Reviewer's report

Title: Psychological and behavioural factors associated with sexual risk behaviour among Slovak students

Version: 1 Date: 11 July 2008

Reviewer: Donald Langille

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Major Compulsory Revisions

1. With respect to the research question, the Background section makes it fairly clear what the authors wish to do, but the question is not presented in the form of a hypothesis or theory, or even a solid reason for carrying out the study, other than to explore associations of behavioural and psychological factors with sexual risk-taking. Other than indicating that the factors they examine have been shown in the literature to be associated with sexual risk-taking, they do not indicate why these factors, and not others, have been chosen. In addition, they state that studies of sexual behaviour are rare in central and eastern Europe, but do not provide what background does exist. Beyond merely stating a wish to explore these associations, a more convincing rationale for the study should be given.

2. In the Methods section it should be explained why a category of “risky occasion” was created by answering yes to any of three questions [sex with someone after a “short” relationship (“short” being unquantified), or while using alcohol or drugs (time unspecified)]. I would have preferred to see these examined as separate risk behaviours, especially since, as the authors later acknowledge, the alcohol data they examine is not related in time to sexual risks. Though I doubt this can be addressed, “ever” having had a risky behaviour may not mean that the person is still at risk, yet other behavioural risks shown to be associated with risky occasion are very recent events, and the time frames are not mentioned for psychological measures.

3. A particular concern with the Methods is the process of randomization. It is stated in the first paragraph of page 5 that 882 students were randomly selected to complete a questionnaire during a “compulsory lecture”. Was this a regular lecture during a university course, or was it a lecture about the study itself to which truly randomized students were invited? If it was a regular lecture, and all students at the lecture were included, then students cannot be said to have been truly randomized. Also, it was not clear what was meant by “identification data” and its related “code”. These processes should be clarified.

4. The reasons for choosing having 4 or more lifetime partners as the cut point for multiple partners (page 6) is not explained and no rationale is provided for choosing levels of drinking, smoking and age of early sex. These choices should be justified.
5. Was there a specific time frame for consistent condom use? If this was left open to interpretation, the results are probably not valid.

6. No attempt was made to adjust for factors such as age in the multiple regressions. Age is probably related to number of sexual partners, and to decreased condom use in young women as relationships solidify and oral contraception is taken up, as well as to patterns of drinking. The authors should explain their choice not to include age in the models (page 7).

7. The Discussion (page 10) makes the point that the occurrence of sex in risky situations is quite high, but does not mention that the behaviours (short relationship or sex while using alcohol or drugs) is both an indication of a yes response to any of these questions, and more importantly a behaviour which could have occurred at any time in the past, therefore perhaps not representing current risk. This should be clearly stated.

8. The Discussion (page 11) about the appropriateness of using condoms all of the time as a risk criterion is confusing when it brings in the notion the study being of first year students since the age range here is 19-28. If many students were as old as 28 many could be in stable relationships and this argument would be weakened. The proportions of younger students of each age, or in each of two or three age categories (e.g., 19-23; 24-28) should be reported, and brought into this discussion.

9. The authors correctly point out (page 10) that recent alcohol consumption cannot be causally linked to sexually risky behaviours in this study. They also discuss the complicated nature of the relationship between drinking and condom use (page 12). Many studies examining sexual behaviours and drinking at the time of their occurrence, as opposed to studies of the type carried out here, show no differences in condom use between drinking and non-drinking sexual encounters. This literature should be added to the discussion.

10. A strength is said to be lack of selection bias due to a high response rate (page 12) – I would be more convinced if the randomization process were more clear (see above). This should be addressed.

11. The authors indicate that religiousness probably represents a number of important supportive constructs (page 11), but provide no references to support their claim; this would be helpful.

12. The bottom paragraph on page 12 states that studies of sexual behaviour are rare. If the authors mean globally this is an exaggeration; if they mean in central and eastern Europe they should say so, and provide references for the reasons they indicate may be responsible for that situation.

Minor Essential Revisions

1. Wording of the response to condom use (always/not always, occasionally, never) (page 6) is puzzling and needs clarification – “not always” includes the
latter two responses.

2. It should be made clear whether all independent variables or only those significant in univariate analysis were included in the multiple regressions (page 7).

3. In Table 4, the confidence intervals for extroversion in males and multiple partners include one; I’d suggest rechecking significance for this calculation.

4. The sentence containing references 7, 29 & 30 on page 12 should have the word “consequences” changed to “associations” if these studies do not demonstrate a causal relationship between alcohol and lack of condom use. BTW, the sentence following this one is incomplete.

5. On page 13 the word “effect” should be changed to “associations”, and “risk factors” to “risk markers”.

Discretionary Revisions
1. The title of the HBSC study should be spelled out in full (page 10).

2. In females, religiousness was very close to significantly protective for risky occasions in univariate analysis. It might be worth mentioning this close association.

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.