**Peer Review and Communication History**

**MS Title**: Where the Head Meets the Heart: ‘Enlightened’ Compassion Lies Between Big Five Openness/Intellect and Agreeableness

**Author Names**: Erin C. R. Lawn, Simon M. Laham, Kun Zhao, Alexander P. Christensen,

and Luke D. Smillie

**Submitted:** Oct 18, 2022

**Editor First Decision**: Revise & Resubmit

Dec 30, 2022

Dear Dr. Smillie,

Thank you for submitting your work to Collabra: Psychology. I sent the paper to two experts who are well qualified to review this paper. I thank these individuals for their service to this journal and for their timely reviews. I independently read the paper and then consulted the comments from the two reviewers.

As you will read below, the Reviewers were quite positive about this work. They each raised some issues for clarification, but these are all addressable. I also enjoyed reading the paper and appreciated the careful and deliberative approach to measuring enlightened compassion and then placing it within the context of constructs within existing trait models. I believe a modestly revised manuscript would likely meet publication expectations at this outlet. The Reviewers did an excellent job so please attend to each of their points either in the revision or in the letter of response.

I will outline my reactions in this letter. I acknowledge that you might disagree with some (or all) of our points so feel free to pushback against any suggestions you believe will harm your work. Just describe your counterpoints in the letter.

1. Please fix the “Error! Reference source not found” instances throughout the paper.
2. Please consider adding a Constraints on Generalizability statement to the paper. The pieces of such a statement are already present in the work and this would just amount to a summation of some of the limitations discussed in the paper.

Simons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. Perspectives on Psychological Science, 12(6), 1123-1128.

1. The discussion on page 9 notes three possibilities about how enlightened compassion might be situated with respect to Compassion and Openness. Can you consider explaining the empirical patterns that would distinguish those three cases so readers are crystal clear how you will interpret results in that section?
2. Is it necessary to describe the correlation between Compassion and Openness as “overlooked” based on the DeYoung et al. (2007) work? It was not clear to me who overlooked that association or if that was even important for the points raised in the paper.
3. The implications of the measurement invariance analyses could be explained more to readers. I was not sure what take aways readers should have from those analyses given that the samples were a mix of student and MTurk workers. Would it make sense to combine the student versus MTurk workers to a create an omnibus 2-group comparison? Regardless, I think so more text will help readers understand what to make of those findings.

Those were the major issues from my reading. 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. If you have any questions or difficulties during this process, please contact the editorial office at editorialoffice@collabra.org.

Thank you for trusting us with your paper. If you have any questions or difficulties during the revision process, please do contact us. Good luck revising this interesting work.

Sincerely,

Brent Donnellan

# Reviewer 1

##### 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.) |  | ✔ |  |  |  |

##### 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 read the manuscript “Where the head meets the heart: ‘Enlightened’ compassion lies between Big Five Openness/Intellect and Agreeableness” with great interest, and I can make this review rather brief: I find the construct of enlightened compassion (EC) interesting, the presented data sufficient, and the manuscript very well written. I also appreciate the Open Science approach throughout the material. Further, the authors addressed all my major concerns in their General Discussion themselves. Overall, I thus only have a few minor comments that might help further improving the manuscript:

* I think that some researchers might consider a bottom-up approach when item statistics decide how to form a factor/construct. Here, as the authors write, a mixed approach is used, because the authors developed items with the particular aim to assess EC following their definition/conceptualization. Maybe this could be further clarified briefly.
(Personally, I would not have used the framing of bottom-up, but this is more a matter of taste.)
* I am not fully sure whether the authors presented the definitions of “moral imagination” and “moral expansiveness” or rather (this is how I understood it) their interpretation of these constructs with links to EC already. I would prefer adding the exact definitions of these constructs, so that readers can see to which degree EC differs from them conceptually.
* Even not directly related to this manuscript, on p. 8 the authors describe that “participation in deep reflection and introspection, and tolerance of alternative perspectives and lifestyles – cluster under Openness rather than Intellect”, which reads surprising to me. To put it bluntly: What is Intellect then, because the description given (engagement with ideas and facts) seems to be in contrast with this finding; I think that reflection about alternative perspectives falls under engagement with ideas, for instance.
* At least in my version, there were several error messages about missing references (such things happen, of course, but I want to mention it).

Again, I think that the authors put together a very sound manuscript, which was interesting and enjoyable to read!

# Reviewer 2

##### 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.) |  |  |  |  | ✔ |

##### 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.

The current manuscript involves a fascinating look into the creation and validity testing of a measure of a newly conceptualized personality trait, enlightened compassion. Evidence for situating this trait within the Big Five personality trait hierarchy is also presented. Overall, the investigation was quite rigorous and thorough, including multiple samples across three studies, and including prediction of behavioral choice. A few comments and suggestions for edits appear below.

1. The authors do a commendable job including all of the necessary components of their research in the manuscript, including descriptive statistics in the supplemental materials and a number of tables and figures. Altogether, though it is necessarily complex, it is also a bit long, which can detract from readability. For example, Figures 4-8 are beautiful, however separating by candidate trait dilutes the point that across all candidate traits the EC measure correlates more strongly (at least visually, if not tested) than any Big Five aspects, as well as presenting the relative strength of correlations across all the focal traits. They also don’t come out very well when printing in black and white.
2. In the Introduction, much is said about the strengths of a bottom-up approach, as well as a balance of both bottom-up and top-down approaches to test construction. In the theory-driven top-down section, the authors mention using moral expansiveness and moral imagination to frame their theoretical approach to enlightened compassion. It would be illustrative for the authors to say more about how these theoretical approaches informed their creation of the initial pool of 24 enlightened compassion items, especially regarding the three groupings (both how items were written within, as well as the groupings themselves). The labels of the groupings in Table 2 were also useful, though I don’t think they appeared or were described in the text of the document.
3. Enlightened compassion is conceptualized as interstitial to Compassion and Openness, and lower in the hierarchy than both. Is there a way to test or demonstrate this? In Study 2, Compassion items, Openness items, and Enlightened Compassion items were all subjected to EFA within each sample. If the EC items are put in with the Compassion and Openness items, are three separate factors extracted (suggesting EC may be between Compassion and Openness), or two factors upon which the EC items load some with a Compassion factor and some with an Openness factor?

Also one small editing piece – there were numerous issues of “Error! Reference source not found” throughout the document, which I’m sure will be fixed in future iterations

**Author Response**
Feb 14, 2023

**Editor First Decision**: Revise & Resubmit

**Responses to Editor’s Feedback:**

1. Please fix the “Error! Reference source not found” instances throughout the paper.

*Response:* We apologise for this error and have now corrected the problem. The missing references (which all referred to the figures in the manuscript) now appear correctly.

2. Please consider adding a Constraints on Generalizability statement to the paper. The pieces of such a statement are already present in the work and this would just amount to a summation of some of the limitations discussed in the paper.

Simons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. Perspectives on Psychological Science, 12(6), 1123-1128.

*Response:* Thank you for this valuable suggestion. Because our previous ‘Limitations’ section focussed entirely on generalisability constraints, our COG section amounts to a light revision of that section, expanded slightly, and more explicitly framed in terms of generalisability beyond the samples, methods, and procedures reported in our manuscript. This revised section appears on pages 36-37, as follows:

“Constraints on Generality

 Although we obtained promising evidence for the structural, content, convergent, and criterion validity of our enlightened compassion measure, we caution that our conclusions may not generalise beyond the samples, methods, and procedures reported here (see Simons et al., 2017). For example, we derived the EC scale using items from a single B5 measure—the Big Five Aspects Scales. Attempts to reproduce our scale using alternative indices of Compassion and Openness may not necessarily yield similar support the validity of our scale. Furthermore, the support we obtained for metric invariance of the EC scale across samples must be weighed against the fact that four of our samples comprised students attending the same Australian university, and three comprised MTurk workers residing in the US. We therefore cannot be confident that the internal structure of the EC scale will generalise beyond such samples. Additionally, despite the comprehensiveness of our assessments of content and convergent validity of the EC scale, we examined criterion validity in relation to just one behaviour—expansive charitable donation. It remains to be seen whether the EC scale will predict a wider range of theoretically relevant behaviours, including behaviours outside the lab.

 Finally, our participant samples were all drawn from Western, Educated, Industrialized, Rich, and Democratic (WEIRD; Henrich et al., 2010) populations. Among other distinctions, WEIRD cultures are typically more individualistic (vs. collectivistic) than non-WEIRD cultures. Pertinently, Openness/Intellect has been found to be the least culturally generalisable B5 domain (Rolland, 2002). This is particularly evident in collectivist cultures, where the defining features of Openness/Intellect are likely less salient (i.e., less adaptively important) and less coherent (i.e., less functionally interdependent; Schwaba, 2021). Given that enlightened compassion is a facet of Openness/Intellect, it would be unwise to assume that individual differences can be coherently measured along this dimension, or that such individual differences function in the same way, within non-WEIRD cultures.”

3. The discussion on page 9 notes three possibilities about how enlightened compassion might be situated with respect to Compassion and Openness. Can you consider explaining the empirical patterns that would distinguish those three cases so readers are crystal clear how you will interpret results in that section?

*Response:* Thank you for this suggestion. We have now added a paragraph with the explanation you request just prior to ‘The Current Research’, on p.9-10:

“Importantly, here may be no definitive means to determine whether a construct resides at the domain-, aspect-, or facet-level of the B5; indeed, the number of levels within the personality trait hierarchy is itself indeterminate. Nevertheless, we can specify patterns of findings that would be consistent with our suggestion that enlightened compassion—as a *subset* of compassionate tendencies that are open-minded—is best regarded as a lower-order facet of the B5. Specifically, an implication of the bandwidth-fidelity trade-off (Glesser et al., 1965) is that measures of relatively narrow traits residing lower in the hierarchy will show incremental validity over-and-above measures of relatively broad traits located above them. In other words, a facet scale should demonstrate higher fidelity in tests of validity, relative to broader bandwidth scales at the aspect level, and likewise for aspect scales relative to domains (e.g., see Danner et al., 2021). Thus, if enlightened compassion is indeed a facet of the B5, we would expect it to predict theoretically relevant traits and behaviours over-and-above the B5 aspects.”

4. Is it necessary to describe the correlation between Compassion and Openness as “overlooked” based on the DeYoung et al. (2007) work? It was not clear to me who overlooked that association or if that was even important for the points raised in the paper.

*Response:* Thank you for picking us up on this mischaracterisation. Indeed, our description was not necessary and was potentially inaccurate. We now remove this suggestion from the manuscript, and simply note that the correlation “partly inspired our thinking about enlightened compassion” (p.20), and that our results replicate “a finding originally reported by DeYoung et al. (2007)” (p. 26). Finally, on page 35 we no longer note that the correlation was “unappreciated”, and instead spell out what we find striking about the correlation: “Despite falling under different B5 domains, the correlation between Compassion and Openness is similar in magnitude to the within-domain correlations between Compassion and Politeness, and between Openness and Intellect (rs ~ .40; DeYoung et al., 2007)”.

5. The implications of the measurement invariance analyses could be explained more to readers. I was not sure what take aways readers should have from those analyses given that the samples were a mix of student and MTurk workers. Would it make sense to combine the student versus MTurk workers to a create an omnibus 2-group comparison? Regardless, I think some more text will help readers understand what to make of those findings.

*Response:* Thank you for this suggestion. We have now expanded our summary of the results of our assessments of measurement invariance in the results section of study 1, commending on sample characteristics that may have influenced these results. We hope this recognises your point about our samples being a mix of students and MTurk workers, and provides readers with more guidance on how to interpret these results. The new text appears on page 17-18 and is as follows:

“**Measurement invariance.**

To assess the consistency of the EC Scale structure (i.e., its measurement invariance) across samples, we compared the CFA model from Sample B to an equivalently specified model within each of our remaining samples (Samples C to G). For each sample, we examined four types of measurement invariance: configural (equivalent factor structure), metric (equivalent factor structure and factor loadings), scalar (equivalent factor structure, factor loadings, and intercepts), and strict (equivalent factor structure, factor loadings, intercepts, and means).

 With Sample B, the EC Scale demonstrated metric invariance in Samples C, D, and E. Further, scalar and strict invariance was found for Samples D and E. Samples F and G did not meet the threshold for metric invariance. Based on RMSEA, SRMR, and CFI, configural invariance was adequately supported for all samples, though not strongly, on all three criteria. Specifically, all SRMRs were < .08, and all RMSEAs were < .10, but the CFIs (all > .80) fell short of the .90 benchmark.

Samples that demonstrated at least metric invariance with B differed from those that did not in a few notable ways. In terms of gender identity, Sample B was majority woman identifying (70%) with Samples C, D, and E being similar in majority woman identifying (≥ 60%). In contrast, Samples F and G were either more closely split between man and woman identifying (Sample E: 45% and 54%, respectively) or were majority man identifying (Sample G: 60% and 40%, respectively).

In terms of ethnicity, Sample F and G had higher representation of Asian (51%) and Caucasian (73%) ethnicities relative to Sample B (41% and 51%, respectively). It’s notable, however, that Sample E had similar ethnicity characteristics to Sample F and achieved strict invariance suggesting that ethnicity differences may not be driving the differences in invariance. Similarly, Sample G had a much higher average age (35.80) than Sample B (19.82) but Sample C was similar in age characteristics to Sample G and still achieved metric invariance suggesting that age differences may not be driving the differences in invariance. In sum, the gender identity composition of the Samples seems to be a potential factor for the invariance of some Samples relative to others with Sample B.”

Additionally, in our new ‘Constraints on Generalisability’ section (pasted in full, above) we noted that potential limits on the generalisability of our findings across samples includes the evidence we obtained for metric invariance of the EC scale.

**Responses to Reviewer 1’s Feedback:**

1. I think that some researchers might consider a bottom-up approach when item statistics decide how to form a factor/construct. Here, as the authors write, a mixed approach is used, because the authors developed items with the particular aim to assess EC following their definition/conceptualization. Maybe this could be further clarified briefly.

(Personally, I would not have used the framing of bottom-up, but this is more a matter of taste.)

*Response:* Thank you for drawing our attention to this tension in the characterisation of our work. We describe our development of the EC scale as adopting a strictly bottom-up approach because we derived our scale directly from the Openness and Compassion aspects of the Big Five, rather than from theory. That is, each item we generated was intended to blend the content of the Compassion and Openness items of the B5, as described in the Study 1 method section on page 14, rather than to operationalise the conceptualisation we offered for enlightened compassion on pages 2-4. Of course, we expected that the resulting scale would converge closely with existing measures that had been derived conceptually, from the top-down, and for which we had offered an integrative conceptualisation. But it is entirely possible that this anticipated convergence would not have emerged. For instance, the scales we identified as markers of enlightened compassion in Study 2 might have correlated relatively weakly (*r* < .20; Gignac & Szodorai, 2016) with our novel scale. In that case it would not have been appropriate to label our novel scale a measure of enlightened compassion, as conceptualised in the introduction. We have made some adjustments to the text throughout the early sections of our manuscript to make this point clearer, as follows:

* On page 3 we write: “Accordingly, we construct a measure of enlightened compassion using the content of pertinent B5 traits, and evaluate our interpretation of that measure by exploring its correlations with theoretically relevant traits from the literature.”
* On page 12 we write: “Crucially, we aimed to unearth this scale from the bottom-up, by deriving items from the content of Compassion and Openness scales, rather than from the theoretical conceptualisation laid out in the introduction.”
* On page 14 we write: “We developed an initial pool of 24 items to capture enlightened compassion (Table 2). Each item was designed to blend B5 Compassion with B5 Openness, and was informed by the item content of the measures of these aspects contained within the BFAS…” We also note here that our item generation was “not informed by any specific a-priori conceptualisation of enlightened compassion”.

2. I am not fully sure whether the authors presented the definitions of “moral imagination” and “moral expansiveness” or rather (this is how I understood it) their interpretation of these constructs with links to EC already. I would prefer adding the exact definitions of these constructs, so that readers can see to which degree EC differs from them conceptually.

*Response:* Thank you for picking us up on this omission. We now provide a definition of moral imagination (“Moral imagination is the envisioning of novel and varied solutions to moral problems”, p. 3) and moral expansiveness (“Moral expansiveness refers to the scope of one’s moral boundaries, in terms of the number and range of entities to which one ascribes moral worth”, p. 4).

3. Even not directly related to this manuscript, on p. 8 the authors describe that “participation in deep reflection and introspection, and tolerance of alternative perspectives and lifestyles – cluster under Openness rather than Intellect”, which reads surprising to me. To put it bluntly: What is Intellect then, because the description given (engagement with ideas and facts) seems to be in contrast with this finding; I think that reflection about alternative perspectives falls under engagement with ideas, for instance.

*Response:* Thank you for alerting us to the somewhat blurry distinction we drew between intellect and openness. Our description of intellect as “engagement with facts and ideas” drew on DeYoung’s conceptualisation of this trait aspect, given that our studies assess intellect using the scale he developed. But the openness aspect certainly involves reflection and thoughtfulness, as can be seen in the scale content (e.g., “love to reflect on things”, “seldom get lost in thought” [R]), and the intellect scale is perhaps better distinguished by its focus on rigorous intellectual engagement (e.g., “think quickly”, “formulate ideas clearly”, “have a rich vocabulary”). We have now revised this text to better capture the key features of and distinctions between openness and intellect, and included scale items to help illustrate these. The revised text appears on page 8 as follows:

“At the aspect level, Openness/Intellect divides into *Openness* and *Intellect* (DeYoung et al., 2007; Woo et al., 2014), with Intellect describing logical and rational engagement (e.g., “formulate ideas clearly”) and Openness describing aesthetic engagement, imagination, and absorption (e.g., “love to reflect on things”) (DeYoung, 2015a; Christensen et al., 2019). Research has shown that open-minded tendencies—including participation in deep reflection and introspection, and tolerance of alternative perspectives and lifestyles—cluster under Openness rather than Intellect (Woo et al., 2014). Therefore, as implied by its label, Openness appears more relevant than Intellect to enlightened compassion.”

4. At least in my version, there were several error messages about missing references (such things happen, of course, but I want to mention it).

*Response:* Please see our response to Editor comment #1.

**Responses to Reviewer 2’s Feedback:**

1. The authors do a commendable job including all of the necessary components of their research in the manuscript, including descriptive statistics in the supplemental materials and a number of tables and figures. Altogether, though it is necessarily complex, it is also a bit long, which can detract from readability. For example, Figures 4-8 are beautiful, however separating by candidate trait dilutes the point that across all candidate traits the EC measure correlates more strongly (at least visually, if not tested) than any Big Five aspects, as well as presenting the relative strength of correlations across all the focal traits. They also don’t come out very well when printing in black and white.

*Response:* Thank you for this feedback. We have endeavoured to streamline the manuscript where possible, although in responding to these reviews we have needed to add additional text, and thus the manuscript is unfortunately no shorter than our first submission. However, we have now replaced Figures 4-8 with a single heatmap (new Figure 4), which presents these associations in a way that may better capture the important patterns in our findings. We acknowledge that the colours of the heatmap will not present so well in a black-and-white printout, but in that case the reader should still be able to discern the actual numerical values.

2. In the Introduction, much is said about the strengths of a bottom-up approach, as well as a balance of both bottom-up and top-down approaches to test construction. In the theory-driven top-down section, the authors mention using moral expansiveness and moral imagination to frame their theoretical approach to enlightened compassion. It would be illustrative for the authors to say more about how these theoretical approaches informed their creation of the initial pool of 24 enlightened compassion items, especially regarding the three groupings (both how items were written within, as well as the groupings themselves). The labels of the groupings in Table 2 were also useful, though I don’t think they appeared or were described in the text of the document.

*Response:* As clarified in our response to reviewer 1’s first comment, our scale was derived directly from the openness and compassion items. This process was uninformed by theories of moral imagination and expansiveness. Rather, we anticipated the scale we developed from the bottom-up would converge closely with these measures that had been derived from the top-down. Hopefully the new text we added in response to reviewer 1 clarifies the approach we adopted for developing the EC scale.

Regarding the groupings in Table 2: We added these labels post hoc because we perceived three themes in the item content, and wanted to ensure that we included a broad sampling of items that blended openness and compassion. But these were not theorised and were not reflected in the results of our factor analyses (and thus were not discussed further in the paper). To avoid misunderstanding, we have adjusted some of the text of the paragraph describing item generation for the EC scale, which now appears as follows on page 14:

"We developed an initial pool of 24 items to capture enlightened compassion (Table 2). Each item was designed to blend B5 Compassion with B5 Openness, and was informed by the item content of the measures of these aspects contained within the BFAS. During this process we perceived three themes within the item content, and thus generated an equal number of items within each theme to ensure a broad sampling of enlightened compassionate content. Thus, eight items covered the tendency to reflect on and envision ways to help others and improve society, a further eight covered the tendency to extend compassion to marginalised or foreign people, and the remaining eight covered the tendency to extend compassion to nature and cultural artefacts. Importantly, these themes were not informed by any specific a-priori conceptualisation of enlightened compassion, nor were they intended to form specific subscales. Participants responded to each item from 1 (strongly disagree) to 5 (strongly agree).”

3. Enlightened compassion is conceptualized as interstitial to Compassion and Openness, and lower in the hierarchy than both. Is there a way to test or demonstrate this? In Study 2, Compassion items, Openness items, and Enlightened Compassion items were all subjected to EFA within each sample. If the EC items are put in with the Compassion and Openness items, are three separate factors extracted (suggesting EC may be between Compassion and Openness), or two factors upon which the EC items load some with a Compassion factor and some with an Openness factor?

*Response:* Thank you for raising this important point, and pushing us to think more fully about our interpretation of enlightened compassion as a facet-level construct within the B5 hierarchy. It turns out that claims of this nature are difficult to falsify. Firstly, the EFA you suggest cannot really answer the question of where EC is in the hierarchy. For example, if this did yield three distinct factors, then it would be unclear whether EC lay below Openness and Compassion, whether it was a third aspect on the same level (e.g., three distinct factors), or whether it was above them as a general factor (e.g., the third factor as a general factor where all items load at least moderately). Alternatively, we could run a series of SEM models comparing (a) three correlated factors (bidirectional arrows between Openness, Compassion, and EC) versus (b) a model where Openness and Compassion were correlated aspects (bidirectional arrows) and both predicted EC as a facet (unidirectional arrows). Unfortunately, these models (and similar variations) are all equivalent, and offer no degrees of freedom to change model fit (also equivalent). Moreover, the latter model is essentially what we’ve presented in Table 5 with the partial correlations between EC and each aspect (controlling for the other aspect). If we replaced this analysis with SEM, the relationship between EC and each aspect would increase (due to attenuated measurement error), but we would be no wiser as to which level EC lies within the B5 hierarchy.

After much thought and discussion with colleagues, we reached the conclusion that the best evidence we can provide for the status of the EC scale as a facet below Openness and Compassion is the combination of (a) the evidence we provide in Study 1 for its strong convergent associations with Compassion and Openness (sample weighted *r*’s = .57) and divergence from the remaining B5 aspects (sample weighted r’s ≤ .12) (p. 16-17), and (b) the evidence we provide in Studies 2 and 3 that the EC scale demonstrates incremental validity above and beyond both Compassion and Openness in the prediction of theoretically relevant criteria. The logic of our incremental validity analyses has now been more fully articulated, in response to Editor comment #3, on pages 9-10. We have also softened some of our statements about the location of EC within the B5 hierarchy (e.g., we remove any suggestions that we can definitely “confirm” the location of the EC scale within the B5 hierarchy). Finally, we note as a limitation to this research the ambiguity of determining, in any definitive way, the level of the personality hierarchy to which a construct belongs. Specifically, on page 36 we now add the following paragraph:

“One important caveat to acknowledge when drawing these conclusions and implications is that we can identify no definitive test of our claim that enlightened compassion is a facet-level construct within the B5. For instance, an intuitively appealing approach would be to compare three structural equation models—one comprising Openness, Compassion, and EC as three correlated factors (i.e., representing EC as an aspect); another regressing Openness and Compassion on EC (i.e., representing EC as a domain); and a third regressing EC on both Openness and Compassion (i.e., representing EC as a facet). Unfortunately, these three models are statistically interchangeable, and offer no degrees of freedom to change their (equivalent) model fit. We therefore argue that enlightened compassion is a facet-level construct on conceptual grounds, based on our definition of this trait as a *subset* of compassionate tendencies that are open-minded. We furthermore defend our claim that the EC scale assesses an empirical B5 facet primarily based on its incremental validity above and beyond the B5 aspects.”

4. Also one small editing piece – there were numerous issues of “Error! Reference source not found” throughout the document, which I’m sure will be fixed in future iterations.

*Response:* Please see our response to Editor comment #1.

**Editor Final Decision:** Accept

Mar 2, 2023

Dear Dr. Luke Smillie,

I have now had a chance to read your revised manuscript “Where the head meets the heart: ‘Enlightened’ compassion lies between Big Five Openness/Intellect and Agreeableness”, along with the letter describing the changes you made from the first submission. Thank you for your responsiveness to the editorial concerns raised in the last round. 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 and I look forward to seeing it published. I learned a lot from the paper. I hope your experiences with Collabra: Psychology have been positive and that you will continue to consider it as an outlet for your work.

I noted one thing that might come up in copy-editing. A reference to Glesser et al. (1965) appears on page 9 but I did not see that reference in the References (but I could’ve missed something).

As there are no further reviewer revisions to make, you do not have to complete any tasks at this point.

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