

Questions and answers during the mixed methods webinar led by Judith Schoonenboom, January 28th, 2020 (slightly edited for readability)

Different designs

Ofeibea Asare: What is a concurrent mixed methods design?

Gurupreet Khalsa: Concurrent means the researcher collects the quantitative and the qualitative data at approximately the same time

Seema Mahato: Could we use the quantitative data to develop a sampling strategy? Like a sequential design? Like in this case we could use the quantitative data to identify whom to interview for the qualitative study.

Judith Schoonenboom: Yes, this can be done. What I did not mention is that Glewwe, Kremer and Mouline actually used the quantitative test scores to select the “median” child for their interviews.

Mutiara Kusuma: Can you give an example where a mixed methods study was first initiated by qualitative research and then followed by quantitative research?

Barbara O'Connor: You can do focus groups to help develop questions for a survey and then follow up with interviews to further develop answers to questions or discover trends in the quantitative data. This would be a qual->quan->qual design.

Lori Foote: It seems that the explanations you've discussed have come out of surprising study results. Can you envision a study that begins with a theory about subgroup differences and therefore uses the study to confirm or disconfirm the theory behind group differences?

Judith Schoonenboom: Absolutely. For example, in a study about academic procrastination (Visser, Korthagen, & Schoonenboom, 2018), we selected three groups of students with low, intermediate and high levels of procrastinations, and analyzed interviews with these students looking for how the factors that were known from the literature to influence procrastination played out. Yet, I expect that such a study will almost always yield more than just a confirmation or disconfirmation. It will show you *how* the factors played their role and will identify new factors and processes. I think that is the power of mixed methods research.

Requirements

Esra: I have been told that a study that does not show power analysis cannot be called quantitative. Therefore, if a study collects quantitative data from 25-50 participants, it is not really quantitative. How does that play out in mixed methods studies that evaluate qualitative and quantitative data from 20 students for example? Thank you.

Oludoye Oluseye: How can one determine sample size in mixed methods design especially in the quantitative strand?

Judith Schoonenboom: This depends on what you want to use the data for. If you want to test an effect, then the standard rules for significance testing apply and a power analysis will provide useful information (most of the time, the sample that is needed will be larger than one would think at first sight). Depending on the expected effect size, 25-50 participants will almost never be enough (actually, for testing the influence of language scores on GPA, Lee and Greene used a sample of 100 students). If you want to use the data to explore whether there are subgroups with no or minimal overlap, then much less participants will do, and the result will not be a firm conclusion, but rather an interesting hypothesis for further research.

Within designs

Mohammed Abdualah Alzahrani: One of mixed methods aims is initiation. What does it mean and how can mixed methods research with the aim of initiation be conducted?

Judith Schoonenboom: Initiation means to follow-up on unexpected results. Although initially conceived as one of five possible purposes of a mixed methods study, I see it as something that plays a role, alongside other purposes of mixing, in almost every mixed methods study. In both examples, the unexpected lack of an effect initiated the mixed methods study.

Debadutta Parida: Is there a follow up to developing a meta-inference? Such as theory building? Or the research ends with the meta inference?

Judith Schoonenboom: To me, the meta-inference is a form of theory building. By definition, it is the inference, or combination of claims, at the end of the study. One possible follow-up within a study is a decision. For example, in action research, the meta-inference is used to make a decision that aims at improving the situation of those involved.

Publications

Chris Lovato: Are you familiar with a published article that describes the approach you have used in your presentation?

Judith Schoonenboom: Yes, see the reference list. My article that best describes this approach has not been published yet, but my published Open Access article Schoonenboom (2019) comes very close.

Multiple vs. mixed methods

Mohammed Abdualah Alzahrani: Is there any difference between multi-method research and mixed methods research?

Mutiara Kusuma: I have heard a term called multiple methods coined to studies with less balance of qualitative and quantitative in the methodology. Can you provide more explanation on this in comparison to mixed methods studies, like how balanced should we go to be able to claim our study as a mixed methods study?

T Dawson: It is not really about balance, it is about the integration within the data processes and the interpretations.

Sally: If we use a systematic review and evidence-based guidelines to design an intervention- can this be considered mixed methods?

Judith Schoonenboom: My answer is a bit complex. One requirement for a mixed methods study is that it uses both qualitative and quantitative data. A study that uses two or more quantitative methods or two or more qualitative methods is called a multi-method study. A mixed methods study should also use a substantial amount of both types of data. For example, a questionnaire in which a few open questions have been incorporated is usually not considered a mixed methods study. That said, whether a study is mixed methods or multi-method is not that important to me, because the question of how to develop integrated claims is basically the same. In a questionnaire that contains a few open questions, the researcher still has to think about how to combine the answers to these open questions with the answers to the closed questions. Thus, if a systematic review and evidence-based guidelines do, for example, not use qualitative data, using them to develop an intervention would be a multi-method study, rather than a mixed methods study, but the question how the elements of the intervention can be based on the claims from the evidence-based guidelines and those claims that results from the review and is the same as it would have been in a mixed methods study. Rather than striving for a balance between the amount of qualitative and quantitative data per se, researchers should use methods that fit their developing research questions and lead to a deep understanding of the phenomenon. On the other hand, it is important that there is a balance in the influence that both types of data have on the developing meta-inference. If results are contradictory, researchers should not favor one type of data over another, unless there is a good reason to do so.

Publishing separately or not

Matthew Stork: Do you have any thoughts on whether it is more or less appropriate to publish findings from a mixed methods study separately – e.g., one paper presenting quantitative findings and a subsequent paper that unpacks those quant findings using qualitative findings? It can sometimes be very difficult to combine both quantitative and qualitative findings into one paper given the space limitations of many journals.

Judith Schoonenboom: In general, piecemeal publication should be avoided. One criterion that I find useful is to examine whether the quantitative or qualitative study alone provides a substantial step forward in developing our understanding of the phenomenon. For example, Glewwe, Kremer and Moulin's (2009) first conclusion, based on their quantitative study, that providing textbooks to schoolchildren in rural Kenya did not affect their quantitative test scores, would not contribute much to our knowledge, and therefore, I think that publishing their study as a mixed methods article was a good decision.

How is the meta-inference being developed?

Mary Halter: I agree with the iterative approach to reaching meta inference, and believe we should allow for this in our research questions. Is there a 'method' description for the meta-inference? [...] I mean a method for meta-inference in particular - research papers (including my own!) simply talk about synthesis or pulling together but rarely describe precisely how that is achieved, e.g. in group work, in reflection, in the construction of theory?

Barbara O'Connor: Mary, I think that is where mixed methods research is moving towards - more information about how the integration is actually conducted and the various means to do so.

Judith Schoonenboom: I agree with Barbara and I think that describing how the meta-inference develops is one component of such a method.

References to my own work

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