Reviewer’s report

Title: Validating the Psychiatric Nurses Methods of Coping Questionnaire: Arabic version

Version: 0 Date: 29 Sep 2017

Reviewer: Mary Chambers

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Linguistic & Cultural Validation

The aim of the study was, apparently, to "address the lack of validated instruments…in Arabic countries by translating the Psychiatric Nurses Methods of Coping Questionnaire (PNMCQ) into Arabic" (p.5). Have details been omitted by mistake by the authors? I cannot see any details of the process of translation of this instrument into Arabic. This has implications for the claims the authors make about the content and face validity of the Arabic version of this instrument. The authors seem to rely on statements the authors of the original validation of the English version of PNMCQ (McElfatrick et al., 2000) make about content and face validity without conducting any analysis of their own on the translated version.

The authors of the original validation study (McElffatrick et al, 2000) describe in detail the processes they went through that saw the instrument reduced from 108 items to 50 and then to 35. There could be a case that the present Jordanian study should have begun with the original 108 items (or more if culturally relevant) to explore if there were some of more cultural relevance to their population than others, or even some that have been omitted. In reducing the number of items from 108 to 50 the original authors eliminated any items "…not endorsed as coping strategies by the nurses." (p.967). This process needs to be undertaken with an Arabic mental health nursing population and if it has been undertaken by the present authors it is missing in this paper.

I therefore find the absence of any detail on the development and thorough validation of the Arabic version of the PNMCQ rather confusing. In a paper that attempts to detail the process of validating this instrument, details about wording and translation into Arabic (and then back translation) are totally missing and I would have expected to see this.

For example, are all the 35 PNMCQ items fully appropriate to the cultural and social situation in Jordan? Is it appropriate to ask questions about having a "satisfying sex life" to an Arabic population? This has not been fully described in the paper.

There is therefore a complete lack of any reference to linguistic and cultural validation in this paper which urgently needs addressing.
I note some of the authors are on Research Gate where I found a helpful summary on this issue which I summarise briefly (in italics) here:

You need at least two approaches to validate a translated questionnaire:

(1) Linguistic validation, where you investigate the equivalence of concepts in the questionnaire (the 'language'), Usually we do forward and backward translation to maintain equivalence of the test questionnaire in the target language. The following link might be helpful.


And

(2) The cultural validation, where you map the concepts to the target culture (e.g. for appropriateness of wording, potential misinterpretation due to different ways of thinking, etc.).

I would have also thought that some background detail regarding conflict in the region would be relevant to the mental health needs of the population as a whole as well as to nurses working in the field of mental health. The situations Jordanian mental health nurses encounter are likely to be very different to English speaking nurses and so consideration of this in terms of the items included in the PNMCQ needs to be described and taken in to account.

Background Section

Since the paper attempts to outline the validation of the Arabic version of the PNMCQ, I am not convinced some details included in the background section on problem coping strategies are relevant. They are interesting to the reader no doubt but the paper does not explore coping strategies or the PNMCQ's ability to differentiate intrinsic Vs extrinsic coping strategies so this background (including other types of coping methods used by nurses from different cultures) seems irrelevant to this paper.

Also, the detailed inclusion of the methods adopted in the Fathi et al (2012) North Sumatra study seems misplaced since this study did not include the PNMCQ. Other instruments are used and validated in the Fathi et al (2012) that may have been interesting to include in the present study but they are not and no explanation is provided.

McElfatrick et al (2000) describe the reliability and validity of the PNMCQ compared with other more generic coping scales. For me this raises the question why the current authors have not included any other coping scales (e.g. the Occupational Stress Indicator) or even the GHQ in this
study as a comparator against which validity could be compared? This is not explained. If they do not exist in Arabic then perhaps one of them (e.g. GHQ) also needs to be linguistically and culturally validated for a Jordanian sample so that it can be used as a comparator with an Arabic speaking population?

Details of the "labour intensive development" of the original (English) version of the PNMCQ is interesting by way of background, however the present paper should be more concerned with providing this level of detail for the development of the Arabic version.

Sample
A third of all respondents in the present study indicated that they had never attended a workshop or training on mental health suggesting that recruitment from 3 public hospitals may not have focussed attention enough on recruiting mental health nurses. This may indicate that the sample may be more indicative of nurses in general rather than mental health/psychiatric nurses who were meant to be the focus of this study.

The response rate of the original McElfatrick et al (2000) study validating the PNMCQ in N Ireland was only 25%. The authors themselves acknowledge (p.967) this issue and highlight that the sample was taken from a student population and the study was undertaken as part of an undergraduate research dissertation. This may have had an impact on the validity of the findings as they apply to a more representative sample of mental health nurses, but also needs to be acknowledged in the present study since it was this small (possibly unrepresentative) population of Irish nurses who provided the face and content validation of the original PNMCQ items.

Data Collection
The data collection period of the present study was June to December 2014 and thus the period that has elapsed until submitting for publication is of concern as it suggests the data may not be as up-to-date as it could be.

There is no description of data collection having occurred at 2 different time points and so the assertion that the instrument is reliable over time seems questionable.

Analysis
I think the above issues relating to the linguistic and cultural validation of the PNMCQ are so crucial that it is not worth me spending a lot of time commenting on the statistics that have been
conducted. I feel the item pool generation for an Arabic version of the instrument needs to be the beginning point and then the analyses conducted on the items that result.

Generally the statistical tests appear appropriate but I would recommend that a statistical expert is asked to review (should the paper be resubmitted in the future). However, the authors of the English version of the PNMCQ undertook a Principal Components Analysis (PCA) to explore item factor loadings (p.968). However, in the current paper the authors describe having undertaken an Exploratory Factor Analysis (EFA) on the 35 items (of the English version) with no rationale given for why EFA (and not PCA) was chosen.

Discussion

I find that the discussion highlights too many new concepts and other research that were not the focus as outlined in the background of the paper, or if they were should appear earlier in the paper. E.g. the introduction of self-efficacy as a concept is not clearly inked to the focus and aims of this paper. 'Clinical supervision' and 'other methods for coping with stress' are also introduced for the first time in the discussion.

Other Comments

Please note that there a several typos throughout and the instrument is abbreviated incorrectly sometimes as 'PMNCQ' rather than PNMCQ. Also, while the authors are correct to say that the English version of the PNMCQ contains 35 items comprising 5 subscales, the 5th subscale should be referred to as "emotional comfort" and not "emotional conflict" (as the current authors have done, p.5)

Recommendation

The paper needs substantial re-working to include details of the methods for the linguistic and cultural validation of the Arabic version of the PNMCQ (as discussed above). If this was not conducted at the time then advice should be sort from experts in cross-cultural instrument validation regarding whether the process for this instrument should be commenced from scratch. I have some concerns regarding the fact that the paper is reporting data that is 3 years old. Perhaps it would be timely to start afresh and update all the data.

Perhaps the original authors of the PNMCQ could have been included in this study to help advise? At the very least I would have expected to see the inclusion of the permission to use it in the present study (even if it were a 'personal communication' via email).
Useful References

I have come across the following during my reading of the topic and hope they may be useful:


Name of Reviewer:

Duncan Barron, September 22nd, 2017

For and on behalf of Prof. Mary Chambers

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.

Unable to assess

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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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
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