

# CREATE Workshop 2016

## Mixed Methodology in Health Psychology; mixing, matching and integrating different methodological approaches in the study of health and illness.

Milou Fredrix  
National University of  
Ireland, Galway  
Federica Picariello  
King's College London

For decades, the field of psychology has been the stage of a passionate debate between supporters of quantitative and qualitative research paradigms. This "qualitative-quantitative debate" is one of those highly charged subjects that can trigger a heated discussion at any research convention. Traditionally, qualitative and quantitative approaches were considered to be incompatible, underpinned by fundamentally different assumptions, (Dures, Rumsey, Morris, & Gleeson, 2011) and unable to communicate with each other. However in recent years, the two approaches have been brought closer together through the use of Mixed Methods Research (MMR). MMR is like a language that allows quantitative and qualitative research not only to co-exist but also complement one another. MMR states that no single method, be it quantitative or qualitative, is fundamentally superior to the other when it comes to understanding behaviour and social phenomena. Using mixed methods designs can help you overcome the weaknesses of both quantitative and qualitative research. These mixed methodologies can provide a more comprehensive and holistic understanding of human behaviour.

The 2016 CREATE workshop brought together thirty-three early career researchers from fourteen different countries, all hoping to gain a greater understanding of what constitutes a good mixed-methods study and to gain expertise on how to

combine quantitative and qualitative data. The three-day workshop was held in Aberdeen, UK, prior to the general EHPS/DHP conference and was facilitated by Dr. Irina Todorova (Health Psychology Research Centre, Bulgaria) and Dr. Rachel Shaw (Aston University, UK).

Although, in recent years, MMR has become the 'hot' method, the facilitators of the workshop stressed that 'doing it right' is not easy. MMR takes more resources and time than traditional paradigms. When dealing with limited time and funding to complete a project, this can be particularly daunting. To help streamline the process of a mixed methods study, a lot of the workshop was dedicated to formulating a clear MMR rationale, research questions and choosing the right design for MMR studies. While working in small groups, we discussed how our own work could be enhanced through the use of mixed methods designs. Dr. Todorova and Dr. Shaw showed us the various mixed methods design options, which varied from basic to more advanced designs, and they provided examples from their own research. The possibilities with MMR are numerous, from convergent parallel designs, where the quantitative and qualitative data collection and analyses are simultaneous, and the results are merged at the end, to sequential designs, where one approach informs the subsequent approach. The complexity of the design depends completely on your research questions (Creswell, 2014).

To get familiar with the different designs, we incorporated the designs into our own work in small groups. After working through the different





stages of designing the MMR study, one person from each group had an opportunity to present their ideas to the larger group. This not only provided us with the opportunity to discuss and reflect on the different designs, it also gave us a chance to provide each other with useful feedback and research ideas.

To make the workshop particularly relevant to health psychology, the facilitators highlighted the role of MMR in health science research. It seems that our field has started prioritising methodological diversity. In fact, qualitative research is rapidly becoming a key component in developing effective health promotion strategies and interventions. In many stages of intervention development, using a mix of methodological approaches is thought to improve effectiveness and uptake of the intervention. After examining the MRC framework for designing and evaluating complex interventions, we concluded that mixed methodology could be beneficial to the process in multiple stages (Craig et al., 2008). For example, in a feasibility and piloting stage of intervention development, using a mixture of

qualitative and quantitative methods makes understanding barriers to participation and estimating response rates more likely (Anderson, 2008).

A clear strength of the workshop was that the facilitators relied on real world examples from their own research. As they guided us through various stages of their research, from designing the study and applying for grants, to the data analysis and write up, they also highlighted the different challenges along the way. For example, Dr. Todorova spoke about a large study that followed 400 newly arrived children from the Caribbean, China, Central America, and Mexico to the United States for five years, using a mixed-methods approach. The data were so rich and cohesive that the findings were written up as case studies (Suárez-Orozco, Suárez-Orozco, & Todorova, 2009). This opened a lively discussion on considerations of anonymity and confidentiality, which can be quite challenging features of MMR.

Dr. Todorova and Dr. Shaw went at a perfect pace, making sure that we were all on track, especially when it came to the discussion of ontology and epistemology, also providing us with useful handouts for future references. An important lesson learned is that using mixed-methods

approaches means that you will need sufficient knowledge of two different research philosophies. Therefore MMR often relies on collaboration. There is still a strong separation present between qualitative and quantitative methods. This is reflected in the expertise of researchers. In fact, we observed in the workshop, that some of us were primarily quantitative and some primarily qualitative researchers.

On the last day of the workshop, we finally reached the most daunting feature of MMR, the data interface, where the actual mixing of results occurs. We were all hoping to be guided through a step by step approach in data integration.



Unfortunately, what seems to be the hardest part of MMR, also seems to be the part that lacks some guidance. The integration of data is a challenge, as it is led by the nature of the data. No golden rules seem to apply here and no manuals are available. It is important to carefully review your data and see where it leads you. This can be particularly challenging when the qualitative and quantitative findings are contradicting each other. While this can be a frustrating result, the CREATE facilitators encouraged us to look at this with a positive attitude. Contradicting results make for great research questions and they open doors for more exploration.

When integrating results, reading examples from previous articles can help immensely. To give us a taste of the range of quality within MMR, the facilitators provided us with articles that we had to read and discuss in groups, before reconvening as a larger group and identifying their strengths and weaknesses. Although there is no manual to follow when integrating findings, when it is done well, the article flows and by the end of it the results are a homogenous picture, instead of separate quantitative and qualitative entities. With regards to appraisal of MMR, especially in the context of systematic reviews, quality assessments tools for such research are limited. However, Dr. Shaw introduced us to the Mixed Methods Appraisal Tool (MMAT; Pluye et al., 2011) and shared with us her experience of using it.

Although MMR is being widely adopted, it is still a relatively new and evolving field; therefore, practical issues exist in relation to publication and appraisal. It is difficult enough to adhere to strict word limits of journals when using one approach, however with MMR this challenge is only further amplified. Luckily, the facilitators shared some tips with us on how to overcome this challenge, in particular, publishing separate papers for the quantitative and qualitative findings, and a third

publication revolving solely around the mixed-methods integration. Submitting to MMR-specific journals that acknowledge the word length necessary for such work, such as the Journal of Mixed Methods Research would be another option.

In the current academic climate, acquiring funding always has to be part of the agenda. The facilitators were able to motivate us with this subject by highlighting that many health research funders are now expecting some form of mixed methodology when calling for proposals. This is great for the uptake of mixed methodologies. However we were warned not to just add a bit of 'tokenistic' qualitative research into larger quantitative projects. The use of mixed methods should add meaning and value to the research, and it should help answer questions that otherwise would remain unanswered (Dures et al., 2011).

The workshop gave us some great insights into a complicated process. The take home message of this workshop was that, even though, many of us, or our supervisors, might be comfortable in one approach, multiple approaches might be necessary to answer certain research questions. However the process should not be underestimated and it should be given the amount of thought and time that it requires.

MMR is all about pushing yourself outside of your comfort zone and this is exactly what we did in this workshop (particularly in the ceilidh dancing



class). We would like to thank Dr. Irina Todorova and Dr. Rachel Shaw, as well as the CREATE organizers for this inspiring and worthwhile experience on behalf of all the participants!



Milou Fredrix  
Health Behaviour Change  
Research Group, National  
University of Ireland Galway,  
Republic of Ireland  
m.fredrix1@nuigalway.ie

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Federica Picariello  
Health Psychology Section, IoPPN,  
King's College London, UK  
federica.picariello@kcl.ac.uk

