Reviewer's report

Title: Cognitive appraisal of exposure to specific types of trauma. A study of gender differences

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Reviewer: Catherine Acton

Reviewer's report:

Thanks for the opportunity to review the paper 'Cognitive appraisal of exposure specific types of trauma. A pilot study of gender differences' by Herta and Cozman, submitted to BMC Women's Health for publication.

The study aims to examine gender differences in the nature of cognitions experienced in the aftermath of 3 categories of traumatic events which were non-sexual in nature and did not involve interpersonal violence. Set in metropolitan Romania, participants were recruited from health settings where they were receiving treatment for physical consequences of these traumatic exposures.

The study utilizes two questionnaires/structured interviews as methods for gathering data: the Posttraumatic Cognitions Inventory (PTCI) and Short PTSD Rating Interview (SPRINT).

The study finds that female participants reported less intense negative cognitions than males. From this the authors conclude that women experiencing clinically significant PTSD symptoms tend to endorse the gender stereotype of masculine instrumentality, strength and control. An additional conclusion is that women who have sustained a permanent physical disability resulting from trauma express a less feminine attitude.

Issues with the Methods that require addressing:

Scales were "translated and adapted" (p.4, line 40) into Romanian by the researchers, with permission from the scale authors. Further information about the validity and reliability of the translated instruments would be helpful here. Furthermore whilst the SPRINT has been previously used by the authors in Romania with cut offs established, the question remains whether validating data for the PTCI in a Romanian context is available.
Assumptions were made about some individual items on the PTCI reflecting "culturally-specific gender stereotypes and attitudes" (p4, line 35). I would argue that at least inter-rater reliability would be required here to validate the use of these individual items to provide one of the key variables of the study, namely "the spectrum of masculinity / femininity" (page 2, line 15).

In addition to this, individual items from the PTCI are used to compare male versus female responding. Again it is questionable whether this usage of the instrument provides valid results.

The study is framed as a 'Pilot Study' which to some degree addresses these methodological limitations. However I would ask that the authors note this elsewhere in the paper (possibly in the Discussion) and make suggestions as to how these limitations could be addressed in future research.

Nowhere do the authors indicate whether study participants have received psychological intervention since traumatic exposure. I would argue that this is an important and potentially confounding variable that should be noted.

I encourage the authors to check the correct title of the software package SPSS. I believe the title 'Statistical Pack for Social Sciences' (sic; page 5, line 9) has not been used for some years.

Issues with the Conclusions that require addressing:

At the beginning of the Discussion, in the sentence on p.6 line 15-16, the authors use the words "depend on" which strongly suggests that intensity of PTSD symptoms (and presence of posttraumatic disability) cause negative cognitions. I caution the authors against inferring causality following a cross-sectional methodology. This is particularly so when it could be readily argued that it is the negative cognitions inherent in a maladaptive psychological response to traumatic exposure that drive the associated symptoms (autonomic arousal, avoidance, and so on).

The conclusions that women experiencing clinically significant PTSD symptoms tend to endorse the gender stereotype of masculine instrumentality, strength and control, and that women who have sustained a permanent physical disability resulting from trauma express a less feminine attitude, would be more meaningful if some normative data was presented for comparison.
All participants have, in addition to trauma exposure, also suffered physical deficits requiring treatment; thus these are a particular sub-group of exposures that are complicated by serious enough physical injury to require medical intervention. A key criticism of the paper is that the results could reflect the impact of disability as much as the trauma exposure per se and the research would benefit from being framed to reflect this. In addition, by stratifying the sample according to time elapsed since index trauma exposure, how can the authors be sure that cognitions experienced are not a function of enduring disability or of poor physical status (requiring treatment up to several years following the trauma; means reported as 64 and 58 months in Table 1, page 13) or of grief and loss? As such, the interpretative comments made in the Discussion (page 7, line15-29) ought to be tempered and these limitations acknowledged.

To address these shortcomings, the authors may wish to consider either of these options:

- frame the study as investigating gender differences in cognitive appraisal of trauma in a physically injured population. The Literature Review would need to be broadened to encompass the impact of disability upon cognitions relating to gender role, and how these may differ between males and females.

- limit the sample to only those who have not been permanently disabled, therefore reducing the sample size to 22 males and 21 females. By focusing only on those individuals without permanent disability, it may be more justifiable to suggest that differences in cognition are a product of trauma exposure, as opposed to trauma exposure plus the impact of disability.

Overall, the concepts being examined in this paper are interesting and have implications for clinical responses to both men and women after they have suffered physically damaging traumata. The findings are compromised by methodological limitations, addressed to some degree by this study being framed as a 'Pilot Study'. However in order to utilize the information that the paper offers, it would be crucial to understand whether these proposed gender differences are a function of the exposure itself, the serious physical consequences of the exposure, or the endurance of a protracted period of disability (and its associated potential impacts upon relationships, occupational functioning, independence, and financial status, to name a few) for up to years afterwards.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

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