Observation research techniques

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Abstract

This paper outlines the aims of the observation techniques workshop delivered on 11 June 2015, and discusses the experience of the group work sessions. Some participants explained their own experience of observation research, and participants discussed sampling, methods used to collect data and the ethics of observation research. The session participants concluded that observation research was a useful complementary technique for library research. More research published by library and information science practitioners and researchers would help to establish best practice in observation research.

Key words: observation; research design; research ethics; library surveys.

Introduction

When planning the session, I wanted to cover the "How, when, where, why, what" type of questions. At the end of the session I hoped that participants would be able to explain some advantages and disadvantages of observation methods, and define what is meant by unstructured versus structured observation, non-participant versus participant observation. Observation can be a very obtrusive research method, and the ethical aspects of observation research need attention. I also wanted the participants to be able to recognise and critique some of the methods such as the use of observation checklists, and the use of photographs or videos.

I was surprised when checking the recent research literature in library and information science how little research discussed observation as a major part of the research methodology. One possible reason for the problem is that observation techniques often complement other research methods used in a research study, and observation may be the minor method used, and not fully indexed. Another possible reason is that the participant observation methods of ethnographic research are usually only feasible for doctoral student research as such research can be very time-consuming. My own experience of research had taught me that observation was very useful. Often I had not used observation formally, but I realised how much I had learnt about the research contexts through informal observation of the surroundings, and notes taken about the way the library was managed, and used. I was therefore keen that the workshop participants should be inspired to use observation techniques themselves. In addition to the workshop slide presentation, all participants were supplied with a list of references, with author abstracts, on observation techniques, so that they had some sources of advice for use in the future.

Organisation of the workshop

We started with some videos on the problems of selective attention from www.theinvisiblegorilla.com (1). Most of us have seen the YouTube clip of the gorilla walking around the basketball players, invisible to us when we are concentrating on counting the ball passes, but very visible when we are advised that there is a gorilla there. There are other videos from the website that demonstrate the problem of selective attention and that our observation may not be as good as we believe. This is a problem for observation research, but such selective attention can also make other research methods such as interviewing less effective. We may

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be focusing on the interview questions and forget to be aware of how the interviewee is responding.

Next came the definitions of structured or systematic observation, where rules (often with checklist) are used to observe behaviour. In "simple observation" the observer just observes what is happening, but in "contrived observation", the observer adjusts the situation and watches what happens. Looking at people doing a searching task set by the researcher is a type of contrived observation. Non-participant observation means that the observer is "looking on", and not playing an active role. In unstructured, ethnographic observation research the researcher is open to observing what really happens, and the researchers may have some role in the situation - they are participant observers.

The first group work task was to discuss how the participants would use observation techniques to study knowledge sharing among health professionals for discharge of patients with hip fracture or stroke from hospital to the community. What sort of "sampling" was necessary for observation? How, practically, could the research be managed? And what were some of the ethical issues? Group discussions highlighted the different health care delivery structures in different countries, that would affect the sampling, and when observation could take place. We agreed that observation would need to be accompanied by other research methods, and discussed the problems of doing research on, and with, busy health professionals. This task was based on actual research conducted in the UK (2), in which observers studied patient/professional interactions, multidisciplinary team meetings, and work shadowing of particular staff. They were nonparticipant observers, but not silent. There are several dimensions to thinking about the relationship between the researcher and those being observed (similarity of work background/experience, or gender/race/religion, or extent of involvement in the activities of the participants, or empathy with political/social agendas) (3).

The second group task was to plan observation research for a library space problem of interest to the group. At this point, it was clear that many of us have done such research, although the work may be considered part of normal monitoring and evaluation (audit). An example from the library literature is the research by Hursh on use of a music library (4). The exploratory phase for this research used library staff to make observations: "Observers were asked to indicate the apparent gender, ethnicity, and age of each subject in the description area. They were given the freedom to choose just a few patrons in an area to follow for the duration of the flip book if the number of people in that area was so great that making accurate observations was difficult or impossible. The absence of a checklist meant participant observers had to be instructed to: 1) not ignore some things they might normally ignore (i.e., remain open to the full range of possible characteristics, behaviors, and activities), and 2) clearly and consistently record what they saw."

We debated the pros and cons of using library staff to do the research, and how (or whether) to inform library users that research on library space use was going on. In the study of the music library, Hursh devised an observation checklist with categories derived from the qualitative data analysis of the exploratory phase. This then allowed observers in the second phase to record activity in five minute "sweeps" of particular zones, moving from one zone to the next and then back to the first zone. We discussed the practicalities of this method, noting the need for clear, independent categories (as observers had to make quick coding choices), and how the quick exit interviews with library users might help gain additional information. The exit interview also encourages library users to appreciate that the library was working for better services for them. We were not too surprised that Hursh found that female patrons were much more likely to multitask at their private laptops than male patrons! In the last part of the workshop we discussed research using visual methods. Such research is much older than "selfies", although as a research data collection tool, phones, and digital recorders are now cheap and convenient. It is easy to obtain a video diary. On the other hand, we still have to do the data analysis, whether it is a video diary or a written diary. We have to think about the ethical issues as well, the cultural issues, and whether we are researching on the participants, or researching about (and with) the participants. Trust is very important with any type of observation research (5), and vital when using visual data such as video.

Conclusions

The final messages of the workshop were:

- observation research is useful, feasible for practitioners, and can be combined with other types of data collection methods;
- observation research can obtain uniquely reliable and valid answers to some library problems;
- we have to think carefully about the ethical aspects of data collection and analysis for observation research.

REFERENCES

1. Chabris C, Simon D. The invisible gorilla. [cited 03 August 2015] Available from http://www.theinvisiblegorilla.com/videos.html.

- 2. Waring J et al. (for UK NIHR). An ethnographic study of knowledge sharing across the boundaries between care processes, services and organisations: the contributions to "safe" hospital discharge. Health Services and Delivery Research 09/2014; 2(29):1-160. DOI: 10.3310/hsdr02290
- Cunliffe AL, Karunanayake G. Working within hyphen-spaces in ethnographic research: implications for research identities and practice. Organizational Research Methods. 2013;16(3):364-92.
- Hursh, DW, Avenarius, CB. What do patrons really do in music libraries? An ethnographic approach to improving library services. Music Reference Services Quarterly. 2013;16(2):84-108. doi:10.1080/10588167.2013.787522
- Cooper J, Lewis R, Urquhart C. Using participant or non-participant observation to explain information behaviour. Information Research. 2004;9(4). http://informationr.net/ir/9-4/paper184.html