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VIDEO-STIMULATED RECALL INTERVIEWS IN QUALITATIVE RESEARCH

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Abstract

Video stimulated recall interviewing is a research technique in which subjects view a video sequence of their behaviour and are then invited to reflect on their decision-making processes during the videoed event. Despite its popularity, this technique raises methodological issues for researchers, particularly novice researchers in education. The paper reports that while stimulated recall is a valuable technique for investigating decision making processes in relation to specific events, it is not a technique that lends itself as a universal technique for research. This paper recounts one study in educational research where stimulated recall interview was used successfully as a useful tool for collecting data with an adapted version of SRI procedure.

Key words: Video-stimulated recall, stimulated recall interviews, qualitative research

INTRODUCTION

As the world becomes increasingly digitalized, researchers often integrate and apply technology in their research (Creswell, 2012). There are a growing number of researchers using video stimulated recall interview (SRI) as a research method that produces both insightful and useful data for examining the way people experience a specific event of interaction in education (Calderhead, 1981; Dempsey, 2010; Haw & Hadfield, 2011; Hoffman, 2003; Macrland, 1984; O'Brien, 1993; Theobald, 2008). Discussion about the stimulated recall technique itself, and the procedures employed in social science research are quite limited (Dempsey, 2010; Lyle, 2003; O'Brien, 1993). This has implications for researchers, particularly novice researchers who attempt to use the technique to investigate teachers' decision making process and behaviours. From the perspective of a novice researcher, this paper aims to (1) discuss the strengths and limitations of the SRI; and (2) describe an adapted procedure to use SRI in a qualitative research project.

BACKGROUND

Gaining access to the decision-making processes of others is intrinsic to the endeavour of

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many social scientists (Calderhead, 1981; Dempsey, 2010; Lyle, 2003; Macrland, 1984; O'Brien, 1993; Vesterinen, Toom, & Patrikainen, 2010). A growth in research on teachers' decision-making processes in relation to teaching practices has led to the use of the research method of stimulated recall (Dempsey, 2010). The technique of stimulated recall gives participants a chance to view themselves in action as a means to help them recall their thoughts of events as they occurred. While there are many stimulated recall data collection methods, this paper focuses on a video SRI technique (Dempsey, 2010; Lyle, 2003). This data collection method involves video-taping teachers during their normal teaching duties then playing them the video recordings of their own behaviour. Reflections from teachers are then elicited through an interview on different aspects of their recorded interactions as they are watching the video. The rapid increase in the use of the technique, its use in a number of different forms, and the emergence of several questions concerning the influences and biases of stimulated recall data add to the importance of examining the strengths and the weaknesses in using the technique.

To counter the theoretical and practical shortcomings of the SR technique, some researchers have introduced a variety of solutions. For example, the necessity for participant awareness of the SRI technique and process before formally collecting data and the fostering of a rapport between the researchers and participants have been emphasised as beneficial for effective data collection (Calderhead, 1981; Gass and Mackey, 2000; O'Brien, 1993). O'Brien (1993) suggested using a "dry-run" (p. 217) to help participants become accustomed to having the cameras in the class and to provide an opportunity for the camera operator to become familiar with the setting up in the classroom. Lyle (2003) suggested the need to make the retrospection as immediate as possible after the recorded event to enhance validity. Dempsey (2010) stressed the need to develop an interview protocol for the stimulated recall interviews. Dempsey (2010) reinforced that the key to the validity issue is the need to ensure that the questions/prompts do not alter the cognitive process being employed at the time of the event. Bearing in mind the above considerations for using SRI in educational research, this paper presents a case study that describes how SRI was used to gather teachers' decision-making processes about fostering learner autonomy in Vietnamese Higher Education classes.

Case study: Teachers' beliefs about learner autonomy in language learning

The case study is part of a larger mixed method research project of Vietnamese EFL University teachers' beliefs about learner autonomy, and their subsequent teaching practices in using strategies to promote learner autonomy. With this research, learner autonomy is defined as *learner's willingness and ability to take responsibility to plan, implement, monitor and evaluate his/her learning in tasks that are constructed in negotiation with and support from the teacher*. For teachers, to foster learner autonomy, they must have an understanding of the concept and an understanding of what strategies

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would be effective for them to use. Teachers must have a belief that learner autonomy is worth incorporating into their pedagogy. As Pajares (1992) explained, beliefs are based on evaluations and judgments and inferences of what people say, intend, and do. An individual's beliefs often must be inferred from statements and actions (Borg, 2000). Therefore, the researcher deemed that stimulated recall interviews, along with observations and field notes would be an appropriate data collection technique to understand the nexus between teachers' beliefs and teaching practices, in relation to learner autonomy. This nexus involve teachers' decision-making processes about incorporating learner autonomy as part of their pedagogy, derived from their beliefs about learner autonomy.

Learner autonomy is a relatively new concept in Vietnamese education but one that is stressed as important for teachers to incorporate in their teaching (Dang, 2010; Vietnamese National Assembly, 2005). The teachers in this study were university lecturers who taught English as a foreign language (EFL) who are now required to incorporate the concept of learner autonomy in their pedagogy. Thus, the overall study aimed to explore the teachers' subjective beliefs about learner autonomy without them having a theoretical foundation of learner autonomy. The focus of the current paper is on teachers' decision-making processes in relation to fostering learner autonomy.

Data collection for the study occurred in three phases: an initial interview, three SRIs, and a follow-up, in-depth interview with each of the four participants in the research. The purpose of the initial interview was to collect background information and data about teachers' espoused beliefs (Borg, 2003) about learner autonomy. This data was analysed and provided the framework for video-recorded observations on teaching activities in the teachers' EFL classes. These recordings were the basis for the SRIs. In the SRI, teachers watched videos of their teaching practices and were asked to discuss their decision-making processes as they carried out their teaching roles. Verbal prompts were used by the researcher where needed to encourage the participants to reflect more deeply about what they were watching themselves doing. The purpose of using SRI in this study was to gain insight into why the participants chose to act/teach in certain ways (Calderhead, 1981; Dempsey, 2010; Lyle, 2003; Macrland, 1984; O'Brien, 1993; Vesterinen, Toom, & Patrikainen, 2010), and so was designed to bring beliefs-in-actions (Borg, 2003). Concluding *in-depth interviews* were also carried out on completion of all the SRIs to understand further possible reasons for teachers' teaching practices in relation to fostering learner autonomy (Johnson, 2001; Kvale & Brinkmann, 2009). The following sections describe the use of SRIs in more detail.

Calderhead (1981) noted that three main categories of factors which may determine the significance or status of stimulated recall data, and which may influence more complete recall commentaries. These factors include anxious and stressful participants, whether tacit knowledge can be recalled, and how the participants should be prepared for the recall process. He emphasised that

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even when teachers' reported thoughts have been collected, as fully as possible, several issues still remain as to the interpretation of such data. For example, participants may censor or distort their recall of thought in order to present themselves more favourably. To address the difficulty in collecting the full thoughts of participants due to their possible anxiety and stress in not only watching a recording of their own teaching practices but commenting on these practices, the researcher paid particular attention to preparing the participants for the process by conducting a "dry-run" (O'Brien, 1993, p. 217) of the videotaping procedure in each class. It was important in the days leading up to the data collection that the teachers and the students in the selected classes become familiar with the presence of the researcher who was also the video camera operator and become accustomed to having the cameras in the class. The dry-run was also an opportunity for the camera operator to become familiar with the setting up in the classroom to maximise video recording the classroom interactions, and avoid potential technical problems.

Gass and Mackey (2000) suggested that "a threat to validity is the possibility that individuals are creating 'explanations' about the links between prompted actions and intentions" (p.42) the researcher, therefore, conducted dry-run sessions on stimulated recall with the four participants before beginning the first observation in the class to counter this potential problem. Each session lasted approximately half an hour. During the dry-run session, the participants were introduced to SRI techniques and processes. While over time participants became familiar with the method and better understood the requirements of SRI, the researcher found that during the dry-run the participants tended to be passive and dependent. Without prompting from the researcher, they did not talk about their teaching when they viewed their videos. Thus, the researcher decided to use an adapted version of the SRI technique, using targeted excerpts from the videos and a developed interview protocol for the SRI. Having prepared questions as prompts is not unusual for SRI protocol (Dempsey, 2010). However, such questioning during the viewing of the videos has been identified as a significant issue, since inappropriate probing could lead to additional reflection and analysis not connected to the research (Dempsey, 2010; Lyle, 2003). Therefore, the researcher developed open-ended probes that would help participants remain focused on the issue when watching how they included learner autonomy in their teaching practices, but not influence them to respond in a biased manner for the research. Samples of the interviewing questions in relation to viewing episodes of including learner autonomy included:

What were your thoughts of doing this activity?

What were you thinking when you decided to do this?

Why did you decide to do that?

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As suggested by O'Brien (1993), in order to record the teachers' practices, two cameras were set up in the classroom. One camera was used to video the teacher and any other major instructional resources (such as slides, blackboard, etc.), and the second camera was used to video the general dynamics of the classroom activities. The photographs below (Figure 1.1) outline the positioning of the cameras in the classroom. Camera one was positioned at the front of the class where the teacher generally stands to teach the lesson. Camera two was positioned at the back of the class to gain an overall sense of the whole classroom dynamic. During the lessons, the researcher was the video operator. The dry-run video recording session allowed participants to become more relaxed with the researcher's presence in the class and subsequently to be involved in the research.
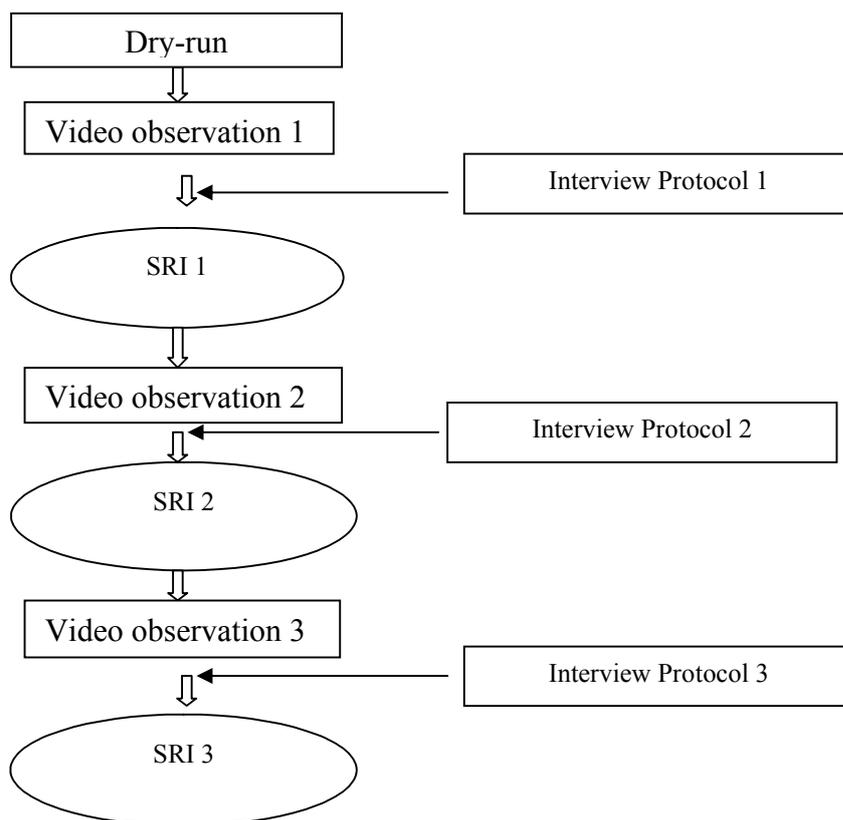
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Figure 1.1
Camera Positioning for Recording Teaching Practices

O'Brien (1993) stated that "the number of video lessons is largely dependent upon the availability of resources, time" (p. 217). In total, sixteen videotapes (including four dry-run sessions and 12 SRI video recordings – 3 SRI sessions for each of the 4 participants) were done. After each recording, the researcher viewed the video and developed the interview protocol for each SRI. The purpose of the SRI was to allow teachers to give their thoughts on their decision-making processes for their teaching behaviours as they viewed their lessons. Previous researchers (Gass & Mackey, 2000; Lyle, 2003) emphasized that the researcher must minimise the time delay between the event and the recall to increase validity. Therefore, all the SRIs were conducted one day after the lesson was recorded in the participants' workplace. On the day of the SRI, the researcher reminded the participants about the

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purpose of the research and the protocol for the interviews. Subsequently, the researcher and the individual teachers watched the video together, and the SRI was conducted. Figure 2 below outlines the procedure used for the SRIs.

Figure 1.2
Procedure of using stimulated recall interviews in the study

Calderhead (1981) states that, SRI "can by no means provide a complete account of teachers' thoughts, nor is the method likely to be of use entirely on its own" (p. 216). Having acknowledged the potential limitations of SRI, the researchers conducted an initial interview before the SRI and a follow-up in-depth interview after SRI with each participant. The purpose of conducting these interviews was to explore teachers' espoused beliefs in relation to learner autonomy. In addition to this, the researcher collected further data in the form of field notes and observations.

DISCUSSION

As argued earlier, stimulated recall is a valuable addition to the literature on research methods. The researcher in the case study reported on in this paper dealt with the potential limitations of the SRI technique in different ways. To counter the limitations of SRI, she developed a SRI procedure with the focus on the utilisation of the dry-run in preparation step, the importance of developing interview

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protocols whilst maintaining the rigor of the research. In addition, the researcher decided not only to use SRI but she also developed a series of interviews, observations and document analysis sessions for the data collection.

In the case study, the researcher acknowledges that with all types of interview-based research there are challenges to both the researchers and participants (Baker &Lee, 2011). For example, the SRI technique is a Western-cultural technique that was adopted in an Eastern cultural context. Therefore, it was vital for the researcher to foresee the potential challenges and constraints in the data collection process. It is critical to note that the participants for this study were Vietnamese who are often depicted as shy in communication (Pham, 2008). Techniques such as SRI are not generally used in Vietnamese classrooms for research and so the researcher encountered some limitations when conducting the dry-run SRI with the participants. For example one participant focused on her physical appearance rather than recalling the observed teaching event while another participant kept talking about something else not related to the event. The third participant just described her activities without further explanation of her thinking processes while teaching. The fourth teacher only talked when she was given questions otherwise she silently watched her teaching practices. Thus, the dry-run sessions helped the researcher and participants acknowledge the problems and limitations to avoid when the actual data collection SRI sessions were conducted. It should also be acknowledged that information from the dry-run sessions were not included in the data collection of the research.

There was a potential limitation in the case study that the use of SRI may cause the participants to produce explanations of their decision-making in defence of their practices, and to answer the questions in a way that they anticipated the interviewer would want (O'Brien, 1993; Lyle, 2003). As argued earlier, despite the preparation process, the researcher found that it is vital to develop an interview protocol after each video observation for the SRI. There are parallels here with the suggestions of Dempsey's (2010), where the role of interview protocols was acknowledged as providing an important structure for SRIs. The current study confirms the important role of developing interview protocols for each SRI. The researcher would suggest that this structure for SRI may be more important with participants who are depicted as passive and shy like Vietnamese participants or in a context where this research technique and method is still new, particularly for a novice researcher.

SRI has many benefits in the area of educational research and the case study in this paper is one typical example. The objective of the case study was to explore teachers' beliefs about learner autonomy. Beliefs do not lend themselves easily to investigation, not least because they are complex and often contradictory and because they are not directly observable or measurable, but rather inferred from what people say and what they do (Borg, 2003). SRIs were an important source of data revealing teachers' decision-making processes as they watched their teaching behaviours, thus helping the researcher gain powerful insights on teachers' beliefs-in-action. There is no doubt that the adapted SRI

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procedure utilised in the current study held the dual roles of capturing teachers' behaviour as well as understanding how decision-making occurs as participants view themselves and recall their thoughts.

CONCLUSION

This paper has demonstrated strengths and limitations in incorporating SRIs into research designs, particularly for the novice researcher. Due to the limited number of studies that employ SRI, and the unique nature of each qualitative study, it may well be necessary for individual researchers to develop a SRI procedure that best fits the purpose of their study, heeding the qualitative research literature and recent debates in use of SRI. The paper has contributed to the literature with a detailed procedure for using stimulated recall interviews in understanding participants' decision-making processes in relation to their teaching behaviour.

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