Author’s response to reviews

Title: Validation of the English and simplified Mandarin versions of the Fear of Progression Questionnaire – Short Form in Chinese cancer survivors

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Editor
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Dear Professor Dempster,

REVISION OF MANUSCRIPT PSYO-D-19-00133.R1

We would like to thank the editor for considering our manuscript, as well as the reviewers for their comments and helpful suggestions on improving the quality of our manuscript. We are pleased to submit a revised version of our manuscript.

We have responded to the pertinent feedback raised by the reviewers, and have indicated the respective changes below as they appear in the revised manuscript. All changes are underlined in the enclosed revised manuscript.

Replies to Reviewer 1:

1. “Some minor grammatical errors just need correcting prior to publication - following examples: No comma required in page 3 line 2 - replace with - In cancer patients the focus; looks like an extra space in line 9 between panel integrating - but this could be the 'justified text'; Page 4 has W bolded on line 40; Full stop required after questionnaire on page 5 line 5; line 27 page 5 should read 'items produced' and further in the sentence change to 'scores'; Line 29 should read 'cancer patient's fear'; page
6 line 15 has a number 9 after distress - not sure why?”

- We have revised all highlighted grammatical errors as per the reviewer’s advice.

2. “It states on line 22 page 6 ‘; weak negative correlations were expected between’ - can you briefly state why you expected weak correlations?”

- We acknowledge that previous research has reported a range of effect sizes from weak to strong (based on Cohen’s criteria). In view of these findings, we have revised the sentence to provide an accurate representation of the literature:

(Subsection: Statistical analyses)
“Divergent validity was examined through correlations between FOP and its potential consequences – quality of life (QoL). Negative correlations were expected between FoP-Q-SF and measurements of QoL in view of previous empirical findings; persistent fear of illness progression is associated with pathological worry, which may have a detrimental impact on QoL [7,20].”

3. “line 29 you state correlations was (plural and then singular), so it should be correlation was or correlations were; line 29 apostrophe is before the s i.e survivor's age; line 31 correlation (not plural); Line 58 - suggest re-write to (80.4%), breast cancer (37%) and gynecological cancers.”

- We have revised the highlighted sentences as per the reviewer’s suggestion.

4. “page 8 line 1 and 2 - I know you have abbreviations at the end, but I always like to write the full words in the text when they are first mentioned, not just the acronym. This is something for the editor though.”

- We have included the full words in the text as per the reviewer’s recommendation.

5. “page 9 line 36 - fear should be singular - same on line 47 and possibly line 56.”

- We have revised the respective sentences as per the reviewer’s suggestion.

Replies to Reviewer 2:

1. “The objectives should be reported at the end of the Introduction section instead of being stated at the beginning of the Method section. In addition, the authors should provide a more detailed description of the objectives including the specific psychometric properties which were tested in the study.”

- We have revised the introduction as per the reviewer’s recommendation:

(Introduction)
“In view of current gaps in the literature, the present study aimed to (1) develop a simplified Mandarin version of the FoP-Q-SF, and (2) validate the FoP-Q-SF for use in Chinese cancer populations. The validation of the FoP-Q-SF involved an examination of its reliability (i.e., internal consistency and test-
retest reliability) and criterion validity (i.e., convergent validity, concurrent validity, divergent validity, and discriminant validity), as well as the confirmation of the factor structure in relation to the original model [9].”

2. “Please, provide the guidelines and the related references used to interpret the values of internal consistency and correlation.”

• We have provided the related references to interpret the values of internal consistency and correlation.

Internal consistency:

(Methods)
“Cronbach alpha coefficients and corrected item-total correlations were calculated to assess the internal consistency of the FoP-Q-SF. A Cronbach alpha coefficient of more than .70 supported satisfactory internal consistency [19].”

Correlation:

(Methods)
“The strength of the correlational relationship was determined based on Cohen’s criteria: r = 0.1 (weak), r = 0.3 (moderate), and r = 0.5 (strong) [21].”

3. “I suggest the authors to calculate the significance tests aimed to compare the level of strength in the association between the scores of the questionnaires. This can help them to support further their conclusions regarding criterion validity. Please, consider the significance tests reported in Meng et al. (1992). Meng, X. L., Rosenthal, R., & Rubin, D. B. (1992). Comparing correlated correlation coefficients. Psychological bulletin, 111(1), 172-175.”

• We have conducted the recommended significance testing as per the reviewer’s recommendation. We have included the relevant details in our methods, results, and discussion sections respectively:

(Methods)
“Additional significant tests based on Meng and colleagues’ recommendations were adopted to compare the level of strength in the association between the scores of the questionnaires [22].”

(Results)
“The criterion validity of the FoP-Q-SF is presented in Table 2. The FoP-Q-SF was strongly correlated with other measures of FOP in cancer patients – the FCRI (r = .66, p < .001) and the FRQ (r = .64, p < .001). The significance tests revealed no significant differences between the correlation coefficients (r = .66 and r = .64) (95% Confidence Interval [CI]: -0.07, 0.14). Strong correlations were demonstrated between the FoP-Q-SF and HADS-Total (r = .55, p < .001), and HADS-A (r = .61, p < .001), while
moderate correlations were demonstrated with HADS-D (r = .35, p < .001). The significance tests revealed significant differences between the HADS-A (r = .61) and HADS-Total (r = .55) (95% CI: 0.04, 0.14), as well as between the HADS-A (r = .61) and HADS-D (r = .35) (95% CI: 0.24, 0.45). Weak to moderate negative associations were found between FoP-Q-SF and various domains of the WHOQOL-BREF – overall QoL (r = –.28, p < .001), physical health (r = –.32, p < .001), psychological (r = –.37, p < .001), social relationships (r = –.26, p < .001), and environmental (r = –.20, p < .001). Weak to moderate negative associations were found between FoP-Q-SF and age (r = –.27, p < .001). The significance tests revealed no significant differences between the weak to moderate negative associations for QoL (r = –.28) and age (r = –.27) (95% CI: -0.16, 0.14).”

(Discussion)

“The results largely supported the criterion validity of the FoP-Q-SF. In line with expectations, the FoP-Q-SF was strongly correlated with other measures of FCR in cancer survivors and there were no differences in the strength of these associations. Concurrent validity was supported with significant strong correlations with psychological distress, especially anxiety; this is also supported by the stronger positive association with anxiety than with depression or HADS total scores. Divergent validity was supported with weak to moderate negative correlations with QoL. Discriminant validity was also demonstrated with weak to moderate negative associations with age. These weak to moderate negative associations did not differ in terms of magnitude, which further supports both divergent validity and discriminant validity respectively.”

4. “The authors considered modification indices as a strategy to improve the model fit. However, they did not provide explanations based on the items’ content in order to justify why adding covariances between the residuals of some items. Please, discuss these points in the Discussion section.”

- We appreciate the reviewer’s concern and we have provided explanations based on the items’ content and discussed the rationale for the use of modification indices in the discussion section:

(Discussion)

“The goodness-of-fit indices of the original model indicated some misfit, which could be adequately addressed by freeing five parameters in the error covariance matrix, without changing the one-factor structure. It is conceptually and statistically acceptable to allow residuals to correlate as correlated errors are likely due to potential redundancy of item content [6,16]. In the present study, item 4 (“being afraid of becoming less productive at work) and item 12 (“being afraid of not being able to work anymore”) may be perceived as similar concerns about occupational disruptions. On the other hand, item 6 (“being afraid of the possibility that the children could contract cancer”), item 7 (“being afraid of relying on strangers for activities of daily living”), and item 11 (“worrying about what will become of the family”) may be perceived as similar concerns about interpersonal relationships. In contrast to specific concerns about occupational disruptions and interpersonal relationships, item 1 (“being afraid of disease progression), item 2 (“being nervous prior to doctor’s appointment or periodic examination), and item 8 (“being afraid of no longer be able to pursue hobbies) may be perceived as general worries associated with disease progression. As noted by previous validation studies on other FCR measures, these minor adjustments to improve model fit do not have any implications on the administration of the scale [6].”

Once again, we would like to thank you for considering our manuscript for publication, and the reviewers for their positive comments and helpful suggestions on improving the quality of our
manuscript. Please do not hesitate to contact me should further changes be required.

Yours sincerely

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