**Peer Review History**

**Ms Title:** Working for the Best or Bracing for the Worst?Approach and Avoidance Motivation in Planning

**Author names:** Simen Bø, Hallgeir Sjåstad, Elisabeth Norman

**Submitted**: Nov 25, 2019

**Editor first decision—Revise & Resubmit**

June 3, 2020

Dear Dr Simen Bø,

After review, we have reached a decision regarding your submission to Collabra: Psychology, "Working for the best or bracing for the worst? Approach and avoidance motivation in planning". Our decision is to request revisions of the manuscript prior to acceptance for publication. Although there is enthusiasm for the work, I cannot make any firm predictions about the ultimate fate of the paper.

The full review information should be included at the bottom of this email. There may also be a copy of the manuscript file with reviewer comments available once you have accessed the submission account. The reviewers did an outstanding job in their reviews and you should address each of their concerns either in the text or in the response letter. I will highlight issues I think are particularly salient here:

1. My biggest concern is that I am not entirely convinced that the key manipulation worked as intended. The manuscript reports a manipulation check which suggests that the participants followed the instructions, but this does not necessarily demonstrate that participants were in an approach vs. avoidance motivational state. This uncertainty undermines the ability to the interpret the results, because it is unclear what to make of a null effect if the manipulation may have been weak or ineffective. On a related note, the present study has 80% power to detect a d of 0.4, but it is not clear that a smaller effect would be uninteresting. For these reasons, I think the current study on its own falls short of providing a solid test of the key hypothesis, and a replication study would be necessary to address: 1) the efficacy of the manipulation, 2) the power of the study to detect the smallest effect of interest. This would also provide an opportunity to include a control group, as suggested by Reviewer 1.

2. Both reviewers note places where language could be clearer, and where statistical discrepancies should be addressed.

3. Reviewer G notes that the attention given to mediation Hypotheses 1 and 2 should match that given to Hypothesis 3.

In summary, I think this is a very interesting paper and I imagine it will have an important impact on the field if you can collect additional data to address the issues raised above. Thus, I hope you will collect new data and revise this for further consideration at Collabra. I realize this may be more substantial revision than you are willing to conduct, but I hope you will consider it. I look forward to receiving your revision. Please see the instructions below for submitting your revision.

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.

Please ensure that your revised files adhere to our author guidelines, and that the files are fully copyedited/proofed prior to upload. Please also ensure that all copyright permissions have been obtained. This is the last opportunity for major editing;, therefore please fully check your file prior to re-submission.

If you have any questions or difficulties during this process, please do contact us.

Please could you have the revisions submitted by August 3, 2020. If you cannot make this deadline, please let us know as early as possible.

Kind regards,

Alexa Tullett
University of Alabama, USA
atullett@bama.ua.edu
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Reviewer E:

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?:
I have read the manuscript entitled Working for the best or bracing for the worst? Approach and avoidance motivation in planning with great interest. The researchers tested the extent to which manipulating approach vs. avoidance toward a goal would impact motivation toward planning for the goal. Anticipated affect and perceived psychological distance to the goal were used as mediators in the primary analyses. Results revealed no significant difference between the motivation groups on planning and no mediation effects. The authors indicated several feasible reasons why these effects were not found in their data, suggesting important directions for future research.

Broadly, I appreciated the authors’ meticulous approach to testing their hypotheses, which were well-informed from a strong review of past research. However, like the authors, I was surprised by the null results! Additional research is certainly needed to explore how approach and avoidance motivation influence planning cognitions and behaviors.
I have listed my specific comments and questions about the manuscript below.

Major Concerns:

1. The authors seem to conflate approach motivation with positive stimuli and avoidance motivation with negative stimuli (e.g., lines 92-99). However, past research demonstrates that negative stimuli, such as the emotion of anger, may also facilitate approach motivation (see Harmon-Jones, 2003). Although this point may not directly impact the authors’ methods and results, such a distinction should be considered for the literature review.

2. Past research not reviewed in this manuscript has suggested that motivational intensity (i.e., low vs. high approach or avoidance motivation) is important when testing differences between motivational states (see Harmon-Jones, Price, & Gable, 2012). For example, participants experiencing low approach-motivation affects and low withdrawal-motivation affects demonstrate a broadened attentional scope, whereas participants experiencing high approach- and withdrawal-motivation affects demonstrate a narrowed attentional scope (Gable & Harmon-Jones, 2008, 2010). I wonder if, in the current study, participants were experiencing a similar degree of approach and avoidance intensity, perhaps partially explaining why there was no difference between the two conditions? A measure of the extent to which participants were truly motivated to approach or withdraw from the course grade would greatly benefit this study.

3. Similarly, past research has shown that personal relevance to a goal significantly predicts goal-relevant behavior and motivation (Harmon-Jones, Lueck, Fearn, & Harmon-Jones, 2006; Simons, Dewitte, & Lens, 2003). To what extent was the goal of approaching or avoiding a grade personally relevant to this particular sample? Although participants were college students who presumably wanted to obtain (avoid) a high (low) grade, the extent to which these specific students cared about that goal might explain some variance in these data.

4. Participants completed this study either during the break of a lecture or prior to the end of a lecture. Why were participants allowed to complete the study at these two different time points? Is it possible that participants’ motivation or mood would have differed depending on when they completed the study? For example, if participants experienced time pressure while completing the study during the break, they might not have been as motivated to plan for the distant future because their immediate future (i.e., attending to the remaining lecture) was more pertinent. Can the authors test for this in their data?

5. The description of the study’s sample size is somewhat confusing. Line 299 indicates that 262 participants were recruited for the study. Lines 318-319 indicate that 226 participants were assigned to the two conditions. And line 365 indicates that 50 participants were excluded from analyses, suggesting that 212 participants would be assigned to the two conditions (262-50 = 212). However, line 369 indicates that 214 participants were included in the study. Please address this discrepancy and/or reorganize the presentation of this information to clarify your sample size in the manuscript.

6. On lines 504-505, the authors admit that having a control condition would help elucidate the impact of approach and avoidance motivation on planning. I completely agree. However, acknowledging the lack of a control condition does not absolve the authors from not including one. In order to have more confidence in the current findings, I recommend they replicate the current study but include a control condition (and perhaps additional outcome measures as described in previous comments).

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' use of tables and figures were appropriate for this manuscript. The authors also provided original data to ensure reproducibility.

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.:
The authors provided adequate information about ethical treatment of their participants on lines 306-315. Information about informed consent and debriefing were provided.

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.:
The text was well-written and free of jargon. I have no recommendations about how the manuscript was written.

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Reviewer G:

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?:
Article title: Working for the best or bracing for the worst? Approach and avoidance motivation in planning
Corresponding Author: simenb1996@gmail.com
Reviewer: Nicole Ryerson
Overall Recommendation: The article presents a well conducted, pre-registered experimental study that contributes to the literature. There were some minor issues documented in the comments below.
Comments:
1. In the abstract, the statement “Thus, the present study tested the effect of approach versus avoidance motivation on willingness to plan in a pre-registered experiment (N=262)” reads as though the research is investigating the willingness to plan within the context of performing a pre-registered experiment. I would suggest revising to the following: “Thus, the present pre-registered study (N=262) experimentally tested the effect of approach versus avoidance motivation on willingness to plan”.
2. The summary on planning was well organized and provided a great introduction to the topic (as well as highlighting its importance as a topic of study)
3. Pg 4 – Para. 1. It might be helpful to have a couple examples of other “strategy choices that people use for goal attainment” included in parentheses.
4. Pg. 6 – Para. 1. The summary of the Moos and Azevedo (2006) was a bit difficult to follow. It might be helpful to either condense the summary (leaving out some of the more nuanced information) or add some additional information to clarify the details of the study (how were the performance-avoidance/approach conditions created?).
5. Pg. 6 – Para. 1. Did the authors mean “a competing hypothesis” (i.e., approach vs. avoidance) instead of “a bi-directional hypothesis”? If not, more clarification is needed for the bi-directional hypothesis (i.e., the relationship between planning and motivation in general). But based on the summary paragraph included on page 8, the use of the word “versus” on page 13, and the use of the word “competing” on page 21, it seems as though the authors are aiming more for a competing hypothesis looking at approach vs. avoidance motivation.
6. Pg. 7 – Para. 2. “participants in the prevention condition scorer higher” should be scored.
7. Pg. 10 – Para. 1 punctuation is missing after “though there are certain differences (Hagger & Luszczynska, 2014)”
8. Pg. 11 – The authors did a great job introducing and connecting anticipated affect/temporal distance to the current study as mediators.
9. Pg. 13 – Hypoth. Mediation hypothesis 3 includes specific details about the mediation effect of temporal distance (approach motivation will decrease temporal distance, etc.). The same level of detail should be included in the mediation hypothesis (1 & 2) concerning the intensity of anticipated affect.
10. Pg. 13 – Participants. 88 men and 143 women are reported, did the remaining 31 participants not respond or did they select the “do not wish to report” option?
11. Pg. 14 – Assignment to condition. The overall sample was reported as 262, which means 36 participants are missing from the assignment to condition count (114 and 112). This discrepancy should be explained.
12. Pg. 16 – Data prep. and prelim analys. Punctuation missing after “(i.e. writing down which goal they wanted to achieve or avoid)”
13. Pg. 17 – “report a grader” should be grade
14. The discussion was well written. It sufficiently summarized all of the findings and presented excellent assessment of those findings.
15. It is much appreciated that the authors are contributing to the open science movement and presenting a manuscript with pre-registration.

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).:
Appropriate use of figures, tables, and data

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

**Author response**

Dec 10, 2020

**Revision feedback to the editor and to the reviewers**

 We want to thank both reviewers and the editor for their thorough comments – the comments have greatly improved the quality of the manuscript and have been vital in conducting an improved empirical test of our research hypotheses. In the new version of our manuscript file, we have addressed several of the suggestions raised by both the editor and the reviewers. As some suggestions pertained to study design and others to the text itself, we have chosen to divide the revision feedback into two sections: One section for the study design, explaining how the second experiment was designed as to address comments, and one section for the text itself, explaining which sections of the text have been changed to address comments.

**Revision feedback – Study design**

 As emphasized in the editor summary and from reviewer E, there was some doubt regarding the appropriateness of the manipulation check reported in the manuscript for study 1. Thus, for Experiment 2, we included a manipulation check that more directly addresses participants’ thoughts about what they want to approach/avoid, reported in the methods description for Experiment 2 (page 25). Additionally, to address the possibility of not having sufficient statistical power to detect an effect of interest, we increased the sample size in Experiment 2 (*n* = 787 after exclusions) substantially compared to Experiment 1. Another study design suggestion was made by reviewer E: The possibility of including a control group. While we appreciate the suggestion, we believe that a control group would be unlikely to represent a meaningful comparison when the research question concerns the relative effects of approach and avoidance motivation. This response is further delineated in the general discussion (pages 32-33). Reviewer G commented on the specificity of our mediation hypotheses for Experiment 1, noting that the association between the intensity of anticipated affect and willingness to plan was not specified in our hypotheses. We agree that this was an oversight and specified this more clearly in our pre-registered hypotheses for Experiment 2 (Appendix S2 and pages 23-24 in the manuscript). Additionally, changes to the study design were made that we believe address reviewer E’s comments about motivational intensity, personal relevance of the goals and time of completion for the study. The reviewer argued that motivational intensity may matter for interpreting our results, and we believe we address this by including, and interpreting, the new manipulation check, which can be considered a measure of intensity. Additionally, the reviewer questioned whether the goal included in the experimental manipulation was perceived as personally relevant for the specific sample. We included a measure of perceived relevance in Experiment 2, and provide results supporting that the goals were perceived as personally relevant (page 29 in the manuscript). Finally, reviewer E wondered if we were able to test for any effect of when participants completed the study in Experiment 1. We were not, but we included a measure of this in Experiment 2 to address the limitation, results of which we note in pages 29-30.

**Revision feedback – The text**

* Reviewer E
	+ Reviewer E noted the importance of distinguishing between approach/avoidance motivation and positive/negative valence. We revised the manuscript accordingly and included this distinction in our introduction of the terms on page 5.
	+ Reviewer E noted that the description of the number of participants in the sample in Experiment 1 was confusing. We revised the manuscript accordingly and made our exclusions more explicit (page 15 and page 17).
* Reviewer G
	+ 1.: Reviewer G commented that our description of the experiment in the abstract could be confusing. We revised the manuscript accordingly and made our experimental design more clear (page 2).
	+ 3.: Reviewer G commented that it would be preferable to have an example of what is meant by strategy choice in the description of planning and goal attainment. We added an example to make this clearer (page 4).
	+ 4.: Reviewer G commented that the summary of the Moos & Azevedo (2006) study was difficult to follow. We included a more detailed explanation of the experimental conditions that were used in this study (page 6).
	+ 5.: Reviewer G commented that our use of the term bi-directional hypothesis may be confusing, as we were presenting competing hypotheses. We revised the manuscript and made it clearer, in all descriptions of the hypotheses, that these are competing.
	+ 6.: Reviewer G identified a typological error, which was corrected.
	+ 7.: Reviewer G identified a lack of punctuation, which was corrected.
	+ 10.: Reviewer G asked about the participants who chose not to indicate a gender: We made it clearer that these participants did not wish to indicate their gender (page 14).
	+ 11.: Reviewer G noted a discrepancy in the description of the sample size. This is described in more detail in the revised manuscript (page 17).
	+ 12.: Reviewer G identified a lack of punctuation, which was corrected.
	+ 13.: Reviewer G identified a typological error, which was corrected.

**Editor final decision—Accept**

Feb 15, 2020

Dear Dr Simen Bø,

After review, we have reached a decision regarding your submission to Collabra: Psychology, "Working for the best or bracing for the worst? Approach and avoidance motivation in planning", and are happy to accept your submission for publication, pending the completion of copyediting and formatting processes.

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.

The review information should be included in this email.

Kind regards,

Alexa Tullett
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atullett@bama.ua.edu