Reviewer’s report

Title: Brief Reasons for Living inventory: A psychometric investigation

Version: 0 Date: 23 Jun 2017

Reviewer: Philip Batterham

Reviewer's report:

This paper reports on the psychometric properties of the BRFL scale in a German sample and its association with suicidal ideation. The design of the study appears to be robust, drawing on clinical and online samples, and the reporting of outcomes is generally clear. The paper is interesting, particularly in its discussion of RFL as a buffer for suicidal ideation in depression. However, there are some major shortcomings of the analyses that require revision.

Major comments:

1. Two item subscales tend to be unstable so there are recommendations against retaining factors with fewer than three items (see, e.g., Tabachnick & Fidell, 2001, "Using multivariate statistics"; Worthington & Whittaker, 2006, The Counseling Psychologist, 34, 806-838).

2. The inclusion of conditional items (requiring the respondent having children) is a considerable limitation of the scale and its use in research and clinical settings. A scale that has systematic missingness is unlikely to be a robust measure of a (unidimensional) construct. Mean substitution is not appropriate, as responses to these two items are likely to be systematically different from other items. I suggest running analyses both with and without the "child" items or using IRT analyses to further investigate this problem with the scale. Or better, developing an argument to drop these items from the scale (I suspect the measurement properties of the scale would not suffer considerably and its utility would increase markedly).

3. Why was PCA chosen instead of a confirmatory factor analysis?

4. How were the number of factors chosen? It seems that the authors retained any factors with eigenvalue >1, which is a poor criterion (see e.g., Patil 2008 J Business Research; Yong & Pearce 2013 Tutorials in Quant Methods for Psychology). The inflexion point of
scree plot would suggest that a 2 or 3 factor solution would be more appropriate. In addition, items 3, 6 and 9 have considerable cross-loadings in the 5-factor solution. This shortcoming of the methodology is also reflected in the marginal internal consistency of most subscales.

5. The examination of construct validity describes the general relationship between all subscales and the relevant measures, which further suggests the subscales are largely indistinct in their relationships with cognate constructs. Furthermore, it is confusing that the authors interpret a BRFL total score (p12-13 and throughout the discussion) after concluding that BRFL does not form a unidimensional construct.

6. "...the factor structure of the German version of the BRFL is very close to the factor structure of the original BRFL." - there is evidence that either the factor structure in the German version is considerably different from the original BRFL (2-3 factors instead of 6) or that the original validation study also used the questionable criterion of eigenvalue>1 to select "factors".

Minor comments:

7. Abstract: BLRF should be BRFL

8. Page 5: What is meant by "neurotic, stress and somatoform disorders"? To my knowledge, current diagnostic systems do not use this terminology.

9. Page 16: I disagree that interviewer-assessed suicidal ideation would be more reliable than self-report measures. We typically find that participants are more willing to disclose suicidal ideation if they are not directly reporting to an interviewer or clinician.
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.

Yes

Are the conclusions drawn adequately supported by the data shown?  
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No

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