. In addition, also no data are available to what extend participants in the study were representative for festival attenders (problem associated with response rate that cannot be given).

2. Most relevant, since the authors did not use a gold standard for assessing hazardous and harmful alcohol use, the term “validity” appears questionable. Although lack of gold standard is mentioned in the limitation, I suppose this issue clearly seriously limits the value of the present paper. Furthermore, although WHO has published the recommendations of using cut-offs of 8, 16 and 20 points, evidence for doing so is scarce and several studies have found much lower cut-offs to be optimal for identifying alcohol dependent individuals (e.g. Bybok et al., 2006).

3. Even if the authors “validate” their data using the AUDIT-10 cut-off of 16 points, significance Tests for AUROC-s should be used - numerical differences alone are not meaningful.

3. Discussion: given the lack of a clinical meaningful gold standard, effectiveness of the shortended versions for clinical purposes cannot be determined - especially since several studies have shown that the validity of the AUDIT-10 is not necesserably significantly better than the validity of the AUDIT-C (e.g. Bradley et al., 2007).
Discretionary Revisions
In the reference section, Authors of Ref. #11, 26 and 27 are mentioned twice.

**Level of interest:** An article of limited interest

**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