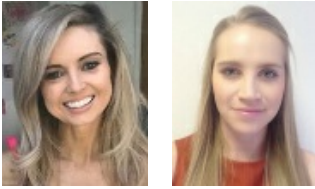


Diary of an app! Will using mobile devices in qualitative research become the norm?



*Researchers have been asking participants to record their experiences and thoughts in traditional, paper-based diaries for many years. But the advent of digital technologies, especially apps for mobile devices, has encouraged some to ask whether these could become the new norm for capturing diary-based data for qualitative research. **Laura Radcliffe** and **Leighann Spencer** have pioneered the use of diary apps in their research and, whilst encountering challenges throughout the development phase, have found them to be easier and more efficient for researchers and participants, offering quicker and better access to the data.*

When you ask research participants to write things down in a diary, the information you get can provide quite different insights from that which you might get from interviews. Responses are more immediate or “in the moment” compared with an interview that might take place weeks or months down the line. Participants can offer more detail as well as a more complete reaction to events that are still fresh in their minds. Similarly, a diary kept every day over a sustained period might reveal changes within a person, whereas an interview can only really capture what participants think, remember, feel, and say at that one point in time.

But while capturing diary-based information can be exciting and rewarding, it's not without its challenges. You need to make sure participants remember to do what is asked of them, at the right times, and also that they don't lose their diary and actually return it for analysis.

We wondered whether these challenges might be overcome through the use of technology, and specifically a smartphone app. Participants were likely, we thought, to have access to their phones all day and so wouldn't be required to carry a pen and paper, while accessing and sharing data with members of a research team could be made easy and secure. It certainly seemed more convenient and efficient for everyone involved in the research process.

Developing an app for use in qualitative research

That said, the process of developing a diary app hasn't been quite as straightforward as we imagined. Firstly, securing funding for this sort of project is far from straightforward. Most funding pots are geared towards particular research and it can be difficult to convince funders that developing an app as part of a research project is a worthwhile activity; they're definitely playing catch up when it comes to funding methods-based work. Secondly, there's the difficulty of working with app developers who, whilst clearly highly skilled, have little or no experience of the requirements of researchers and tend to speak a completely different language too.

There was a significant gap in understanding and communication. A big early learning point for us came with the realisation that different versions of the app were needed for iOS and Android devices, with compatibility with both being essential as we wanted participants to be able to use it no matter what type of phone they owned. Everything takes twice as long as you might imagine because every idea for a screen has to be explained, shared, commented on, discussed, and agreed (again made more difficult by those language barriers), and must then be tested and piloted to iron out any technical glitches or problems. Unexpected costs such as publishing not just on the iTunes platform but also on Google Apps caught us similarly unaware. We really could have done with a checklist or step-by-step guide but such resources just don't exist, a gap we hope to plug some point soon.



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App in practice

However, there is some good news: one of the apps we developed is now being used as part of current research. The [Work Interaction and Mood Diary](#) helps to track the day-to-day experiences of employees who are being mistreated at work. We thought an app could work well in this context as one of the first pieces of advice given by organisations like [Acas](#) or the [Chartered Institute of Personnel and Development](#) to concerned employees is to keep a detailed record of any mistreatment which may be used in the event of any grievance procedure or employment tribunal. Using a paper-based diary in this situation could be risky as leaving it lying around at work or at home could potentially cause real problems. We thought an app would certainly be more secure – it belongs to the participant, it's private, password-protected, and gives people real sense of ownership of the diary compared to a paper-based one they would have to give back.

Early findings from our research using the app are fascinating and have already helped us put together a clearer picture of how people's experiences of being mistreated at work evolves over time. For example, we have seen how an email altercation seems to have more of a negative impact on a person's wellbeing than a face to face disagreement; how there is an observable "Thank Goodness it's Friday" effect, with people having a better time on a Friday because they know the weekend is coming; and how having a good or productive day at work seems to lessen the blow of any negative interaction.

Easier and more efficient for participants and researchers

Once you have an app up and running there are undoubtedly huge benefits. It is easier and more efficient for both participants and researchers; as soon as the data is entered, a researcher can access it in the back end of the app, there is no delay and analysis or follow-up work can get moving. You certainly capture those "in the moment" reactions to things, no matter how small, because most people have their phone on them at all times.

The Work Interaction and Mood Diary app has also made possible all sorts of interesting collaborations – not always obvious or easy for PhD research. Being able to physically demonstrate the app to trade unions and participants themselves has definitely made it easier to work with potential beneficiaries and improve the chances of this work having an impact. Although it's still early days for the project, the app has had [some media attention](#) from the Guardian too.

Do we think diary apps will become the norm? Yes, but there is a real need for more training. The [ESRC National Centre for Research Methods](#) has run some phone app coding workshops, which have been great, but further training on the ethics of data collection when using methods like this is also key.

Funders, universities, and research centres are still playing catch-up. More and more PhD students and other researchers will want to use smartphone apps for all sorts of research in future and we need to make that possible sooner rather than later. We hope our experience – and the checklist and guide we plan to develop – will prove helpful.

The authors will be discussing their experiences and sharing practical tips with researchers at the [ESRC Research Methods Festival in Bath in July](#).

Note: This article gives the views of the authors, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below.

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