Reviewer's report

Title: Cross-sectional Prevalence Survey of Intimate Partner Violence Perpetration and Victimization in Canadian Military Personnel

Version: 1 Date: 5 April 2013

Reviewer: Kate Walsh

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Re: 'Cross-sectional Prevalence Survey of Intimate Partner Violence Perpetration and Victimization in Canadian Military Personnel'

Mark A Zamorski and Miriam E Wiens

This manuscript examined the prevalence and correlates of partner violence perpetration and victimization in a Canadian Military sample. The introduction makes an excellent case for the importance of examining partner violence in this sample; however, I have outlined a number of concerns about the manuscript in its present form below.

Major Compulsory Revisions

1. Are there cultural factors that the authors expect will differentially affect the prevalence of partner violence victimization or perpetration in this Canadian sample? If not, what makes this sample unique or important to study?

2. A goal of the manuscript is to examine correlates, including mental disorders, to aid in identifying risk groups and contributing factors; however, mental disorders and “high risk” drinking were assessed within the last year, not for the length of the relationship. A limitation of this approach is that partner violence could have occurred with their current partner 15 years prior to the assessment and thus been separated from past year symptoms by a significant amount of time. Do the results presented here really illuminate risk groups or are these associations tangential at best?

3. Some counterintuitive findings were observed and warrant more discussion. Specifically, IPV perpetration was lowest among those with more recent deployments compared to those with more temporally distant deployments, and PTSD and depression were differentially associated with PTSD and depression despite being highly correlated. Please elaborate on why these associations may have been observed.

4. Is there a way to know if those who declined participation differed from those who participated on partner violence? How was the study advertisement worded?

Minor Essential Revisions

5. In the “Data Source” section, 2315 surveys out of 4385 surveys were returned, but only 2157 were usable. Please more clearly articulate the reasons for the differences in numbers (e.g., why were 158 unusable?).
6. Were respondents compensated for completing surveys?

7. Has the survey instrument been validated in previous studies? How were the 10 acts of violence selected?

8. Is there information on length of current relationship or stability of current relationship? How was current “intimate relationship” defined for participants?

9. Because mental health questions were asked on a survey, it might be more appropriate to use the term “probable” when referring to PTSD and depression.

10. In the analysis section, why was listwise deletion used to handle missing data instead of multiple imputation? This practice could bias estimates by not permitting full use of available data.

11. Explain the Archer and Lameshow criteria for goodness of fit.

12. What was the cutoff for the tolerance and variance inflation factor?

13. On pages 11-12, when describing prevalence estimates and using terms like “larger fraction” it is important to include a referent (e.g., “emotional or financial abuse was seen in a larger fraction” than what?)

14. When describing correlates on pages 12-13, the term univariate is used; the proper term for relationships between only two variables is “bivariate.” “Univariate” should be used when describing a single variable (e.g., the mean for PTSD severity). If referring to odds ratios, the terms unadjusted and adjusted can be used.

15. On page 18, citation 33 refers to the NISVS, which did NOT measure perpetration, but the cite is used to support that women perpetrated more violence. Please revise.

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

**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