



Reporting your Quantitative Research

Author guidelines or toolkits for dissertations, conferences and journals often provide meticulous detail on font sizes and margins, but are silent on the content you should include in a well written report on your research. Obviously, reading other people's work in journals or conferences is critical to understanding the norms in the field, and for years I relied on this approach to advise students on their research reporting. However, there are also some useful (possibly even essential) references that are extremely helpful. Many EER journals, including JEE, point authors to resources published by AERA and APA¹. Using these as a starting point, what changes when you are designing an EER study or writing about EER work?

Let's start with "*Reporting Quantitative Research in Psychology: How to Meet APA Style Journal Article Reporting Standards*"². **READ THIS BOOK!** This short little book describes in flowchart and checklist style the information that should be reported in a paper, report or dissertation. It includes key differences for research that is observational versus experimental, or quasi-experimental, and it has information on reporting studies where $N = 1$, and other types of situations. It also has some critical information such as how to report that the data in your paper was also published in your thesis, or how to use your abstract to optimize findability for people looking for literature in your field. There are a few key differences between EER reporting and APA reporting, as it is described in this text. For example, the information they suggest putting in an "Author Note" in an APA style report is often handled very succinctly in the "Acknowledgement" in EER papers.

While this APA book is a great starting point, it is not complete for EER work. For example, it does not mention the importance of including your research paradigm (e.g. theoretical and conceptual framework(s)) in your reporting. Instead, JEE recommends using the AERA work "*Standards for Reporting Empirical Social Science Research in AERA Publications*", which mentions theoretical orientation as an important part of a research report. This AERA Standards guide is one of many AERA publications available online. While useful, this particular publication is relatively short, and does not include as much detail as the APA book, unfortunately.

So, what do both of these publications miss in EER reporting? There are a couple of critical pieces (see table below). First, many EER publications, and particularly dissertations, contain a more fulsome description of the theoretical orientation and conceptual frameworks used by the authors in situating and designing their research study. This is true for both quantitative and qualitative EER studies. These concepts have been discussed in other research snacks.

Second, many EER studies benefit from a description of the "context" or "setup" in the Introduction, or early in the Methods section. APA calls this "setting, exposure and time span". For example, the research may revolve around a specific course, a program (curricular or co-curricular), a particular classroom or space, a specific pedagogical approach or teaching method, or a specific type of assessment. It is the context in which you either are doing your observations or your manipulation (in the case of an experimental or quasi-experimental study). The reader needs to understand this "setup" before you explain the method you are employing to investigate some aspect of the educational experience, or the experiment you are running in the context. And finally, it is

¹ AERA (American Education Research Association) and the APA (American Psychological Association) are both enormous compared to EER groups. It is worth attending an AERA conference, if you have the chance, just to see the wide, wide world of education research.

² There is a similar guide for Qualitative Research published by APA.

increasingly common for EER dissertations (both qualitative and quantitative) to include a positionality statement that describes the way the author identifies themselves and their perspective as part of the research work. Positionality generally appears in the Introduction.

As the APA points out, the content list they provide is too expansive to be covered in most papers given word or page limits. However, reading through the checklist is invaluable for would-be authors, including students who are planning out their research program.

What to include in reporting – extending the APA guidance	
APA guides provide helpful checklists for publication content	https://apastyle.apa.org/jars https://apastyle.apa.org/jars/quantitative quick checklist: https://apastyle.apa.org/jars/quant-table-1.pdf (Similar guides are available for qualitative research)
Author Note	In EER this information (in short form) is generally found at the end of a paper in the acknowledgement rather than an author note.
Theoretical & Conceptual frameworks	See the research snacks on these topics. (https://ceea.ca/resources-2/)
Setting, exposure and time span; i.e., context and setup	Very frequently an EER study is taking place in a specific context (e.g. a third year design course, first year orientation programming, etc.). For a course, this description might include a summary of the intended learning outcomes, the student population taking the course, the assessment plan, the pedagogical approach, the length/structure of the course and how it fits in curriculum, for example.
Positionality statement	How the author positions themselves: who they are and how this may impact their perspective on the research. It may also include the researcher’s relationship to the participants (e.g., instructor for the course being studied). This is recommended by the APA for qualitative studies and is increasingly common in EER in all types of dissertations/reports.

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References:

Reporting Quantitative Research in Psychology: How to Meet APA Style Journal Article Reporting Standards, Second Edition, Revised, Harris Cooper, American Psychological Association, 2020.

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Standards for Reporting on Empirical Social Science Research in AERA Publications, Educational Researcher, Vol. 35(6), p. 33-40, 2006. Accessed May 7, 2022:

https://www.aera.net/Portals/38/docs/12ERv35n6_Standard4Report%20.pdf

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