**Peer Review and Communication History**

**MS Title**: A good person shouldn't feel this way: Moralized attitudes, identity, and self-esteem

**Author Names**: Pierce Ekstrom, Calvin Lai

**Submitted:** Dec 22, 2021

Prof. Donnellan,

Thanks again to you and our reviewers for the opportunity to submit our Stage 2 registered report for further consideration at *Collabra Psychology*. We appreciate the time and effort you’ve devoted to improving our work, and we are excited to share the results of our analysis with you.

Per *Collabra Psychology*’s submission guidelines, we confirm the following:

* The manuscript includes in its Data Accessibility Statement a link to the OSF pages containing anonymized study data, digital materials, and analysis code.
* The manuscript contains in its Data Accessibility Statement a link to the Stage 1 protocol on the Open Science Framework.
* No data other than the pilot data included at Stage 1 was subjected to the pre-registered analyses prior to In-Principle Acceptance, and we had no prior access to the data in question or to summary reports of the data through descriptive or inferential statistics or narrative descriptions of the data in talks, papers, or personal communications with others.
* We have tracked all changes to the introduction to our manuscript using Microsoft Word’s Track Changes feature. These changes were all minor, generally changing the future to the past tense.

Thank you for considering our Stage 2 submission. We look forward to hearing from you.

**Editor First Decision**: Revise & Resubmit

Mar 29, 2022

Dear Pierce Ekstrom,

I have now received all reviews of your Stage 2 Registered Report submission, “A good person shouldn’t feel this way: Moralized attitudes, identity, and self-esteem”, from qualified researchers. I also independently read the manuscript before consulting these reviews. The reviewers were mixed in their assessments as you will read below. The biggest issue noted by Reviewer #2 concerns the interpretation of the validation study results. My goal is to prompt you to consider the issues in your revision so that other readers can make their own judgments. I think this is in keeping with the RR mechanism and I respect that different scholars will have differing opinions on the issue. I do not plan to send a revision back out for review and thus the time lag to the final decision should be greatly reduced if/when you submit the revised manuscript. My plan would be to review the new version and the letter of response and then make a final up or down decision. I still reserve the right to consult with one or both of the reviewers if anything drastically changes.

I mostly organized my points by reviewer order. I hope this is helpful. 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 did not list all concerns raised by the Reviewers but I ask that you consider all of their points in a response letter.

Issues Raised by Reviewer #1

1. Reviewer #1 raised a concern about whether the confirmatory AIID dataset tests should be conducted on the 85% confirmatory dataset or the merged complete dataset. I checked the Stage 1 Registered Report and noted that your team stated that you would use the merged dataset. So I think that is fine for the final report. However, it might be worthwhile to post a supplement that details the results using just the 85% confirmation sample. I imagine the results will be quite similar.
2. Related to point #1, I think it would be good to link to the Stage 1 proposal directly in the final report so interested readers can have ready access to that version of the paper. (I apologize if I missed this). I believe this will address concern #2 raised by Reviewer #1.
3. Reviewer #1 raised over concerns about tracking the analyses and offered helpful suggestions for delineating what was pre-registered versus exploratory. This may help the flow of the Results section.
4. The General Discussion is relatively brief and could be expanded a bit by reference to the main ideas pursued in the paper. For example, I thought it might be useful to separately summarize the strength of the evidence for the two hypotheses derived from Figure 1. I might be way off base, but I think there is stronger support here for the morality-identity hypothesis than the identity-rubric hypothesis. The current Discussion is a little sparse and I think this leaves readers with a sense of ambiguity about the interpretations of the work and uncertainty about next steps for research to advance tests of the underlying ideas. I think it would be ideal to expand the Discussion so readers are crystal clear about your interpretations and opinions on next steps. Readers are free to disagree with your interpretations and ideas but I think they will be in a better position to learn from your work if things were more explicit in the Discussion.
5. One last concern I had with the Discussion was a consideration of whether the Rosenberg Self-Esteem scale was the best way to operationalize the affective state implied with your theorizing. The RSE seems to pick-up on a considerable amount of trait-like variance and alternative measures might be worthwhile. Thus, it might be useful to suggest alternative measures for future tests of the hypotheses in question. Indeed, I think a wider consideration of measurement issues will factor into a revised Discussion that responds to the concerns raised by Reviewer #2.

Issues Raised by Reviewer #2

1. This Reviewer had a more negative interpretation of the validation study results than it seems was the interpretation offered by your team. This Reviewer did not believe the validity evidence was strong enough to be convinced that the current tests of the hypotheses using the AIID dataset were informative. I think you should consider this argument in the revision (especially in the Discussion) and offer your counter-points. It would also help to expand the reporting and discussion of the validation study to have some consideration of effect sizes. I encourage you to perhaps adopt an even more critical stance on the measures in the Discussion in the service of advancing future work. I think this will help put readers in a good place to form their own judgements about the “measurement argument”. Ultimately, I think different readers will come to different conclusions about the measurement issue and that is okay with me. I see my role as prompting you to make the validity evidence issue more explicit (see also points 12 & 13 below).
2. I encourage you to also provide some suggested future tests of the hypotheses in question in the Discussion. That way interested readers could try those studies on their own if they were interested in the ideas you pursued in this work. I believe this is a generative pathway forward that would be informed by all of the effort embodied in this report.

Additional Issues I Noted in my Review

1. I wonder if adding in an additional paragraph summarizing the preliminary exploratory tests of the AIID dataset in the Introduction will enhance the final paper. I think it is fine to link to the online supplementary materials for extensive details but a think a brief synopsis will help readers anticipate what will be reported.
2. Can you define IDC in the note for Table 1? I also wonder if a key to the actual items would be helpful for readers interpreting Table 1. I think this will make it more informative but I do not feel strongly about this point.
3. Can you report some descriptive data (i.e., the Mean, SD, and estimate of internal consistency for the Rosenberg scores)? It might be good to note the response scale (i.e., 4 or 5-point scales).
4. Was the age of 110 on the validation study plausible?
5. In line with concerns about measurement, it might be useful to draw out the implications of having to drop the “composite” measure of moralized attitudes from the AIID. I think readers might benefit from learning more about how validation studies like you conducted can inform how they approach the analysis of existing datasets. This could be a topic you briefly address in the Discussion.
6. Likewise, I think more needs to be said about the implications of Footnote #5 and what that means for the validation work. Is this a big deal or a minor error? (I might have missed this but I would also flag this issue in Appendix A).
7. I think a brief summary of the results of the validation study and how they inform the results of the AIID dataset will enhance the paper. This could occur at the end of that section before you describe the confirmatory tests of the hypotheses using the AIID dataset. This could also preview issues you address in the General Discussion to respond to Reviewer #2
8. I agreed with suggestions from Reviewer #1 about the value of finding ways to help readers/users navigate the files on the OSF project page.

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. 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 resubmission.

If you have any questions or difficulties during this process, please contact the editorial office [editorialoffice@collabra.org](mailto:editorialoffice@collabra.org). Good luck revising this work. Thank you for trusting us with your paper.

Sincerely,

Brent Donnellan

# Reviewer 1

##### Open response questions

### Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

This is a review of a stage 2 registered report. I reviewed stage 1 in 2020. As before, I am again going to focus my review on methods and statistics. I leave areas requiring domain expertise to other reviewers.

1. I consulted my copy of the proposal from June 2020. There appears to be a discrepancy between what was done in the Stage 2 report and what I expected based on the proposal. In the proposal, the authors wrote “We will use the remaining 85% of the dataset to perform confirmatory tests of our hypotheses” (p. 13). However, in the Stage 2 report, the 15% exploratory dataset has been pooled with the 85% holdout dataset. I think it is better, and more in keeping with the plan, for the analyses to have been done on the 85% holdout alone, rather than pooling that data with the data that were used for exploration.
2. Regarding pre-registration and the RR process: I am not sure how Collabra handles this, but what I would hope to see is the following. The approved stage 1 protocol should be cited in the manuscript, preferably with a stable DOI and link to a registry. (Was the protocol registered on OSF prior to the onset of the confirmatory analyses?)
3. Open practices: I am increasingly advising authors to include a “Transparency and Openness Statement” as a subsection in the paper’s Method, although it is not yet required at Collabra. This section brings together various disclosures into one succinct statement. For instance, here is a sample statement that APA advises authors to include at JEP:LMC:  
   “We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study, and we follow JARS (Kazak, 2018). All data, analysis code, and research materials are available at [stable link to repository]. Data were analyzed using R, version 4.0.0 (R Core Team, 2020) and the package ggplot, version 3.2.1 (Wickham, 2016). This study’s design and its analysis were not pre-registered.”  
   The things you want to include are: citations to any secondary materials/data/code, citations to any pre-registrations, stable links to any shared primary data/materials/code, and a statement of which reporting standards you followed (if any; typically this would be JARS or the 21-word statement). This is an optional change that I think would increase the obviousness of the various open practices that you follow.
4. There are many files on the OSF page associated with this project. However, they are hard to navigate, and it is difficult to tell what is what. I recommend including a table of contents, or other descriptive information, on the OSF wiki to help readers navigate the files. Try to think about what information a reader would need to understand the files and include it.
5. It is difficult (if not impossible) to really track adherence to the stage 1 plan in a project with this level of complexity as a reviewer. Here are a few things that would make it easier. First, separate analyses that were planned/pre-registered from any exploratory additions. Include separate headers to distinguish the former from the latter. Second, include a subsection in the Method for “deviations from pre-registered plan,” and disclose all deviations there. Third, using track changes is very helpful. Changes were only tracked in the intro here, making it hard to see where additions were made in the method, results, and discussion. Relatedly, there just a lot here. I wonder if some kind of table or other organizing framework could help the reader keep track of the many research questions and tests. That framework could then be used to organize and streamline the different findings from intro to results to discussion.
6. Demographic information about the AIID respondents is missing. Are they from the US/Canada/UK like the validation sample? What about age, gender, race?

Additional points:

1. Please make sure to formally cite the AIID in the reference list, including a DOI. Currently, there only appears to be a link to the AIID OSF page.
2. On page 14, you write about “the general population,” but it is not clear which population you are referring to. Is it US adults? People in the US? Something else?

I sign all of my reviews,  
Katherine S. Corker

##### Rating scale questions

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  | ✔ |  |  |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  | ✔ |  |  |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  | ✔ |  |  |  |

# Reviewer 2

##### Open response questions

### Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

I reviewed two versions of this manuscript at the first stage of this RR. I continue to think that the ideas are interesting, but that the measures do not map onto the intended constructs. Because of this, I am not confident we can come to clear theoretical conclusions from the analyses.

I may be mistaken, but I believe the validation study is also a “registered report” in that data were not collected prior to review? I ask because I do not remember seeing these results and if I had seem them I would not have recommended doing the rest of the study.

When reading the main text of this Stage 2 manuscript, I was surprised how little info there was on the actual validity tests. It didn’t report effect sizes or how clearly the AIID versions mapped onto previously validated version? This is really important information for the reader to have without requiring that they dig into the supplemental materials.

When I did dig into the supplemental materials, I find that the best item has the following conditional effects, "(b\_moral conviction = .15, p = 0.021) or “(b\_moral conviction = -.15, p = 0.049)” depending on the item direction. These effects are barely distinguishable from zero despite a large sample size. These b’s are smaller than the b’s between different constructs in the main text (see e.g., Table 2). I can’t see how this is evidence that the AIID moral conviction measure is a good approximation of moral conviction. This means that I don’t think the conclusions of the manuscript can follow from their analyses of the AIID. I just don’t think we know what they are measuring.

This is not just a problem with moral conviction. AIID centrality also has problems. The effects are not large (although larger than for moral conviction) and most items have a problem. The authors rely on “compensating” problems from each item in order to justify using the composite. I’m not sure that this is a psychometrically valid approach? When combined with the weak relationships to the measures of the validating construct, I’m just not confident we know what those items are assessing.

Lastly, as I mentioned in a prior review, I don’t buy the gut feelings measure and I don’t buy the citation that is used to justify it. I won’t repeat my prior feedback on this measure here, but the current version of the manuscript has not changed my impression. This, when combined with the weak results from the validation study, makes me really question what the authors are measuring for three of their four key measures.

Minor comment

Something is off with the CIs in the supplemental figures. The CIs are the same width for the entirety of the regression line. That shouldn’t be the case. They should be tighter at the mean. There is something about how some of the R packages compute these. I ran into the problem before. It’s fixable.

##### Rating scale questions

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) | ✔ |  |  |  |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  |  |  | ✔ |  |

**Author Response**  
May 13, 2022

Revision memo for “A good person shouldn’t feel this way: Moralized attitudes, identity, and self-esteem”

Prof. Donnellan,

Thanks again to you and our reviewers for the opportunity to revise and resubmit our manuscript for further consideration at *Collabra Psychology*. We appreciate the time and effort you’ve devoted to improving our work.

We have incorporated feedback from all three of you in our revised Stage 2 submission. This revision memo details the changes we have made, addressing your and the reviewers’ comments point by point.

**Comments from the Editor**

*The reviewers were mixed in their assessments as you will read below. The biggest issue noted by Reviewer #2 concerns the interpretation of the validation study results. My goal is to prompt you to consider the issues in your revision so that other readers can make their own judgments. I think this is in keeping with the RR mechanism and I respect that different scholars will have differing opinions on the issue. I do not plan to send a revision back out for review and thus the time lag to the final decision should be greatly reduced if/when you submit the revised manuscript. My plan would be to review the new version and the letter of response and then make a final up or down decision. I still reserve the right to consult with one or both of the reviewers if anything drastically changes.*

*I mostly organized my points by reviewer order. I hope this is helpful. 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 did not list all concerns raised by the Reviewers but I ask that you consider all of their points in a response letter.*

***Issues Raised by Reviewer #1***

*1. Reviewer #1 raised a concern about whether the confirmatory AIID dataset tests should be conducted on the 85% confirmatory dataset or the merged complete dataset. I checked the Stage 1 Registered Report and noted that your team stated that you would use the merged dataset. So I think that is fine for the final report. However, it might be worthwhile to post a supplement that details the results using just the 85% confirmation sample. I imagine the results will be quite similar.*

Thank you for checking. We agree that it would be nice to know the results we’d obtain using *only* the confirmatory data to permit a cleaner boundary between confirmatory and exploratory results. We have re-estimated all of the models used to test our “morality-identity” and “identity rubric” hypotheses using the 85% confirmatory dataset and detailed these results in the online supplemental materials at https://osf.io/6rq9h/. Most coefficients were virtually unchanged, but three changed in statistical significance; the interaction between Target B identity centrality and Target B gut feelings (from b = 0.01, p = 0.020 to b = 0.01, p = 0.202) and both interactions (i.e., Target A and B) between attitude identity centrality and gut feelings (from b = 0.004, p = 0.046 to b = 0.004, p = 0.098; from b = 0.004, p = 0.080 to b = 0.004, p = 0.104). All three of these interactions were estimated in models predicting self-esteem—interactions we had previously judged to be too small to be of theoretical significance. So using the full dataset vs. the confirmatory subset of the data would not affect the conclusions we’ve drawn.

In the main text of the manuscript, on page 32, we now write, “Although our pre-registration indicated that we would combine the 15% and 85% subsets of the AIID data for a single analysis, this decision blurs the boundary between data used for exploratory and confirmatory purposes. We therefore re-estimated all models used to test our Morality-Identity and Identity Rubric hypotheses using the 85% confirmatory dataset only. The size and statistical significance of coefficients were virtually unchanged, with two exceptions described below. They are described in detail in supplemental analyses available here: https://osf.io/6rq9h/.”

Note that we chose not to repeat our descriptive analyses we used to build Figure 2 because these were not the focus of our inferential tests. Nor did we re-estimate the many models described in Table 9, given that we never actually ran these models on the exploratory dataset.

*2. Related to point #1, I think it would be good to link to the Stage 1 proposal directly in the final report so interested readers can have ready access to that version of the paper. (I apologize if I missed this). I believe this will address concern #2 raised by Reviewer #1.*

We agree. We have inserted a stable doi link to the OSF registration that includes our Stage 1 proposal (<https://doi.org/10.17605/osf.io/zry5b>) on pages 10, 32, and 68. Please note that this link to our registration is NOT anonymized, and so if there will be further rounds of blind peer review, we should remove this link before a draft is sent to reviewers.

*3. Reviewer #1 raised over concerns about tracking the analyses and offered helpful suggestions for delineating what was pre-registered versus exploratory. This may help the flow of the Results section.*

We have made a few changes to make it easier to follow our results.

First, we changed a few headings to make clearer that all of the analyses reported in the manuscript were pre-registered: “Validation Study Results” is now “Validation Study Results (Pre-Registered Analysis)” and “Results from the AIID dataset” became “Results from the AIID dataset (Pre-registered Analysis).”

Second, we changed all of the headings and subheadings in our results section to clarify the idea that the section was supposed to test. For example, “Moralization and Identity Centrality” is now “Testing the Morality-Identity Hypothesis.”

Third, we made minor changes to the beginning of each major section of the results to first reiterate the hypothesis we test in that section before detailing the statistical analysis we use to test it.

Finally, following Reviewer 1’s suggestion, we made a Table that briefly summarizes our results across the various operationalizations of identity centrality that we used. This is Table 2 in the revised manuscript.

*4. The General Discussion is relatively brief and could be expanded a bit by reference to the main ideas pursued in the paper. For example, I thought it might be useful to separately summarize the strength of the evidence for the two hypotheses derived from Figure 1. I might be way off base, but I think there is stronger support here for the morality-identity hypothesis than the identity-rubric hypothesis. The current Discussion is a little sparse and I think this leaves readers with a sense of ambiguity about the interpretations of the work and uncertainty about next steps for research to advance tests of the underlying ideas. I think it would be ideal to expand the Discussion so readers are crystal clear about your interpretations and opinions on next steps. Readers are free to disagree with your interpretations and ideas but I think they will be in a better position to learn from your work if things were more explicit in the Discussion.*

We have expanded our Discussion in a few ways.

First, in our “Summary of Results,” we have made clearer how each result maps on to each hypothesis, highlighting explicitly that we find “robust support for the Morality-Identity hypothesis” and “weak and inconsistent support for the Identity Rubric hypothesis.”

Second, we have added an extensive discussion of the validation study and its implications. See our reply to Editor Comment #6.

Third, we have elaborated on why our registered test of our hypothesis might have presumed self-esteem to be too malleable. On the one hand, gut feelings that are inconsistent with one specific attitude may be a very narrow threat to the self. On the other hand, as you point out, the Rosenberg Self-Esteem scale may be too broad and trait-like a measure to serve as a movable dependent variable.

Finally, throughout the discussion, we have more explicitly considered the implications of our work for future research, clarifying how later investigations might use what we’ve learned or answer questions that our study leaves unanswered.

*5. One last concern I had with the Discussion was a consideration of whether the Rosenberg Self-Esteem scale was the best way to operationalize the affective state implied with your theorizing. The RSE seems to pick-up on a considerable amount of trait-like variance and alternative measures might be worthwhile. Thus, it might be useful to suggest alternative measures for future tests of the hypotheses in question. Indeed, I think a wider consideration of measurement issues will factor into a revised Discussion that responds to the concerns raised by Reviewer #2.*

We agree. We have added an explicit discussion of the trait-like nature of the Rosenberg Self-Esteem Scale and commented on how the narrow identity threats we examined may not impact participants’ responses to such a measure. For example, we write, “On the one hand, narrower measures of self-esteem might prove to be more malleable. People’s thoughts and behavior during a particular event or time period might affect how they feel about themselves during that specific time. On the other hand, more frequent, numerous, or chronically salient contradictions between people’s gut feelings and the attitudes they believe to be appropriate might have a stronger impact on self-esteem than the one or two attitudes we were able to assess.”

These additions can be found on page 59 of the manuscript.

***Issues Raised by Reviewer #2***

*6. This Reviewer had a more negative interpretation of the validation study results than it seems was the interpretation offered by your team. This Reviewer did not believe the validity evidence was strong enough to be convinced that the current tests of the hypotheses using the AIID dataset were informative. I think you should consider this argument in the revision (especially in the Discussion) and offer your counter-points. It would also help to expand the reporting and discussion of the validation study to have some consideration of effect sizes. I encourage you to perhaps adopt an even more critical stance on the measures in the Discussion in the service of advancing future work. I think this will help put readers in a good place to form their own judgements about the “measurement argument”. Ultimately, I think different readers will come to different conclusions about the measurement issue and that is okay with me. I see my role as prompting you to make the validity evidence issue more explicit (see also points 12 & 13 below).*

Although we do interpret our validation study results more positively than Reviewer 2 did, we have revised the manuscript extensively to make clear that the results were weaker and more mixed than we expected.

First, we have moved all of the information that we previously relegated to a supplemental document into the main text.

Second, we have revised the way we present and interpret those results to explicitly acknowledge that both pessimistic and optimistic interpretations are defensible, though we do ultimately favor the more optimistic interpretation. This revision appears on page 28.

Finally, we have also revised our Discussion to take up this question. We have attempted to state as clearly as possible that (A) the validity evidence is weaker than we expected and (B) we do not think the weak validity evidence changes the conclusions we ought to reach. We offer three arguments for confidence in our conclusions: (1) our results did not depend on which AIID measure was used; (2) the wording of AIID measures gives us some confidence in their construct validity; and (3) we find converging results using other measures.

*7. I encourage you to also provide some suggested future tests of the hypotheses in question in the Discussion. That way interested readers could try those studies on their own if they were interested in the ideas you pursued in this work. I believe this is a generative pathway forward that would be informed by all of the effort embodied in this report.*

We appreciate the suggestion, and we have included more specific suggestions for future research throughout the discussion section.

***Additional Issues Noted by the Editor***

*8. I wonder if adding in an additional paragraph summarizing the preliminary exploratory tests of the AIID dataset in the Introduction will enhance the final paper. I think it is fine to link to the online supplementary materials for extensive details but a think a brief synopsis will help readers anticipate what will be reported.*

We now briefly summarize the results of the exploratory analyses in the “Overview and Hypotheses” section.

*9. Can you define IDC in the note for Table 1? I also wonder if a key to the actual items would be helpful for readers interpreting Table 1. I think this will make it more informative but I do not feel strongly about this point.*

We agree. We have updated Table 1, spelling out “Identity Centrality” and providing abbreviated information about each moralized attitude and attitude identity centrality item.

*10. Can you report some descriptive data (i.e., the Mean, SD, and estimate of internal consistency for the Rosenberg scores)? It might be good to note the response scale (i.e., 4 or 5-point scales).*

Yes – we have added this information to the part of the Method section where we describe the self-esteem scale. Possible scores ranged from 1 (minimum self-esteem) to 6 (maximum self-esteem), with *M* = 4.69, *SD* = 0.95, α = 0.89.

*11. Was the age of 110 on the validation study plausible?*

Probably not, but because we did not pre-register any plan to exclude participants reporting unlikely demographic characteristics (or any other signs of survey inattention), we retained all participants regardless of age. We now say this in the manuscript. Excluding our supposed 110, 96, and 89-year-olds also leaves our descriptive statistics for age largely unchanged (*M* = 40, *MDN* = 39*, SD* = 14.10 compared to *M* = 41, *MDN* = 40, *SD* = 14.06).

*12. In line with concerns about measurement, it might be useful to draw out the implications of having to drop the “composite” measure of moralized attitudes from the AIID. I think readers might benefit from learning more about how validation studies like you conducted can inform how they approach the analysis of existing datasets. This could be a topic you briefly address in the Discussion.*

Although we do not explicitly invoke the composite measure in the discussion, we think that our revisions to the results and discussion cover this. Specifically, in the results we now write “The four items may be weakly intercorrelated because they measure four distinct beliefs: whether positive judgments are acceptable, whether positive judgments are wrong, whether negative judgments are acceptable, and whether negative judgments are wrong.” And in the discussion, we write “our validity study offers an important caveat for our own and future work. We cannot safely assume that when people say that their attitude is moral or important to who they are, that they will *also* say that the opposite attitude is immoral or anathema to their self-concept. Although we might say people “moralize” an attitude when they judge it to be desirable, acceptable, or wrong, these judgments probably do not lie along a single dimension.”

*13. Likewise, I think more needs to be said about the implications of Footnote #5 and what that means for the validation work. Is this a big deal or a minor error? (I might have missed this but I would also flag this issue in Appendix A).*

We now address this question in the manuscript. In the Method section for our validation study, we write “Follow-up analyses suggest that this error probably did not have a large impact on our results,” and we have added a footnote (Footnote 8, page 23) that explains our reasoning. Although participants were about half a scale point more likely to report judgments were “consistent with” their self-concept than that judgments were “important to” their self-concept, responses to both versions of each item were similarly correlated with other indices of identity centrality.

We have also flagged this issue in Appendix A. Thanks for catching that.

14. I think a brief summary of the results of the validation study and how they inform the results of the AIID dataset will enhance the paper. This could occur at the end of that section before you describe the confirmatory tests of the hypotheses using the AIID dataset. This could also preview issues you address in the General Discussion to respond to Reviewer #2

We agree. We think the revisions we’ve made to the Results and Discussion sections (see our reply to Comment #6) provide a better framework for interpreting our validation study.

15. I agreed with suggestions from Reviewer #1 about the value of finding ways to help readers/users navigate the files on the OSF project page.

Ok! We have renamed the “Supplementary Document Overview” on our project’s OSF page to make its purpose more obvious (“START HERE - Overview of Supplementary Materials”) and restructured the OSF page itself to mirror that overview document and make the page more navigable.

***Comments from Reviewer 1***

*This is a review of a stage 2 registered report. I reviewed stage 1 in 2020. As before, I am again going to focus my review on methods and statistics. I leave areas requiring domain expertise to other reviewers.*

*1. I consulted my copy of the proposal from June 2020. There appears to be a discrepancy between what was done in the Stage 2 report and what I expected based on the proposal. In the proposal, the authors wrote “We will use the remaining 85% of the dataset to perform confirmatory tests of our hypotheses” (p. 13). However, in the Stage 2 report, the 15% exploratory dataset has been pooled with the 85% holdout dataset. I think it is better, and more in keeping with the plan, for the analyses to have been done on the 85% holdout alone, rather than pooling that data with the data that were used for exploration.*

We address this concern with the re-analyses we described in our reply to Editor Comment #1.

*2. Regarding pre-registration and the RR process: I am not sure how Collabra handles this, but what I would hope to see is the following. The approved stage 1 protocol should be cited in the manuscript, preferably with a stable DOI and link to a registry. (Was the protocol registered on OSF prior to the onset of the confirmatory analyses?)*

See our reply to Editor Comment #2

***3. Open practices:*** *I am increasingly advising authors to include a “Transparency and Openness Statement” as a subsection in the paper’s Method, although it is not yet required at Collabra. This section brings together various disclosures into one succinct statement. For instance, here is a sample statement that APA advises authors to include at JEP:LMC:  
“We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study, and we follow JARS (Kazak, 2018). All data, analysis code, and research materials are available at [stable link to repository]. Data were analyzed using R, version 4.0.0 (R Core Team, 2020) and the package ggplot, version 3.2.1 (Wickham, 2016). This study’s design and its analysis were not pre-registered.”  
The things you want to include are: citations to any secondary materials/data/code, citations to any pre-registrations, stable links to any shared primary data/materials/code, and a statement of which reporting standards you followed (if any; typically this would be JARS or the 21-word statement). This is an optional change that I think would increase the obviousness of the various open practices that you follow.*

In a separate section above our “AIID Method” section, we now write, “All data, analysis code, and research materials for this project are available on our project’s OSF page: <https://osf.io/6ckns/?view_only=5b58ca3bc4104c02a4df96e4d545d53e>, including supplemental analyses mentioned but not reported in detail in the main text of this manuscript. The OSF page also includes power analyses we used to determine our sample size. Data were analyzed using Stata 17 (StataCorp, 2021). All analyses except those explicitly marked as exploratory were pre-registered at https://doi.org/10.17605/osf.io/zry5.”

*4. There are many files on the OSF page associated with this project. However, they are hard to navigate, and it is difficult to tell what is what. I recommend including a table of contents, or other descriptive information, on the OSF wiki to help readers navigate the files. Try to think about what information a reader would need to understand the files and include it.*

See our reply to Editor Comment #15.

*5. It is difficult (if not impossible) to really track adherence to the stage 1 plan in a project with this level of complexity as a reviewer. Here are a few things that would make it easier. First, separate analyses that were planned/pre-registered from any exploratory additions. Include separate headers to distinguish the former from the latter. Second, include a subsection in the Method for “deviations from pre-registered plan,” and disclose all deviations there. Third, using track changes is very helpful. Changes were only tracked in the intro here, making it hard to see where additions were made in the method, results, and discussion. Relatedly, there just a lot here. I wonder if some kind of table or other organizing framework could help the reader keep track of the many research questions and tests. That framework could then be used to organize and streamline the different findings from intro to results to discussion.*

See our reply to Editor Comment #3. We have made an effort to clarify the structure of our Results section in several ways. We did not deviate from our pre-registered analysis plan at any point.

For the record, we tracked changes in the introduction but not elsewhere because *Collabra* requires that changes to the introduction (but not other sections) be tracked. We would be happy to comply with whatever system makes reviewing easiest.

*6. Demographic information about the AIID respondents is missing. Are they from the US/Canada/UK like the validation sample? What about age, gender, race?*

Demographic information about the AIID respondents was included in the “AIID Data” section on p. 14 of the manuscript.

*7. Please make sure to formally cite the AIID in the reference list, including a DOI. Currently, there only appears to be a link to the AIID OSF page.*

Good catch! We have made this change.

*8. On page 14, you write about “the general population,” but it is not clear which population you are referring to. Is it US adults? People in the US? Something else?*

We have changed “the general population” to “the U.S. population at large.”

***Comments from Reviewer 2***

*I reviewed two versions of this manuscript at the first stage of this RR. I continue to think that the ideas are interesting, but that the measures do not map onto the intended constructs. Because of this, I am not confident we can come to clear theoretical conclusions from the analyses.*

*1. I may be mistaken, but I believe the validation study is also a “registered report” in that data were not collected prior to review? I ask because I do not remember seeing these results and if I had seem them I would not have recommended doing the rest of the study.*

That’s correct; Reviewer 2 is in no way contradicting themselves or reversing an earlier stance with their comments here.

*2. When reading the main text of this Stage 2 manuscript, I was surprised how little info there was on the actual validity tests. It didn’t report effect sizes or how clearly the AIID versions mapped onto previously validated version? This is really important information for the reader to have without requiring that they dig into the supplemental materials.*

*When I did dig into the supplemental materials, I find that the best item has the following conditional effects, "(b\_moral conviction = .15, p = 0.021) or “(b\_moral conviction = -.15, p = 0.049)” depending on the item direction. These effects are barely distinguishable from zero despite a large sample size. These b’s are smaller than the b’s between different constructs in the main text (see e.g., Table 2). I can’t see how this is evidence that the AIID moral conviction measure is a good approximation of moral conviction. This means that I don’t think the conclusions of the manuscript can follow from their analyses of the AIID. I just don’t think we know what they are measuring.*

*This is not just a problem with moral conviction. AIID centrality also has problems. The effects are not large (although larger than for moral conviction) and most items have a problem. The authors rely on “compensating” problems from each item in order to justify using the composite. I’m not sure that this is a psychometrically valid approach? When combined with the weak relationships to the measures of the validating construct, I’m just not confident we know what those items are assessing.*

Please see our reply to Editor Comment #6. Although we continue to disagree with Reviewer 2 about the face validity of the AIID measures in question and their interpretation of our validity results, we agree that we erred in not taking these questions head on in our previous draft and—in particular—in relegating the specific results of these analyses to a supplemental document. We hope that our revised presentation of these results is more thorough and informative so that readers can draw their own conclusions about the value of the items and the soundness of our conclusions.

*3. Lastly, as I mentioned in a prior review, I don’t buy the gut feelings measure and I don’t buy the citation that is used to justify it. I won’t repeat my prior feedback on this measure here, but the current version of the manuscript has not changed my impression. This, when combined with the weak results from the validation study, makes me really question what the authors are measuring for three of their four key measures.*

We discussed this concern in more detail in a previous revision memo, but because this round of revision was between we authors and the editor, Reviewer 2 would not have seen our response. In case further feedback is sought from Reviewer 2, and so that the public record of our current revision memo will indicate that we take this important concern seriously, we have pasted our earlier response here:

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We have changed the way we introduce the gut feeling measure to clarify why we believe it is appropriate and useful for our purposes. On pp. 16-17, we now write, “Previous research indicates that reports of gut feelings and indirect, reaction-time measures (e.g., IAT scores) both measure something distinct from participants’ controlled attitudes toward those targets (Ranganath, Smith, & Nosek, 2008). Whereas measures like the IAT rely on the speed of categorization to infer participants’ spontaneous affective reactions, self-report measures of ‘gut feelings’ rely on participants’ *perceptions* of their spontaneous affective reactions. Both are useful indices of individuals’ spontaneous affective reactions that may contradict or complement participants’ general self-reported attitudes (see Gawronski & Bodenhausen, 2007). That said, our measures of gut feelings are better suited for our planned analyses than the IAT. Whereas the IAT can only measure spontaneous affective reactions relatively (i.e., target A vs. target B). our measures of gut feelings allow us to examine feelings toward targets A and B as separate predictors of self-esteem.”

We believe this is a more precise and accurate summary of Ranganath et al.’s (2008) findings than we provided in our [initial] submission, and that this revised summary is sufficient to justify our use of the measure.

Moreover, recent experimental work by other researchers lends additional credibility to self-reported measures of gut feelings. Hahn & Goedderz (2020) find that when participants are asked to report their spontaneous "gut responses" to attitude targets, their reports correlate more strongly with both actual IAT scores and the scores participants *predict* they will receive on a later IAT (p.S127).

<https://www.researchgate.net/publication/342330212_Trait-Unconsciousness_State-Unconsciousness_Preconsciousness_and_Social_Miscalibration_in_the_Context_of_Implicit_Evaluation>

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In addition to these previous remarks, we would like to add now that if the IAT and gut feelings do measure different things (e.g., “real” spontaneous affective reactions vs. “perceived” spontaneous affective reactions), we would have expected the latter to be more closely related to self-reported self-esteem. We wouldn’t expect feelings that entirely escape people’s conscious notice to weigh on their conscience.

If the editor agrees with Reviewer 2 that our current argument and the Ranganath et al. reference are insufficient to justify our reliance on the “gut feelings” measures, we can add some of these arguments and/or cite Hahn and Goedderz in the main text. For now, we have refrained from making these additions due to length considerations.

*3. Something is off with the CIs in the supplemental figures. The CIs are the same width for the entirety of the regression line. That shouldn’t be the case. They should be tighter at the mean. There is something about how some of the R packages compute these. I ran into the problem before. It’s fixable.*

This was indeed an error in our previous figures, though we used Stata to plot all figures. We have corrected the error. The issue was that we instructed Stata to compute the CI *only* at the minimum and maximum value of the X-axis variables, so the previous figures accurately showed the 95% CI for the endpoints and showed excessively large confidence intervals for every value in-between.

With that, we believe we have responded to all of your comments and the reviewers’. Thank you all, sincerely, for the time and effort you have devoted to our manuscript. All three of you have offered valuable and constructive feedback at every round of review that has produced visible and important improvements to the project and our interpretation of our data. We are aware that this task was made even more difficult than a reviewer’s usually is by the complexity of the AIID dataset, the number of variables we have analyzed, the length of the paper, and, frankly, the messiness of the data. We are therefore doubly grateful for your attention and your input, and we believe that with your help we have drafted a manuscript that will cast light on how moral beliefs and attitudes relate to the self-concept.

Sincerely,

Authors

**Editor Final Decision:** Accept

May 23, 2022

Dear Pierce Ekstrom,

I have now had a chance to read over your manuscript “A good person shouldn’t feel this way: Moralized attitudes, identity, and self-esteem”, along with the letter of response. Thank you for your responsiveness to the remaining concerns. I am happy to say that your paper is now officially accepted for publication in Collabra: Psychology. Congratulations on this excellent work, I think it will make an important contribution to the literature. I look forward to seeing it published! I hope your experiences with Collabra: Psychology have been positive and that you will continue to consider it as an outlet for your work.

You will be receiving separate correspondence regarding any production and technical comments, data deposits, as well as publication charges. We work with the Copyright Clearance Center to process any applicable APC charges. Please note that your APC transaction must be completed before your article gets published.

You will have an opportunity to check the page proofs before we publish your article. Thank you again for publishing in Collabra: Psychology.

Sincerely,  
Brent Donnellan