**Peer Review and Communication History**

**MS Title:** **Using and Understanding Power in Psychological Research: A Survey Study**

**Author Name:** Elizabeth Collins and Roger Watt

**Submitted:** May 7, 2021

**Editor First Decision: Revise & Resubmit**

July 15, 2021

Dear Elizabeth Collins,

I have now received all reviews of your manuscript, “Using and Understanding Power in Psychological Research: A Survey Study” from qualified researchers. I also independently read the manuscript before consulting these reviews. I agree that your manuscript has important strengths and also that there are some issues that need to be addressed. I therefore encourage you to submit a revised version for further consideration at Collabra: Psychology.

I received one detailed and outstanding review of your MS and read it independently prior to consulting the review. I will highlight issues I think are particularly salient here. In your resubmission, please include a document with a point-by-point response to both the points I list here and the reviewers’ comments, outlining each change made in your manuscript or providing a suitable rebuttal.

I will not reiterate the reviewer’s comments except to expand on some issues around the sample. The sample is not representative of the field. I do not see that as an intractable problem as statistical reasoning this is an under-researched area, making most contributions useful. However, I do not feel enough is done in the paper to highlight these issues. Perhaps a paragraph in limitations where you reflect on the possible differences between your sample and the field as a whole. As the reviewer pointed out, you are a bit heavily sampled on ECRs and open science practitioners. These two groups are going to tend to be more versed in power than others. Acknowledging differences of this nature will help to put the results in an appropriate context.

The section on post hoc power would benefit from a bit of expansion. In general, post hoc power is a useless concept and it should be presented as such. My preference would be that the post hoc power section highlights how justification for its use are wrong headed. For example, reasons given for post hoc power analyses being “to check the actual power” makes no sense. Checking the “actual” power would only be possible with a population estimate. What the authors are checking is power assuming their sample was a perfect representation of the population. The assumption is untenable – if it were tenable then we really wouldn’t have any reason to engage in significance testing.

Another issue I am having with the post hoc power piece is that it seems participants may be confusing this with sensitivity analysis, an approach that estimates achieved power for detecting various effect sizes given an achieved sample size. This has received a fair amount of attention recently with JESP and the SPSP working group on power both recommending this approach (note: I am a member of the SPSP group). Given the characteristics of the sample and the answers provided, it seems likely that some are confusing the two constructs.

The Center for Open Science offers this text as part of their standard reviewer statement: “"I request that the authors add a statement to the paper confirming whether, for all experiments, they have reported all measures, conditions, data exclusions, and how they determined their sample sizes. The authors should, of course, add any additional text to ensure the statement is accurate. (Nosek et al., 2017).” This statement provides excellent guidance. Please add text to your paper that addresses these issues (where relevant).

In summary, I think this is a promising manuscript and, I hope you will revise it for further consideration at Collabra: Psychology. I look forward to receiving your revision.

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 contact the editorial office at editorialoffice@collabra.org.

We hope you can submit your revision within the next six weeks. If you cannot make this deadline, please let us know as early as possible.

Sincerely,

Chris Aberson

# 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.

Collabra: Psychology

Using and Understanding Power in Psychological Research: A Survey Study.

This manuscript seeks to build an understanding of how researchers currently use and interpret power analyses in their own research. Some encouraging trends emerged in this survey of researchers. In particular, it appears that researchers are in fact using power analyses, which is great news. There are also some important qualitative comments included in the manuscript, including one who sees power analyses as one more hoop to jump through to satisfy others, and wonders “why [they’re] bothering.” This mix of quantitative results with more in-depth comments shed unique light on the current state of power analysis, though perhapse the results of each question reported in separate tables could be integrated more to explain the overall results in a cohesive narrative. I also do not think enough attention is given to the possibility that some unique trends could have emerged from this particular group of 214 psychologists that are majority PhD students and postdoctoral researchers (47.66% and 10.65%, respectively) who found this survey through Twitter or mailing lists. I really liked the table showing the broad range of subfields in psychology represented, though. Overall, I think the information contained in this manuscript is incredibly useful, and I look forward to citing this in my own work.

Below, please find broader explanations of my concerns, broken up into three categories. The major issues section addresses issues that I believe must be addressed before this manuscript could be considered for publication at any outlet. Minor issues are things I think the researchers could improve, but if they have a strong rationale for not addressing these issues that would be acceptable. Minutiae are my own notes on grammar, typesetting errors in the paper, and other small things. I’m sure that many of these would be caught in copyediting, but I think it’s helpful to minimize risk and correct them now.

Major Issues
• The results of each survey question feel like they are reported individually and not interpreted in the broader context of this manuscript, with the exception of how all specific results are broken down by whether or not the researchers use power analyses regularly. Is there a way to add in some transitions to improve the flow and connectivity of these results? I know each table is showing different results, but if there is a way to combine some of the 13 tables that could be a place to start connecting ideas from individual questions.
• I’m concerned that the sample might not fully reflect the majority of researchers and their views towards power analyses. I appreciate that the participant recruitment through Twitter and mailing lists is openly addressed once on page 5 of the manuscript, but implications of this are not addressed even in the discussion. This might just be my opinion as someone following lots of open science accounts and people who care about statistical methodology and power analyses on Twitter, but I find my interactions in that community are overwhelmingly positive towards power analyses compared to interactions with other faculty and students not in that subset of researchers. This should be addressed in detail in the discussion, and also the mailing lists in which the survey was advertised could be listed.
• The sample is also majority PhD students and postdoctoral researchers, and I’m wondering if there are any differences in power analysis usage rates between this group and more senior faculty. Perhaps this is my own bias, but whenever I read the sample referred to as researchers I imagined majority PIs, though professors made up only 7.01% of the sample. I’m guessing this sample might be underpowered to test this, but at least addressing how the sample could impact results might be helpful.
• In Bakker and Wicherts (2011), they found that only 3% of authors discuss power considerations in designing their studies. This seems to be in line with the 2.9% of articles you cite from Tressoldi and Giofre (2015). Then, the results of this study and the Bakker et al. (2016) study that 47% of authors use power analyses for sample size planning seem to be a big jump. Some discussion into why this may be the case feels necessary to connect those statistics and set up the problem you are addressing.
• This is not a major issue in the sense that it will take much rethinking or redesigning of the paper, but since the entire topic of the paper is power analyses, I thought it best to include here. The abstract includes the phrase, “calculate power analyses,” but power analyses are the way we calculate statistical power or estimate a sample size for a test to achieve a desired statistical power. This phrase is impossible, but the idea can be reworded for clarity of the main objectives of the manuscript.

Minor Issues
• In the abstract, the claim “Research shows that psychology studies are underpowered due to small sample sizes, and that researchers do not hold accurate intuitions about sensible sample sizes and associated levels of power” is made. Is this what you did in your study? Or is this based on the literature?
• I was very excited to see a sample from 14 different countries, but after seeing that many countries only had one participant, I feel like all 14 countries are not represented equally. I’ll leave this decision up to you since it’s technically not wrong, but I would take the 14 countries part out of the abstract to prevent even a hint of overclaiming.
• A transition between the second and third paragraph of the introduction is needed.
• The third paragraph in the introduction references power typically being below 25% to explain Type II error rate, but that number being different from the 18% Cohen calculated for small effect sizes in the next paragraph is confusing.
• The Power in Psychology paragraph reads like a list of studies. While I appreciate the thorough investigation into the literature, I think this could be stronger with more of a narrative flow.
• The Current Study section could use a bit more detail and explanation to really set up the problem your results are answering.
• In the first paragraph of the analyses section, more definitions should be included. Are interpretive/inductive content analysis the same thing?
• How were the three key elements of power (probability, statistical significance, and stated effect size) chosen? And why were references to ‘an effect’ or ‘existing/true effect’ counted to record frequencies but not for inclusion in scores out of three?
• Cohen’s kappa tends to give a better measurement of interrater reliability than percentage agreement (Cohen, 1960; McHugh, 2012).
• Are the categories of “Yes–has used” and “Yes–uses” mutually exclusive?
• Page 10 refers to complex designs where power analysis cannot be used. What are those designs? And is it worth mentioning simulation methods here?
• I really like Table 6 and the surrounding section!
• Could the information in the last paragraph of page 14 be included in Table 7, perhapse in an “exclusive” column?
• Was the claim in the Importance of Power section (More than 90% of the sample rated power as being very or somewhat important for psychological research, regardless of experience using power analysis or engagement with open science) tested?
• “We found much higher reported power analysis than previous studies” on page 21 doesn’t make sense, maybe it should read “…power analysis use than previous studies”?
• The heading What is Power in the discussion seems more appropriate for an introduction.

Minutiae
• British English spelling is used throughout. I know other papers published in Collabra: Psychology use it (e.g., Wöstenfeld et al., 2020), but this was just something I noticed.
• APA 7 no longer requires all the authors to be listed the first time a citation is used in the text beyond three authors (the manuscript currently appears to be using APA 6 conventions for citations).
• I’m a big fan of the Oxford comma. One should be used in the second sentence of the abstract after sample size.
• In paragraph 1, effect-size is hyphenated once. This should either be removed, or effect size should be hyphenated throughout the manuscript for consistency.
• Be consistent with italicizing “a priori,” which is italicized first in the introduction then never again for subsequent uses.
• I’m happy to see Jamovi and ggplot cited, but R should be cited as well, then.
• Mone et al. needs a year in the citation (1996 according to the references list) in the first sentence of the last paragraph on page 3.
• (Drisko and Maschi, 2015) should be (Drisko & Maschi, 2015).
• Table 5 could be eliminated, and those summary statistics given in the text.
• 184 shouldn’t be italicized in the Effect Size Information section.
• It is not necessary for the figure to be in color, though I don’t think this journal charges extra for a color figure so this may be a moot point.
• Table 12 could potentially be moved to a supplement.
• “We believe that in a larger and more representative sample would show lower use of power analysis” in should be deleted.

Bakker, M., Wicherts, J. M. (2011). The (mis)reporting of statistical results in psychology journals. Behavior Research Methods, 43, 666–678. doi:10.3758/s13428-011-0089-5
Cohen, Jacob (1960). A coefficient of agreement for nominal scales. Educational and Psychological Measurement, 20(1), 37–46. doi:10.1177/001316446002000104
McHugh ML. (2012). Interrater reliability: the kappa statistic. Biochemia Medica, 22(3), 276–82. doi: 10.11613/BM.2012.031.

##### 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**
Aug 18, 2021

Dear Dr Aberson and Reviewer 1,

We appreciate the opportunity to revise and resubmit our manuscript, “Using and Understanding Power in Psychological Research” to Collabra. We would first like to thank both of you for your rigorous and thoughtful reviews of our work, which have enabled us to improve many aspects of this paper.

The introduction has now been restructured to create a more effective narrative flow, with a clearer explanation of our work. Power analysis and post hoc power analysis are now introduced later in the introduction to improve the layout. We have added a transparency statement and some additional detail into our methods section, particularly regarding the qualitative analysis, and have ensured that our manuscript aligns with the transparency and openness standards at Collabra. Our results section has been re-organised to merge some tables, remove some content to supplementary material, and create a better flow from one topic to another. Finally, our discussion has been expanded to create an explicit section on sample limitations, and also reflect more strongly on post hoc power, with a discussion of sensitivity analyses.

We have left our manuscript in UK English, and left Figure 1 as a colour image, as we are under the impression that both are acceptable for publication at Collabra based on the author guidelines and other recent publications. However, we are happy to provide a revised manuscript in US English if this is preferred, and similarly provide a greyscale image if required. We have also created one supplementary material file, titled Additional Data S1, to provide larger tables instead of leaving them in-text.

Below, we provide a detailed response to all editor and reviewer comments, explaining the actions we have taken.

Many thanks for your time spent reviewing this manuscript,

Elizabeth Collins & Roger Watt

**Detailed Response to Editor Comments**

1. *Perhaps a paragraph in limitations where you reflect on the possible differences between your sample and the field as a whole. As the reviewer pointed out, you are a bit heavily sampled on ECRs and open science practitioners. These two groups are going to tend to be more versed in power than others. Acknowledging differences of this nature will help to put the results in an appropriate context.*

**Thank you for this suggestion. We have added a paragraph titled “Limitations” in the discussion, which now discusses convenience/Twitter sampling, the demographics of the sample, and self-report versus actual PA use.**

1. *The section on post hoc power would benefit from a bit of expansion. In general, post hoc power is a useless concept and it should be presented as such. My preference would be that the post hoc power section highlights how justification for its use are wrong headed.*

**We have expanded the introduction description of post-hoc power, and allocated a full section titled ‘post hoc power analysis’ to the discussion to emphasise the content related to post hoc power, and its lack of value as a concept, which we hope is sufficient.**

1. *Another issue I am having with the post hoc power piece is that it seems participants may be confusing this with sensitivity analysis, an approach that estimates achieved power for detecting various effect sizes given an achieved sample size.*

**This has been now been discussed within the post hoc power analysis section of the discussion. Results section Part 2 (p. 16) also details the five participants who made it obvious that they had interpreted post hoc power analysis as including sensitivity analyses.**

1. *“"I request that the authors add a statement to the paper confirming whether, for all experiments, they have reported all measures, conditions, data exclusions, and how they determined their sample sizes. The authors should, of course, add any additional text to ensure the statement is accurate. (Nosek et al., 2017).” This statement provides excellent guidance. Please add text to your paper that addresses these issues (where relevant).*

**Please now find a transparency statement in paragraph two of the methods section.**

**Detailed Response to Reviewer Comments**

**Major Issues**

1. *The results of each survey question feel like they are reported individually and not interpreted in the broader context of this manuscript, with the exception of how all specific results are broken down by whether or not the researchers use power analyses regularly. Is there a way to add in some transitions to improve the flow and connectivity of these results?*

**The number of tables has now been reduced to 7 in the results section (previously 11 tables) with one table now provided as supplementary material, one absorbed into the text, and two tables combined to show all reasons for not using power analysis. The structure of the overall section has also been modified to separate the data into three clear sections that address different topics (power analysis use, post hoc experience, and power knowledge). We hope this improves the flow.**

1. *I’m concerned that the sample might not fully reflect the majority of researchers and their views towards power analyses. I appreciate that the participant recruitment through Twitter and mailing lists is openly addressed once on page 5 of the manuscript, but implications of this are not addressed even in the discussion. This should be addressed in detail in the discussion, and also the mailing lists in which the survey was advertised could be listed.*

**I agree, thank you for this feedback. We have included the mailing lists, and the discussion has now been updated with a paragraph labelled “Sample Limitations” to reflect these concerns.**

1. *The sample is also majority PhD students and postdoctoral researchers, and I’m wondering if there are any differences in power analysis usage rates between this group and more senior faculty. Perhaps this is my own bias, but whenever I read the sample referred to as researchers I imagined majority PIs, though professors made up only 7.01% of the sample. I’m guessing this sample might be underpowered to test this, but at least addressing how the sample could impact results might be helpful.*

**Thank you, we agree that the sample is skewed towards those early in their careers. The demographic characteristics are now evaluated under “Sample Limitations” in the discussion. There is a full demographic breakdown of PA use in the supplementary material we have created.**

1. *In Bakker and Wicherts (2011), they found that only 3% of authors discuss power considerations in designing their studies. This seems to be in line with the 2.9% of articles you cite from Tressoldi and Giofre (2015). Then, the results of this study and the Bakker et al. (2016) study that 47% of authors use power analyses for sample size planning seem to be a big jump. Some discussion into why this may be the case feels necessary to connect those statistics and set up the problem you are addressing.***We looked up the Bakker and Wicherts (2011) paper you kindly provided the reference for, and can’t find any evidence that they investigated power as sample size rationale within the paper. We’ve found the paper cited elsewhere, stating the 3% figure in some places, but 11% in others (neither match the original article). So that was quite a mystery goose chase! Regardless, we have now connected the issues of discrepancies and self-report vs. actual behaviour in the discussion (p. 22).**
2. *This is not a major issue in the sense that it will take much rethinking or redesigning of the paper, but since the entire topic of the paper is power analyses, I thought it best to include here. The abstract includes the phrase, “calculate power analyses,” but power analyses are the way we calculate statistical power or estimate a sample size for a test to achieve a desired statistical power. This phrase is impossible, but the idea can be reworded for clarity of the main objectives of the manuscript.*

**This has now been clarified.**

**Minor Issues**

1. *In the abstract, the claim “Research shows that psychology studies are underpowered due to small sample sizes, and that researchers do not hold accurate intuitions about sensible sample sizes and associated levels of power” is made. Is this what you did in your study? Or is this based on the literature?*

**This has now been clarified to indicate that this is the literature, not our study.**

1. *I was very excited to see a sample from 14 different countries, but after seeing that many countries only had one participant, I feel like all 14 countries are not represented equally. I’ll leave this decision up to you since it’s technically not wrong, but I would take the 14 countries part out of the abstract to prevent even a hint of overclaiming.*
**Now removed from abstract.**
2. *A transition between the second and third paragraph of the introduction is needed*.

**The introduction has been slightly restructured for clarity, which we hope has a better narrative flow.**

1. *The third paragraph in the introduction references power typically being below 25% to explain Type II error rate, but that number being different from the 18% Cohen calculated for small effect sizes in the next paragraph is confusing*.

**Thank you for drawing our attention to this. We hope that the introduction is now less confusing with regards to power, errors and small effect sizes, as we have changed the broad structure and re-written the explanations of errors.**

1. *The Power in Psychology paragraph reads like a list of studies. While I appreciate the thorough investigation into the literature, I think this could be stronger with more of a narrative flow*.

**Thank you. We have restructured the introduction to create more narrative flow, and so information about power in psychology can now be found in paragraphs three and four. We have also sought feedback from a colleague to ensure the work now flows more smoothly in this section.**

1. *The Current Study section could use a bit more detail and explanation to really set up the problem your results are answering*.

**We have now lengthened this section to explicitly state the objectives of this study.**

1. *In the first paragraph of the analyses section, more definitions should be included. Are interpretive/inductive content analysis the same thing?*

**We have added clarification about analyses and definitions of key terms here.**

1. *How were the three key elements of power (probability, statistical significance, and stated effect size) chosen? And why were references to ‘an effect’ or ‘existing/true effect’ counted to record frequencies but not for inclusion in scores out of three*?

**These three elements are the correct definition of what statistical power ‘is’ – we have now added more detail to the section in Methods under ‘Analysis of Definitions’, using Cumming’s definition as an example. Mentioning ‘an effect’ or similar indicates some understanding, hence being counted out of interest to look for basic awareness, but is not accurate as power relates to a specified effect size, hence not being scored as a correct element of a definition. We hope that this is clear in the updated Analysis section (page 7-8).**

1. Cohen’s kappa tends to give a better measurement of interrater reliability than percentage agreement (Cohen, 1960; McHugh, 2012).

**Thank you. We have now calculated Cohen’s Kappa for all interrater reliability, see p. 8 in the Methods section.**

1. *Are the categories of “Yes–has used” and “Yes–uses” mutually exclusive*?

**Yes, they are. We have now tried to clarify this in the first paragraph of Part 1 (p. 11) of the results, but will add more detail if this is not sufficient**.

1. *Page 10 refers to complex designs where power analysis cannot be used. What are those designs? And is it worth mentioning simulation methods here?*

**We have clarified with comments from participants about multi-level models and mixed model designs as being particular points of difficulty.**

1. *I really like Table 6 and the surrounding section!*

**Thank you! Although this table has now been merged with a very similar earlier table in order to bring the results together (presenting different explanations for not using/not always using power analysis).**

1. *Could the information in the last paragraph of page 14 be included in Table 7, perhapse in an “exclusive” column?*

**Table 7 (now Table 5) now incorporates this data into the “Exclusive Use” column, and has also been expanded to include all of the “Other” methods instead of having them all written out.**

1. *Was the claim in the Importance of Power section (More than 90% of the sample rated power as being very or somewhat important for psychological research, regardless of experience using power analysis or engagement with open science) tested?*

**Apologies, this was an oversight after removing (yet another!) table. I have added the chi square results for demographic differences. The full table of demographic differences (or lack of) is now presented in the supplementary materials.**

1. “*We found much higher reported power analysis than previous studies” on page 21 doesn’t make sense, maybe it should read “…power analysis use than previous studies”?*

**Noted and amended, thank you.**

1. *The heading What is Power in the discussion seems more appropriate for an introduction.*

**Now amended to “Participants’ Understanding of Power”**

**Minutiae**

1. *British English spelling is used throughout. I know other papers published in Collabra:* *Psychology use it (e.g., Wöstenfeld et al., 2020), but this was just something I noticed.*

**I believe that Collabra has no preference between US and UK English, so I opted for my native spelling in this work. However, we are happy to reproduce the manuscript in US English if requested by the editorial team.**

1. *APA 7 no longer requires all the authors to be listed the first time a citation is used in the text beyond three authors (the manuscript currently appears to be using APA 6 conventions for citations).*

**All references now amended in line with APA 7.**

1. *I’m a big fan of the Oxford comma. One should be used in the second sentence of the abstract after sample size.*

**Amended.**

1. *In paragraph 1, effect-size is hyphenated once. This should either be removed, or effect size should be hyphenated throughout the manuscript for consistency.*

**Amended to use effect size throughout.**

1. *Be consistent with italicizing “a priori,” which is italicized first in the introduction then never again for subsequent uses.*

**Amended to use a priori throughout.**

1. *I’m happy to see Jamovi and ggplot cited, but R should be cited as well, then.*

**R now cited.**

1. *Mone et al. needs a year in the citation (1996 according to the references list) in the first sentence of the last paragraph on page 3.*

**Amended.**

1. *(Drisko and Maschi, 2015) should be (Drisko & Maschi, 2015).*

**Amended.**

1. *Table 5 could be eliminated, and those summary statistics given in the text.*

**Table 5 (regarding freq. of power analysis use) has been removed, with the summary stats now presented in-text before the sub-section “Software Preferences” in Part 1 of the results.**

1. *184 shouldn’t be italicized in the Effect Size Information section.*

**Amended.**

1. *It is not necessary for the figure to be in color, though I don’t think this journal charges extra for a color figure so this may be a moot point.*

**I believe that this is not an issue as Collabra is online-only, although I am happy to supply a greyscale image instead.**

1. *Table 12 could potentially be moved to a supplement.*

**Table 12 is now in the supplementary material file.**

1. *“We believe that in a larger and more representative sample would show lower use of power analysis” in should be deleted.*

**Amended.**

**Editor Second Decision: Revise & Resubmit**

Sep 14, 2021

Dear Elizabeth Collins,

I have completed my review of your manuscript, “Using and Understanding Power in Psychological Research: A Survey Study.” Your work will appear in Collabra: Psychology after some very minor revisions.

Please unblind the MS.

APA. Please rename the section Method rather than Methods. Please remove all leading 0’s from p-values – APA only uses 0 before the decimal if the value can exceed 1.0. Please use the uppercase Greek symbol Chi rather than x in italics. Please add effect sizes to all Chi-square values. Please use hanging indents as required by APA style.

Please update OSF links to non-anonymized ones.

Please email me when the revision was received. I was late on this review as I either missed or did not receive notification from our system of the revision.

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 contact the editorial office at editorialoffice@collabra.org.

We hope you can submit your revision within the next six weeks. If you cannot make this deadline, please let us know as early as possible.

Sincerely,

Chris Aberson

**Author Response**

Sep 15, 2021

Dear Dr Aberson,

Thank you for your time spent reviewing our revised manuscript. We are delighted to provide the final version of *Using and Understanding Power in Psychological Research: A Survey Study*. We confirm that we have responded to all minor amendments, as listed below, and confirm that we have fully proof-read our work and adhered to the Collabra author guidelines.

Amendments:

**Please unblind the MS.**

*- Done*

**Please rename the section Method rather than Methods.**

*- Done*

**Please remove all leading 0’s from p-values – APA only uses 0 before the decimal if the** **value can exceed 1.0.**

*- Done*

**Please use the uppercase Greek symbol Chi rather than x in italics.**

*- Done*

**Please add effect sizes to all Chi-square values.**

*- Done*

**Please use hanging indents as required by APA style.**

*- Done*

**Please update OSF links to non-anonymized ones.**

*- Done*

**Please email me when the revision was received. I was late on this review as I either missed or did not receive notification from our system of the revision**

- *We submitted our revised paper on August 18th, 2021*

Many thanks again for your time, and for your insightful reviewer comments on the first version of our work.

Kind regards,

Elizabeth Collins and Roger Watt

**Editor Final Decision: Accept**

Sep 15, 2021

Dear Elizabeth Collins,

I have now had a chance to read over your manuscript “Using and Understanding Power in Psychological Research: A Survey Study”, along with the letter describing the changes you made. Thank you for your responsiveness to the concerns that the reviewers and I raised. 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 hope your experiences with Collabra: Psychology have been positive and that you will continue to consider it as an outlet for your work.

As there are no further reviewer revisions to make, you do not have to complete any tasks at this point. Our managing editor will contact you in case there are any pre-prodution file related questions. You will have an opportunity to check the page proofs before we publish your article. Thank you again for publishing in Collabra: Psychology.

Sincerely,
Chris Aberson