

Video Recordings of Interactions

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Abstract. Video recordings are an important resource for capturing in-dept social interaction and collaboration in workplace studies. Video-recorded observations can be used to analyse knowledge expansion in collaborative work when practitioners use videoconferences (VCs). Interaction analysis of a problem-solving activity is carried out, pointing to sequences in the work where knowledge expand, and problems are solved. Systematic observations using video recordings provide access to analysis of complex forms of interaction among professionals.

Keywords. Observation, video recordings, videoconferencing

1. Introduction

Observation is the process of gathering open-ended, first-hand information by observing people and places at research sites. Video recordings are an important resource for capturing and analysing social interactions [1]. The objective is to increase the understanding of the value of video-recorded observations in healthcare settings.

2. Methods

Ethnographic research allows studying people at their workplaces while they engage in daily activities, i.e., their behaviour, discussions, and interactions [1]. Herby, how work tasks are accomplished by understanding the professional's language, interaction, and communication. Interactions in the video-recordings were analysed according to interaction analysis, the investigation of discussion, and the use of resources [1].

3. Results

In total, 48 observations from VC meetings in have been video-recorded and analysed using interaction analysis. An observational protocol was designed to systematically organise the observations (Figure 1). To understand knowledge expansion in the cases, I chose a language-focused approach to the video recordings (Figure 2). The B suggests moving the instrument as far as possible (1), and A grabs, shows and suggests cauterising the tissue (2). The B supports the suggestion and explains that it is possible to go deeper,

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but in this case, he can stop at this level, as it would be difficult to move further inside the abdomen (3). The A agrees with the B (4) but keeps going deeper into the abdomen.

Session	Activity	Descriptive notes	Reflective notes
10 02.11.18 10:22	A performing surgery assisted by an on-site B	A move the instrument inside the abdomen and B guide to the right position.	Seem like A searching for the right position. Asks B what to do and holds while waiting for advice.
12 07.01.19 10:04	A performing local surgery assisted by B at a distance (VC)	A move the instrument inside the abdomen, finding the tissue. B says "Yes".	A know what to do, since he is going straight to the tissue? B supports, while A adds the B' suggestions for actions.
A = mentee; B = mentor			

Figure 1. Excerpt from observational protocol

The B thinks it is a good decision to move further inside the abdomen but present a problem with it (5).

		Language in session 12	Action
1	B	Reach in as deep as you can inside there ... as far as you can.	Give advice to move the instrument.
2	A	And cauterize this?	Grabs the tissue. Shows the tissue to the mentor.
3	B	Yeah, I mean, sometimes you can go much deeper. But yeah, try that; that's good.	Advises to move the instrument further inside the abdomen.
4	A	No I think that's good.	Agrees with the mentor.
5	B	That's good. See – eh – yeah. That's far, is it difficult now to get it all the way in? Yeah, I don't think you're going to be able to easily do it. There you go, now pull it all the way into the abdomen. Yeah, that's it.	Supports the mentee. Present a problem. Give advice to move the instrument further inside the abdomen.
A = mentee; B = mentor			

Figure 2. Transcript of video recordings.

4. Discussion and Conclusions

Video recordings provide access to complex forms of social interaction and collaboration that can be analysed in-depth. Analysis of this specific session illustrate interaction; the mentee showing the tissue and moving the instruments, exchanging knowledge about the problem to solve and keep the surgery successful.

Video-recorded observations add value when attempting to understand highly specialised knowledge in a particular domain, which might be difficult for researchers to capture in the moment. Video-based studies of interactions between professionals facilitate our understanding of complex situations and contribute to the understanding of how knowledge expand in work practice.

References

- [1] Jordan B, Henderson A. Interaction analysis: foundations and practice. *Journal of the Learning Sciences* 1995;4(1):39-103. doi: 10.1207/s15327809jls0401_2.