Technical Note:

A Discussion of Obser-View as a Method of Generating Data in the Construction Industry

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Abstract: This study demonstrates the paradigmatic position of obser-view and argues for the incorporation of reflectivity in obser-view to foster rigorous data generation. Aimed at introducing obser-view to the construction industry as a method of generating data, this study critically examines obser-view, exploring its application to construction research. Obser-view is an emerging data collection technique developed by Kragelund in 2006, where a non-scripted interview immediately post-observation is conducted. This helps to gain a deeper understanding of the phenomenon. Although researchers adopt various strategies to ensure rigor in qualitative research, there are still concerns in relation to validity, reliability, bias and objectivity in qualitative research. However, developing strategies that will help in gaining a deeper understanding of the phenomenon in study and tackling the aforementioned challenges will help in ensuring transparency in qualitative research. A review of literature is presented, the limitations and benefits of obser-view are also presented.

Keywords: Construction industry; data; obser-view; qualitative research; validity.

Introduction

There are continued challenges in the qualitative research paradigm in relation to demonstrating transparency and validity in the methodology adopted [1] and this may be because of the epistemological and ontological position of the research paradigm. It may also be due to the inadequate clarity in qualitative methodology [2]. As a result, researchers of this paradigm adopt triangulation of methods, triangulation of observation [2-3]; use of multiple sources of evidence, shared experience, ideas of various participants [4]; reflectivity of researchers, member checking sand peer- debriefing [2] to ensure rigor and trustworthiness in qualitative research. These can strengthen and help in validating the research [2,4,5]. Despite the above strategies and others adopted by researchers to tackle the afore-mentioned challenges, and the ability of qualitative research methods to provide robust tools for under-standing some phenomena [6], qualitative methods remain rejected in some fields [2]. Be it as it may, some researchers such as Griffiths [6] who contend the ontological position of qualitative research, on the other hand acknowledge its sole ability to answer some research questions.

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But in answering these questions, researchers must demonstrate transparency and rigor; strive to ensure validation of knowledge, reduce reactivity and bias. Consequently, arguments to the imperativeness of improving transparency through developing new research methods by some researchers such as Kragelund [1] and Lietz et al., [2] and exploring the application of emerging methods or introducing them to fields where they are under examined or entirely new, hold water. Therefore, this study with the overarching aim of introducing obser-view (a highly under examined emerging method [1]) to the construction industry argues for the incorporation of reflectivity in obser-view. Obser-view is an emerging data collection technique developed by Kragelund in 2006, where a non-scripted interview immediately post-observation is conducted [1]. This paper exa-mines the research paradigms underpinning obser-view. It goes further to demonstrate the appropriate-ness of obser-view in research, exploring its applica-tion to the construction industry. Obser-view is a data generation method, which involves the non-scripted discussion, and reflection on data collected immediately post- observations with participants with the aim of improving data generation and gaining deeper understanding of the generated data [1].

Research Philosophies

The challenges qualitative researchers encounter are due to the nature of research paradigm or like Lietz *et al.* [2] argue, the inadequate clarity of methodology in qualitative research. Qualitative research stems

from interpretivism, constructivism [2,4,7] as against quantitative research, which stems from positivism, emperialism and rationalism [4,7]. The latter is mostly based on deductive approach (top to bottom)- moving from general ideas or theories to specific situation hence a good theory tester [7,8]. It adopts methodologies such as experimental studies, statistical survey, cross-sectional studies, longitudinal studies. On the other hand, qualitative paradigm is mostly based on inductive approach (bottom to top) - suggesting general theories from particular situations (more like generating theory) [7,8]. It adopts methodologies such as case studies, action research, ethnography, grounded theory, participant enquiry, qualitative survey. However, this does not mean that each approach is restricted to the research paradigm assigned above, as in rare occasions, they can interchange or may be combined; case studies and action research may also involve adopting positivist approach.

Equally important are the ontological positions (the study of reality- the nature of things and understanding how the world is made up of) in relation to qualitative and quantitative paradigms. Qualitative paradigm embraces the ontological position that reality is a social construct, varies and depends on the ability of the researchers to interpret and construct reality-subjective reality [2,4,7], an indication that the reality is dependent on the researcher [7], hence multiple truths and multiple realities. It is of the epistemological position (study of knowledge- how to discover knowledge in relation to the world) that the object of study and the researcher are not isolated from each other, hence are not independent entities [4,7]. This means that the researcher or investigator can influence the object of study and vice versa. Hence, the participant can provide falsified or biased information, while the interpretation of the investigator in data collection, analysis, methodlogy or even research design can influence the outcome of the research. Changes in relation to individual and time; difference in culture, religion, thoughts and beliefs can also influence the perception of people and how they interpret things. As a result, it can be argued that works based on this paradigm are: open to bias, reactivity (observer effect)- the altering of behaviour by individuals because they are being observed [2]; difficult to reproduce by other researchers; difficult to generalise findings; open to criticism and highly subjective. It also depends on the knowledge of the researcher in relation to research skills and area of study. On the hand is the quantitative paradigm, which embraces the ontological position that there is only one truth [4] hence consistent and independent of the researcher and or participant's perception [4,7]. In terms of epistemological position, it believes that the

phenomenon in study or the researcher cannot be influenced by each other [4] thus are independent entities. This means that only the knowledge that can be verified empirically can be seen as valid and the truth [7]. In illustration, it is about objectivity; unlike qualitative research. It is not open to bias and criticism of validity. The recognition that adopting only one epistemological position in a research depends on the aim of the research is very insightful, as mixed methods research presents the compatibility of both. An in-depth qualitative research that generates a theory or hypothesis can adopt a quantitative approach to verify or falsify it [7].

Obser-view

Having examined research philosophies above and described obser-view in the introductory section, understanding its ontological and epistemological position is pertinent. Kragelund developed obser-view in 2006 during a research project because the participants (nursing students) wanted to discuss and reflect with her. Elsewhere in this paper (research philosophies section), it is evident that obser-view is of qualitative paradigm. It thrives on the philosophical position of co-construction of data; the phenomenon in study (object of study) and the investigator are not independent entities and that understanding the phenomenon is a reciprocal process between them [1] - epistemological position. This means that the researcher and participants co-construct part of the data and meaning – epistemological position, hence open to bias, reactivity and subjectivity. Researchers support co-construction of meaning [2,9] but Lietz et al., [2] argue that there should be effort to reduce bias and reactivity.

In terms of ontological position, obser-view embraces subjective reality - truth being dependent on the interpretation of the investigator and object of study (participant), hence a social construct. It takes into consideration the claims of the participants and investigators in studying reality. Furthermore, its epistemological position enables the development of knowledge through three perspectives as against two or one perspective like other methods and internal validation of research due to its ability to offer outside, inside and inter-subjective perspectives of the data collected [1]. As this is the case, this justifies the sorting of the opinions of the participants in gaining in-depth understanding of the data and phenomenon. It also helps in ensuring that the perception of the participant [2] is represented in the study. Obser-view may offer chances of clarifying some issues during data collection faster, hence reducing time spent and cost.

Obser-view provides a platform for exploring the phenomenon outside the perceived understanding or

perception of the researcher. This is because there is no theme guide for obser-view, hence no planned questions [2]. However, the data reflected on may be based on the interpretation of the researcher and the participant at that time, as this is non-scripted and done immediately post-observations hence may be limited. Nevertheless, the emergence of themes during the obser-view session [1] promotes in-depth inclusion of the participant, enhancing the learning process and reflection. Furthermore, obser-view gives the participant a sense of belonging, which may help in unearthing covert and salient aspects of the phenomenon in study- more than the tip of the iceberg, as the process is capable of spurring the participant to provide more relevant information. It can help in drawing inference than if other qualitative methods are adopted. On the other hand, it may appear confrontational to the participant, hence should be voluntary and the investigator should know when to discontinue the reflection session if the participant is not comfortable with it.

Kragelund [1] argues that obser-view as against observation and interview empowers the participant and researcher to have equal control, as they agree on the content of the dialogue. Creswell [10] emphasizes the need for equal or near equal control in some qualitative data collection methods. He demonstrates the importance of reflection on the relationship between the interviewer and the interviewee by citing researchers. This is on the grounds that in interviews, the interviewer is in sole control during the interview, where the interviewer may catalyze a one-way dialogue [10]. There should be reflection on the truth for authenticity and problems associated with power distance [10]. The contention here is that there are issues about the relationship between the interviewer and the interviewee that may not be tackled through interviews [10]. Obser-view may just be another pragmatic strategy ensuring this relationship. Kragelund [1] argues that obser-view establishes a relationship between the participant and researcher which is evident above, she further asserts that this may only be possible in a long term research, hence observations. Although, it may not establish the expected relationship in semi-structured interviews [1], it may help in understanding some phenomena better. In contrast, ethical issues in relation to the relationship between the participant and qualitative researcher remain a concern in qualitative research [11], but the relationship in question may also help in ensuring that the perception of the interviewee is fully presented over that of the researcher, hence ensuring rigor [2].

Further, obser-view may face some challenges such as the participant or observer being bored especially during long semi-structured qualitative interview sessions, hence the participant may opt out. Furthermore, challenges experienced during some methods (observation and interviews) that make up obser-view [10] are also worth considering. In illustration, Creswell [10] cites an instance of a researcher, Ezeh who despite being of the same nationality with the participant in his study, was seen as a spy, despite the strong relationship established as a result of long observation period of participants. It can be argued that there are always challenges and ethical issues with qualitative research [10,11] and in research entirely, so may be controlled like in every research perhaps by seeking ethical approval prior to resumption of research [1] and through reflectivity [11]. However, as obser-view has been successfully piloted in a high risk environment (psychiatric hospital), where the participants were nursing students [1], it suggests that with due consideration to ethical issues, communication and physiological capabilities, the aim of adopting obser-view will be achieved. Additionally, fields such as the construction industry, where difficulty in ensuring that there is no deviation from the subject due to participant's psychological problems as Kragelund [1] reports may not exist. Therefore research in such fields may find less psychological challenges in adopting obser-view.

Reflectivity in Obser-view

This study argues that in obser-view, reflectivity should be incorporated in relation to the investigator and especially the participants. This is on the grounds that: reflectivity is the conscious acknowledgement by an individual of their values, beliefs, perception, experience that can affect data collection or interpretation [2,11,12]; the participant is a co-generator of data in obser-view [1] hence can influence that data; the perception of participants should be presented above that of the observer [2] and if obser-view is to be adopted, participant's perception can influence the data; reflectivity is mostly used in interviews [11,12]. This simply means that if the participants and observers (participants in this case) note their personal values and experiences inter alia that can influence the collection and interpretation of the data [2,12], trustworthiness is increased in the research. As this is the case, it is evident from the above that having the co-constructors of data in obser-view engage in reflectivity, it can help in ensuring validity in the qualitative enquiry. Also, being that reflectivity has been used widely in collection of data due to the possible effect of bias, reactivity inter alia [2,12] and the need to ensure reliability in the research to avoid invalidity [1,2,12], incorporating reflectivity in obser-view where possible may improve the qualitative enquiry. This argument is backed up by an autoethnographic project by Lietz et al. [2], where the researchers'

experiences as Jews are the objects of study, the researchers have been the analysts, and a third researcher of different spirituality base. In the study, reflectivity has been highly engaged which is reported to have led to having the third researcher contribute to what can be argued to be data collection which is of reflectivity standpoint strategy. This is on the grounds that a narrative of the two autoethnographic journals has been written by the third researcher after reading them. The point here is that it can be argued that the third researcher is a co-constructor of data.

Applying Obser-view to Construction Industry Research

Research in the construction industry is mainly based on the built environment, human community, natural environment; it can be a mixture of the three, any two or just one [7]. Hence, the afore-discussed research paradigms can be adopted but depends on the societal factors [7], research questions, aim of research inter alia. Having demonstrated elsewhere in this paper the philosophical underlying determinants for adopting qualitative research techniques, it can be argued that the premise presents adequate compatibility features for adoption of obser-view (a contraction of interview and observation [1]) in construction industry research. After all, researchers such as Creswell [10] examine interviewing and observation thoroughly, recognizing the benefits and challenges of using them as methods of data collection in qualitative research. These are among the methods currently in use in the construction industry research and other industries. Researchers should adopt strategies that will help improve validity, reliability, trustworthiness and rigor in qualitative research [4,5]. Based on the above premise, and that obser-view- a contraction of the features of observation and interview, and the arguments in this paper, the workability of obser-view as a method in the construction industry and other industries is evidenced, but of course with normal ethical consideration as in every other data collection method. However, the application of obser-view in the construction industry is subject to trial, although already used by Kragelund. Nevertheless, the case below demonstrates how obser-view can fit into the construction industry research.

> In particular, this paragraph reports the experience of the author (referred to as the researcher hereinafter) while working for a construction firm in Nigeria. During the period in question, one of the researcher's responsibilities had been to monitor/inspect how field engineers, site manager, foremen conduct site inspection and co-ordinate activities on construction sites. During inspections (or obser-

vations as in research), a site manager of a small construction site was found not to have reached an agreement with prospective sub-contractors or individual contractors. The procurement method in this case is informal as seen in small projects in developing countries. This involves a lot of informal processes, which will not be discussed here. Due to the inability of the site manager to reach an agreement with the prospective sub-contractors or individual contractors, the project was delayed. During the discussion/reflection sessions with the site manager, the researcher found that she did not take further expected informal actions to ensure that the project continued because of unionism and gender bias. The researcher may not have unraveled this information if there were no discussion/refection sessions (which are obser-view in research) after the observation/ inspection sessions. Also, during the discussion, the site manager also learnt other strategies that may have been adopted to avoid a repetition of the event. Correspondingly, the researcher has learnt the extent of gender bias in the society and the effects of unionism on small projects. Observation only may not have provided such level of knowledge. This does not only help in internal validation of data, but also is a learning process. The above case is argued to fulfill most of the philosophical positions that underpin obser-view.

Obser-view can also fit into other aspects not limited to: where the participants want to learn; this may be in a learning environment, apprentice program; a construction process and as Kragelund [1] demonstrates in situations where the participants want to reflect on a co-participatory process.

Implications

Being that no claim is made in this study of the ability of obser-view to ensure absolute rigor in qualitative enquiry or be the silver bullet to silence the critics of qualitative research, it is evident that it can help in gaining a better understanding of the phenomenon. Additionally, being an emerging method as there is almost no record of this method in literature [13] prior to Kragelund [1], this study further explores obser-view and its application to other fields of research as Kragelund [1] proposes and as researchers advocate, hence contributing to knowledge. Validity, reliability and trustworthiness among others can be improved when observ-view is adopted. Although not empirically proven, researchers may find that obser-view will reduce the overall data collection period in research. This is an area that future research can explore, likewise its

application to other fields. Above all, incorporating reflectivity on the part of the participant, will also help in eliminating bias, reactivity and reduce subjectivity, hence improving quality of data.

References

1. Kragelund, L., The Obser-view: A Method of Generating Data and Learning, *Nurse Researcher*, 20(5), 2013, pp. 6-10.

2. Lietz, C.A., Langer, C.A., and Furman, R., Establishing Trustworthiness in Qualitative Research in Social Work: Implications from a Study Regarding Spirituality, *Qualitative Social Work*, 5, 2006, pp. 441- 458.

3. Denzin, N.K., *The Research Act in Sociology: A Theoretical Introduction to Sociological Methods*, London: Butterworths, 1970.

4. Kipo, D.D., Mixed Research Methods: Reflections on Social Policy, *Asian Social Science,* 9(17), 2013, pp. 259-268.

5. Padgett, D.K., *Qualitative Methods in Social Work Research: Challenges and Rewards,* Thousand Oaks, CA: Sage, 1998.

6. Griffiths, F., Qualitative Research: The Research Questions It Can Help Answer, The Methods It Uses, The Assumptions Behind the Questions and What Influences the Direction of Research, A Summary of The Panel Discussion at The Conference 'Exploring Qualitative Research in General Practice', *Family Practice*, 13(1), 1996.

7. Nani G., Research within Our Environment: Which Philosophy, Which Methods? In: Nani G., Nkum, R.K., Awere, E., Kissi, E., and Bamfo-Agyei, E. (Eds) *Procs 1st Applied Research Conference in Africa, (ARCA)* Conference, 29-31, August 2012, Elmina, Ghana, 2012, pp. 17-25.

8. Neville, C., Effective Learning Services Introduction to Research and Research Methods, University of Bradford School of Management. 2007 Retrieved on 12-10-14 from http://www.brad.ac.uk/management/media/management/els/Introduction-to-Research-and-Research-Methods.pdf

9. Guillemin, M. and Gillam, L., Ethics, Reflectivity, and 'Ethically Important Moments' in Research, *Qualitative Inquiry,* 10(2), 2004, pp. 261-280.

10. Creswell, J.W., *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks, CA: Sage, 2007.

11. Haahr, A., Norlyk, A., and Hall, E.O.C., Ethical Challenges Embedded in Qualitative Research Interviews with Close Relatives, *Nursing Ethics*, 21(1), 2014, pp. 6-15.

12. Walker, S., Read, S., and Priest, H., Use of Reflectivity in Mixed-Methods Study, *Nurse Researcher*, 20(3), 2013, pp. 38-43.

13. Kragelund, L., Obser-View Seen As a Data Generating Method and a Learning Space, Retrieved on 12- 05 - 14 from http://static.sdu.dk/mediafiles/Files/Om_SDU/Institutter/Ifpr/Konferencer/Adult _Learning/Abstracts/3%20Linda Kragelund.pdf 2009.