Peer Review Comments

Responses for Version 1

Reviewer A:

1) General comments and summary of recommendation
Describe your overall impressions and your recommendation, including changes
or revisions. Please note that you should pay attention to scientific,
methodological, and ethical soundness only, not novelty, topicality, or scope.
A checklist of things to you may want to consider is below:
 - Are the methodologies used appropriate?
 - Are any methodological weaknesses addressed?
 - Is all statistical analysis sound?
 - Does the conclusion (if present) reflect the argument, is it supported by
data/facts?
 - Is the article logically structured, succinct, and does the argument flow
coherently?
 - Are the references adequate and appropriate?:
The current study sought to examine the prospective role of self-control on
anxiety and the degree to which this may be mediated by affect regulation.
This study benefits from several high-quality features – namely, it's large and
multi-site sample and its use of longitudinal design. However, I am concerned
that there is a substantial mismatch between the research questions and the
data at hand. Having worked with pre-existing data myself, I'm sympathetic
to problems that arise when trying to analyze data for a purpose it was not
intended. That being said, I believe there are two significant problems with
the methodology that prevent the authors from being able to answer their
questions about the interplay between self-control, affect/emotion
regulation, and anxiety:

1. There is a conflation between emotion regulation (the authors refer to this
as "affect regulation" but the specific allusions to reappraisal and
suppression and work by James Gross and colleagues suggest they're

referring to the emotion regulation) and coping. While these are highly similar constructs, they're not synonymous and often treated quite differently in terms of theory and measurement. For the authors to use a measure of coping as a stand-in for affect regulation, they need to demonstrate high congruence ($r \geq .80$) between those constructs.

2. A similar concern is the use of the BSI at the third-year time point in place of the SCL. Because the measures of anxiety differ in terms of item content across timepoint, there is a major confound in the analyses that no statistical tricks can address. These analyses may show a relationship between self-control and later anxiety, but we cannot rule out a methods artifact. I understand that the authors write that the BSI-18 and SCL-90R are highly correlated, but this correlation is not reported, and there is no citation for this claim. More importantly, the correlations between the specific anxiety items of the scales are unknown, and that's what's needed to assume measurement invariance. A correlation matrix with the 10 SCL items and three BSI items measured concurrently would address this concern. If that's too difficult, it would at least help to know how the results change if only the PANAS is used to measure anxiety at both time points.

Other concerns:

3. Because trait self-control, baseline anxiety, and coping were measured concurrently, I could easily see variants on the SEM that might or might not provide evidence for the theory. Perhaps self-control mediates the relationship between coping and anxiety? (I believe there is an extensive literature on CBT and externalizing behavior that would justify a causal path from coping to self-control.) Perhaps anxiety mediates the relationship between self-control and coping (Englert, Bertrams, & Dickhäuser, 2011)? All of this is to say that I would be more convinced that the structure you have imposed on these data is correct if you would develop a few different models and compare the fits to show that yours is, if not statistically significantly better than the others, at least not worse.

4. To clarify, were the BCOPE scales that have not been consistently evaluated as (mal)adaptive omitted from analyses?

5. Please note in the text when each scale was administered – it was not clear they differed until I looked through the tables.

2) Figures/tables/data availability:
Please comment on the author's use of tables, charts, figures, ifrelevant. Please acknowledge that adequate underlying data is available to ensure reproducibility (see open data policies per discipline of Collabra here).:
Tables and figures were appropriate and correctly placed.

It is unclear if data are available -- on the OSF page, there are notes that data cannot be shared, yet there is a csv file available for download containing de-identified data. This file doesn't include items, just scale scores, so I was unable to run any of the R code (which analyzes variables). I don't have SAS, so I was unable to check if the inferential analyses were reproducible.

3) Ethical approval:
If humans or animals have been used as research subjects, and/or tissue or field sampling, are the necessary statements of ethical approval by a relevant authority present? Where humans have participated in research, informed consent should also be declared.
If not, please detail where you think a further ethics approval/statement/follow-up is required.:
Yes, the necessary statements are present.

4) Language:
Is the text well written and jargon free? Please comment on the quality of English and any need for improvement beyond the scope of this process.:
Yes, the manuscript is well-written.

Reviewer B:

1) General comments and summary of recommendation
Describe your overall impressions and your recommendation, including changes or revisions. Please note that you should pay attention to scientific, methodological, and ethical soundness only, not novelty, topicality, or scope.
A checklist of things to you may want to consider is below:
 - Are the methodologies used appropriate?
 - Are any methodological weaknesses addressed?
 - Is all statistical analysis sound?
 - Does the conclusion (if present) reflect the argument, is it supported by data/facts?
 - Is the article logically structured, succinct, and does the argument flow coherently?
 - Are the references adequate and appropriate?:
Please see attached PDF for general comments and summary of my recommendation.

2) Figures/tables/data availability:
Please comment on the author's use of tables, charts, figures, ifrelevant. Please acknowledge that adequate underlying data is available to ensure reproducibility (see open data policies per discipline of Collabra here).:
The authors present the results with an appropriate figure and have also made the data freely available on OSF.

3) Ethical approval:
If humans or animals have been used as research subjects, and/or tissue or field sampling, are the necessary statements of ethical approval by a relevant authority present? Where humans have participated in research, informed consent should also be declared.
If not, please detail where you think a further ethics approval/statement/follow-up is required.:
Yes.

4) Language:
Is the text well written and jargon free? Please comment on the quality of English and any need for improvement beyond the scope of this process.:
Yes, the paper is well written and well organized.

Editor Decision for Version 1

Editor: M. Brent Donnellan
Affiliation: Michigan State University
Editor decision: Revisions required
Decision date: 14 October 2019

Dear Dr John P Powers,

Thank you for submitting your work to Collabra: Psychology. I sent the paper to two experts who are extraordinarily well qualified to review this paper. (One was incidentally a reviewer for a previous version of this paper at a different outlet). I thank them for their service to this journal. I independently read the paper and then consulted their comments.

As you will read below, the reviewers raised a few big issues and offered many constructive suggestions and comments. The critiques could be substantial especially if the PANAS only analyses do not show the same patterns (see below and comments from both Reviewers). However, I think you have the data necessary to test the issues and you might have reasonable counterpoints. Thus, I will extend a revise and resubmit decision but you should consider this a "high risk" R&R decision. Depending on the letter and nature of revision, I reserve the right to consult again with one of both of the reviewers.

The reviewers did an outstanding job and you should address each of their concerns either in the revised text or in the response letter. I will highlight some issues that came up as I read your paper. I acknowledge that you might disagree with some (or all) of these points so feel free to pushback against any suggestions you believe will harm your work. Just describe your counterpoints in the letter. I will send you the pdf from Reviewer B in a direct

email so I can avoid wrestling with the journal management system. (I get this might be a bit lazy but it will spare us all some frustration and help me issue this decision faster.)

1. Both Reviewer A and B have concerns with the lack of perfect overlap between the baseline anxiety measure and the 3-year anxiety measure. I like the idea of supporting analyses just using the common PANAS items. Both reviewers had more to the say on this issue so please respond to their concerns. This is one of the biggest concerns that I had with the paper especially as it seems as if the baseline measure was weaker than the 3rd-Year measure.

2. I am sympathetic to the concern from Reviewer A about the distinctions between emotion regulation and coping. To be frank, I suspect there is all sorts of jingle/jangle concerns with these constructs and trying to sort this out could be a career. Thus, I do not think you necessarily need to take a stand here but perhaps you can deal with the issue by referring to coping strategies throughout the paper given the measurement strategy.

3. The concern from Reviewer B about the overlap between trait self-control and other constructs resonated with me. Reviewer B offers suggestions for approaching this issue. I assume the effects reported here are different than when the BFI Conscientiousness measure is used instead of the BCSCS? Is there anything to be gained by creating composites out of all Trait C/Self-Control items administered at baseline? [I also think it might be helpful if there was an easy to access list of all measures administered to the sample to partially deal with concerns from Reviewer A.]

These are more minor issues:

4. I think putting sample items in Table 1 will help readers better grasp the variables in question.

5. Do you think it makes sense to report d-metric effect sizes in Table 2 (if these are even appropriate in light of any concerns about homogeneity of variance between women and men)?

6. Do you think it makes sense to explain alpha, omega, and H to readers in a bit more detail? What should readers make of these values? [Would it also be more straightforward to use "Number of items" as the column header rather than "n items"?]

7. I wonder if it is cleaner to report the correlations for the whole sample in Table 4 and only draw attention to cases where the gender differences in the size of the correlations were significant?

Those were the most salient issues that occurred to me in reading the paper and the reviews. Please feel free to contact me for any clarifications.

To access your submission account, follow the below instructions:
1) login to the journal webpage with username and password
2) click on the submission title
3) click 'Review' menu option
4) download Reviewed file and make revisions based on review feedback
5) upload the edited file
6) Click the 'notify editor' icon and email the confirmation of re-submission and any relevant comments to the journal.

If you have any questions or difficulties during this process, please do contact us. Could you have the revisions submitted within 90 days? If you cannot make this deadline, please let us know. Good luck revising this work. Thank you for trusting us with your paper.

Sincerely,

Brent Donnellan
Michigan State University
donnel59@msu.edu

Author's Response to Review Comments for Version 1

Author: John P. Powers
Affiliation: Duke University, Durham, US
Revision submitted: 23 December 2019

Dear Collabra: Psychology editorial team,

We have uploaded a revised manuscript in response to the reviewer and editor comments. We have also uploaded supplementary files under the Summary page of our responses to the comments, a version of the revised manuscript with changes tracked, and the revised supplementary materials as a separate file.

Thanks so much and please let us know if there is anything else you would like from us.

John P. Powers

Attached document:

Editor Decision for Version 2

Editor: M. Brent Donellan
Affiliation: Michigan State University
Editor decision: Accept submission
Decision date: 13 January 2020

Dear Dr John P Powers,

Thank you for submitting the revised version of your manuscript. I read the revised paper and then your responses to the previous reviews. I appreciate your attention to the issues and reasonable letter of response. I am happy to accept this paper for publication. I look forward to seeing this online.

As there are no further reviewer revisions to make, you do not have to complete any tasks at this point. The accepted submission will now undergo final copyediting. You will be contacted once this is complete to answer any queries that may have arisen during copyediting and to allow a final chance to edit the files prior to typesetting. If you wish to view your submission during this time, you can log in via the journal website.

Sincerely,

Brent Donnellan
Michigan State University
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