Reviewer's report

Title: Relationship between single and multiple perpetrator rape perpetration in South Africa: A comparison of risk factors in a population-based sample

Version: 4  Date: 8 April 2015

Reviewer: Jessica Draughon

Reviewer's report:

LOVE the use of the word intensification instead of accentuation! Are you planning on using intensification and accentuation interchangeably? Or will you just choose one? P. 6 line 151 still contains the accentuation language.

Appreciate the orienting sentence at the beginning of the paragraph on streamlining (line 80).

MAJOR COMPULSORY REVISIONS:

1. Results section and Table 2: Based on the language in the text, I’m still expecting to see more than one set of odds ratios in this table.

   Basically, it seems like a sentence is needed stating that the ORs presented represent the increased odds of ever perpetrating rape (either SPR or MPR) over never raped AND the same ORs (due to the type of analysis conducted and the unviolated proportional odds assumption) ALSO represent the increased odds of MPR over SPR/never raped.

   It might be helpful to restructure the results section to state the odds by which these factors increase the risk of any rape (vs. never raped) and MPR (vs. SPR/never raped). E.g.: “Having a mother who completed school increased the odds of any rape (vs. never raped) and MPR (vs. SPR/never raped by more than two fold compared to a having a mother who had no schooling.”

   I had to read up on ordered logistic regression to understand the results. Not all readers will be willing to do so, and may be confused by these findings, or not understand the implications and conclusions.

MINOR ESSENTIAL REVISIONS:

2. The last sentence in the main paragraph on p. 6 line 160-163 doesn’t make sense – it seems like there may be words missing.

3. What was the time frame for data collection? This may also assist with concerns over the use of 2001 census data.

4. Line 323 “probably” should be “probable”

5. Paragraph starting on line 328 – a word seems to be missing from this
sentence: To fit “a” multivariable model OR to fit multivariable model”s”

6. Line 412 “ever raped on our study” should this be “ever raped in our study” instead?

7. Line 420 “can be seen associated” should this be “can be seen to be associated”? Or simply “is associated” instead?

8. Line 427 – “not greatly differing between on these” can delete either “between” or “on” to improve readability

9. Line 430 – “relationships” is plural but further in the sentence “is” is singular, please revise for consistency.

DISCRETIONARY REVISIONS:

10. Line 345: What is R500 in US Dollars? I ask since it was included in the methods section.

11. Line 371: “Who had sexually bullied” – so the men had perpetrated sexual bullying. Why did I think this was had been sexually bullied…? Maybe back on line 263 change the wording to reflect these questions measured sexual bullying perpetration vs sexual bullying victimization (I realize the sample question does make this clear)?

12. Why focus only on cannabis use? You state in the methods section that cannabis use was the only drug use measured, but then in discussion talk about “mostly marijuana”. Did you measure other drug use? If not, then why marijuana only?

13. Some grammatical issues mainly starting in the results and discussion sections – I tried to note in minor essential revisions but may not have caught all of them.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests