



# Integrating Quantitative & Qualitative Methods to Enhance Clinical Research

## Associated Resource Sheet/FAQs

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## **Resources**

### **1) Journal Articles and Books on Mixed Methods**

Barg, F. K., Huss-Ashmore, R., Wittink, M. N., Murray, G. F., Bogner, H. R., & Gallo, J. J. (2006). A mixed-methods approach to understanding loneliness and depression in older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61(6), S329-S339.

<https://doi.org/10.1093/geronb/61.6.s329>

Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health*, 2013, 541-545.

Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, 119(10), 1442-1452.

<https://doi.org/10.1161/CIRCULATIONAHA.107.742775>

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—principles and practices. *Health Services Research*, 48(6pt2), 2134-2156.

<https://doi.org/10.1111/1475-6773.12117>

Gitlin, L., & Czaja, S. (2015). *Behavioral intervention research: Designing, evaluating, and implementing*. Springer Publishing Company.

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine*, 13(6), 554-561. <https://doi.org/10.1370/afm.1865>

Lewin, S., Glenton, C., & Oxman, A. D. (2009). Use of qualitative methods alongside randomised controlled trials of complex healthcare interventions: methodological study. *BMJ*, 339.

<https://doi.org/10.1136/bmj.b3496>

Wittink, M. N., Barg, F. K., & Gallo, J. J. (2006). Unwritten rules of talking to doctors about depression: integrating qualitative and quantitative methods. *The Annals of Family Medicine*, 4(4), 302-309.

<https://doi.org/10.1370/afm.558>

### **2) Journal Articles and Books on Qualitative Data Analysis**

Bradbury-Jones, C., Taylor, J., & Herber, O. (2014). How theory is used and articulated in qualitative research: Development of a new typology. *Social Science & Medicine*, 120, 135-141.

<https://doi.org/10.1016/j.socscimed.2014.09.014>

Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health*, 25(10), 1229-1245. <https://doi.org/10.1080/08870440903194015>

Kahan, J. P. (2001). Focus groups as a tool for policy analysis. *Analyses of Social Issues and Public Policy*, 1, 129-146.

Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279-301. <https://doi.org/10.17763/haer.62.3.8323320856251826>



Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. <https://doi.org/10.1093/intqhc/mzm042>

Saldaña, J. (2021). *The coding manual for qualitative researchers*. (3<sup>rd</sup> ed). Sage Publishing.

### **3) Mixed Methods Design Studio- UCI Institute for Clinical and Translational Science (ICTS)**

The ICTS at UCI is piloting a process for providing researchers with feedback on mixed methods studies during the planning stages. Interested investigators can find out more by contacting Anton Palma, PhD, in the ICTS: [palmaa@hs.uci.edu](mailto:palmaa@hs.uci.edu).

### **4) Mixed Methods Research Training Program for the Health Sciences (MMRTP)**

The Mixed Methods Research Training Program for the Health Sciences is funded by the National Institutes of Health through the Office of Behavioral and Social Science Research, the MMRTP is a training program in mixed methods where chosen scholars have access to webinars, resources, attend a retreat to discuss their research project, and are matched with methods expert consultants. Additional information can be found at the [John Hopkins MMRTP website](#).

## **FAQs**

### **What is mixed methods research?**

Mixed methods research is a research approach where investigators use both quantitative and qualitative methods within their study design.

### **What does it mean to integrate mixed methods in research?**

Integrating mixed methods means integrating the quantitative and qualitative methods in a way that allows the two types of data to “talk to each other”. In other words, the quantitative data informs the qualitative data or vis versa. This allows investigators to gain a deeper insight than if the methods were used alone.

### **What is the value of integrating qualitative and quantitative methods into research?**

There are many benefits to integrating qualitative and quantitative methods into your research design. Integration allows you to understand how and why an intervention works. Integration may allow you to gain a deeper understanding of how participants are interacting with your research method informing future study design to ensure the data captured by this method is what you are intending. Integration of qualitative and quantitative methods can help you understand the numbers and the narrative providing a more holistic view of your research landscape.

### **What does a researcher need to consider when considering a mixed methods approach?**

When deciding if a mixed methods approach is appropriate for your study question one should consider three big questions of

1. What are you trying to learn?
2. What are your sources of information?
3. Does adding quantitative or qualitative methods add relevant information that could not otherwise be gathered.

Other items to consider include:

- Time- do you have the time for data collection and data analysis? Qualitative methods can be more time consuming than quantitative methods
- Expertise- are you an expert or do you need collaborators with expertise in quantitative, qualitative, or mixed methods?
- Staff- do you have staff who can implement the method of choice? How much training will staff require? Where will your staff receive the training?

By answering these questions, you can decide if quantitative or qualitative methods are appropriate and if an integrated approach is appropriate for your study question.

### **What is a joint display?**

A joint display is a visual display to demonstrate how you plan to integrate quantitative and qualitative data during the research process. This helps you plan your approach and can help reviewers understand your proposal. It is important to plan early how the data will relate to each other during data collection, analysis and interpretation. Here is an [article](#) describing joint displays.