

Article

Can Member Check Be Verified in Real Time? Introducing ARC (Asking, Record, Confirm) for Member Checking Validation Strategy in Qualitative Research

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Abstract. Member checking involves a process to allow the data to be validated to ensure the credibility of the sources. It is also used to confirm the accuracy of the data and normally returned to the participant after the event or the session. However, it is almost common to find that the data could be lost or misinterpreted after being transcribed and analyzed by the researcher. This paper argues that validation post analysis is timeconsuming and involves data lost in the making. Therefore, in this paper, ARC technique (ask, record, confirm) was employed to assist data collection and validation in real-time for qualitative research. Feedback from respondents during the focus group session was reconfirmed on post-it notes and later pasted on A1 sized sheet paper as open coding. This paper presents the steps it took to formulate challenges and opportunities on Building workforce for the future in the Architecture profession to illustrate the nature of the ARC technique. The research demonstrates how the data later transferred to ATLAS.ti 8 for thematic analysis. In the nutshell, the issue on the traditional approach can be addressed through the ARC intervention. Prior work on member checking does not address the issue to be resolved in a real-time. ARC technique will benefit a qualitative researcher to obtain reliable results for their qualitative inquiry.

Keywords: ARC technique, focus groups, member checks, qualitative validation, ATLAS.ti 8.

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1. Introduction

Qualitative research strategies on data validation differ from its competitor, quantitative in so many ways. Often in qualitative research, the researcher becomes the one who collects the data and the one who analyze it [1]. Qualitative researchers might determine how the data will be shaped and have a bias on research results. However, this bias may be reduced with several checking on the process and active validation of the results with the respondents through member checking. Member checking involves a process to allow the data to be validated to ensure the credibility of the sources [1]. It is also used to confirm the accuracy of the data and normally returned to the participant after the event or the session [2]. Despite that, it is almost common to find that the data could be lost or misinterpreted after being transcribed and analyzed by the researcher.

The novices have been reported taken the process as a forthright and report it as a line of the sentence about the procedure [2]. The details of the procedure always being ignored and thus questioning the epistemology and methodology challenges of the process. The debate on the trustworthiness and credibility remain relevant until today despite several strategies outlined by qualitative scholars until today. This paper demonstrates the ARC (ask, record and confirm) technique for determining the member checks in real-time to ensure the validity of the responses. The validation using member checks are questions which are still unanswered, and hence explored here the steps that can be taken through ARC intervention. This is to ensure reliability and validity in qualitative inquiry in traditional focus group strategies and providing empirical evidence on conducting validation of member checks using the ARC (ask, record and confirm) technique to gain feedbacks for a study on building a workforce for the future in the Architecture profession.

This paper proposed an ARC technique [3] to implement a verification strategy to minimize errors and self-correcting during the conduct of inquiry procedures. Member checks in ARC also allow for the confirmation of discussion topics in real-time. After every session, this focus group session presents tentatively discussed issues, new ideas, feedback and a summary of each discussion based on post-it notes for further validation and clarification through member checking in real-time for the formulation of the coding in the ATLAS.ti 8. At this phase, the task will summarize session findings to further improve for the following sessions. A plethora of measures having been developed to assess the information conveys on the post-it notes are consistent with the thought from the respondents.

2. Methodology

Several scholars proposed member checking as the strategy to enhance rigour in the qualitative inquiry [3], [4]. However, some methods in qualitative ascertain that

member checking is not the ultimate procedure to express rigor in qualitative research [5]. Hence, this article debates on how validity and rigor can be achieved through a simple procedure called ARC (asking, report, confirm) as being described earlier [6]. The objective of this paper is focusing on the validity and reliability of the member checks in applying this technique. During the implementation, the results of the preliminary round were shown to the respondents to reconfirm their assertion and to allow for modification if necessary. There are two sessions conducted on two separate days. Further works to improve the questions and the topic are suggested into the following sessions. The result from the previous session helps to create a standpoint and therefore, will not be discussed again in the other session as to avoid conflict answers from different stakeholders. Nevertheless, the ARC strategy helps to avoid conflict in the final output of the session so that informed decision could be made at the end of the session to return the responsibility for the attainment of reliability and validity to the respondents.

In this focus group, the respondents were encompassed of Council of Accreditation Examination Malaysia (CAEM), representatives from Ministry of Economic Affairs, Academics from Public and Private universities in Malaysia and Professional Architects from the industry. The session lasted about two days, and the participants were divided into 5 groups comprises of varies background as mentioned earlier. This session employed a focus group protocol by creating several questions pertaining to current problems in Architectural education, proposals for the future and suggestions to the relevant ministries (Fig. 1). The committee helps to develop program and etiquette throughout the session. Each group were given a marker and the A1-sized papers were pasted on the wall in the hall with a space to pin post-it-notes on 1) nice to have; 2) important; 3) crucial for the betterment of architectural profession in the future.

The focus group largely contained open-ended questions allowing the moderator to start the discussion by 1) asking the participants in the hall. The second stage 2) the participants recording their feedbacks and paste it on the A1 sized of paper according to the questions raised. On the third step, the participants were asked 3) to reconfirm their answers, responses and feedbacks earlier to assist on the formulation of coding and to help member checking process in real-time. During this stage, second moderator will help to record non-verbal responses from the respondents and to record verbal and non-verbal activities if necessary. The diversity of the group helps the dynamic of the discussion, but ARC technique helps to eliminate unnecessary feedback and record only data that essential for the discussion. The discussion allowed the participants to share their experiences from their own background as academics, professional in the industry, local authority and ministry. The process was further simplified by listing the coding generated from each session and record it as thematic coding.

During the presentation, the moderator first introduced the current Architectural education scenarios in Malaysia. In terms of evidence, the recording specifically concentrates on filling any missing information from the post-it notes intervention. The moderator needs to ensure the information was validated before transferred to the post-it notes. Focus groups have the advantage of allowing participants to argue on the responses from other members in the group. In this stage, the moderator will ensure the member checking was conducted post-discussion to avoid misunderstandings among the participants and to reaffirm their decision. The post-it notes help to ease the process of transcribing the lengthy process of transcribing, and the process of coding can be expedited through the post-it notes intervention (Fig. 2).



Fig. 1. The presentation from each group.



Fig. 2. The post-it-notes intervention.

3. Results

The research project is using focus group and thematic analysis to make sense of the data. The task that spanned in two days through a series of the focus group was analyzed through category coding and thematic development. In this analysis, the researcher was looking into the potential theme inductively and can be considered as the fundamental task in qualitative research.

The researcher was using ATLAS.ti 8 for the analysis process. The post-it notes information were re-typed in the MS Word and audio recording were partly transcribed to match with the coding initiated in the Post-it note. During the focus group session, the answer given by the respondents were reconfirmed and rewrote during the session to reflect the iterative process of reflection and member checking process of typical qualitative data analysis.

For the next step, the data from the recording and post-it-notes were transferred to ATLAS.ti 8 for further codes development. The data from post-it-notes were matched with the recording and transcripts report. The coding, as highlighted in the figure above, were generated from the post-it-notes intervention (Fig. 3). The codes were emerged during the data collection step, thus shortening the period of producing initial coding. Next, the network view was established for graphic representation (Fig. 4). The network view option in ATLAS.ti 8 allows the viewers to see the relationship between each coding and how the feedbacks relate to each other.

In a typical member checking, ethical questions were raised when the respondent see their spoken words in a written format. There are some studies reported mixed reactions from the respondent that disagree with the written text of their responses and some who received their written feedback open-hearted (Forbat & Henderson, 2005). This traditional setting might enable the researcher to ascertain steps taken in their research but still unable to validate and confirm the precision of the data interpreted during the session. Previously, the validation steps involved a series of member checking to resonate the data taken during the focus group session. The process took a long process of transcribing the session into a text, transfer it to qualitative software or done manually. With the current intervention, the process of the method in member checking helps to validate the findings by looking for disconfirming responses (objectivism), but at the same time, it provides a reflection on the personal experiences that embedded from varies background to create opportunities towards the richness of the data (constructivism) [2].



Fig. 3. Codes were generated from the Post-it-notes data obtained earlier.



Fig. 4. Network view provide relationship among codes.

4. Conclusion

The observations also agree that the competency of the moderator plays important roles in handling the session. This process serves as a means to validate the research and to reaffirm the finite responses from the participants in real-time. However, the difficulty of this moderation was extensively reduced with the aid of experienced moderator. From this research experience, focus groups discussions were led by the researcher around the topic of interest. Each focus group lasted for 8 hours including break. The results tend to become unstable and unreliable when the moderator losing grips especially when handle respondents who tends to dominate the session. There are several ways of improving the moderating skills. One strategy is to conduct a pilot study to gain some experiences.

There were several strengths and limitations associated with the focus group session. Some participants might agree with most of the group as to avoid being odd in the group. Some respondents may be watchful with their thoughts, to avoid opposing view to the most 'louder' participants in the group. Nevertheless, the purpose of the session is to get the perception and feedback on certain ideas, proposal in a holistic manner and not through an individual experience like in the case of an interview. When will be the best time to apply ARC technique? This technique will benefits researcher to avoid traditional member checking which is time consuming and involved tedious process. In this case, member checks are needed to ensure the input is necessary without prolong the duration of the data to be validated due to the hectic schedule of the respondents. As a final extension of the current work, it would be useful to implement this strategy in different data collection strategy such as in-depth interview and narrative study as well.

As this is a new technique, the method does present some limitations in its practical usage. Nonetheless, the research has proven that the technique helps reduce bias and minimize errors in the validation of the member checks procedure. This process has the advantage over traditional method that, respondents were required to validate their feedbacks in real time as contrast to traditional method when the data can be lost or the respondents reluctant to validate their thoughts. Another problem could be the logistical issues when respondents are located further away from the researcher. Finally, this technique offers data collection triangulation, which involves voice and video recording, direct observation and ARC techniques. Furthermore, sessions can be completed after all respondents agree on summaries obtained from each session. The snowball method in the ARC technique might have different applications from

the Delphi method since the information was snowballed to a different group compared to the same participants in the Delphi method. Overall, this research posits that this new technique will benefit focus groups and qualitative researchers overall.

5. Future Recommendations

Another prominent issue identified when assessing techniques related to the translation of discussions into simple words or keywords, forcing some of the respondents to be succinct in expressing their ideas. When researchers wish to summarize points being discussed, moderators tend to interject in discussions and to provide suggestions for keywords. This can create biases, in turn affecting final codes. Therefore, moderators must maintain a degree of distance from audiences and monitor dynamics as much as possible [4]. Although assistance from moderators may be necessary, final responses must come from respondents.

A related issue concerns the homogeneity and heterogeneity of respondent backgrounds [5]. When participants come from the same background, group dynamics function more effectively. However, respondents of differing backgrounds can also generate fascinating and broader responses. The homogeneity of the participants might contribute to a sociable session and to a more relaxing environment. The respondents tended to support one another's opinions, although some sessions were extended because the participants behaved too casually. In subsequent sessions, the research included respondents of differing backgrounds. Although this focus group was dominated by a certain member, the findings are more interesting. The discussion touched on several issues, and new codes emerged relative to those of the previous group. This technique generated interesting information for the thesis and is thus worth exploring.

Beyond these broader discoveries, it is also noticed in one session that the respondents wanted the moderator to record keywords for them. This is especially common when respondents belong to professional and older demographic groups. In this case, the classic goals of rapport were necessary [6]. This normally occurs when respondents already know one another and have established a relationship. Nevertheless, it is easier to validate results, and less time is required when the moderator is in control of the situation.

In addition, keywords of the previous group were raised in subsequent sessions, thus making subsequent sessions shorter and more precise. This is simply attributable to the fact that these discussions did not require as much elaboration as the first focus group. The keywords derived from the previous sessions served as indicators of how ideas were generated and collected. The pooling of ideas also contributed to data saturation, as suggested by [7]. The main topic of future ARC technique exploration concerns the success of sessions with less than two moderators. Whereas one moderator must control the session, the other moderator should monitor keywords raised during debates and readdress them during the member checking round. The second moderator can further clarify keywords that he or she heard during group debates, thus avoiding obtrusively interpreting non-verbal actions between respondents. This can be done by asserting comments in the ATLAS.ti 8 video transcriptions. However, regardless of the recording methods used, the second moderator must be alert, especially when discussions become lively and when several participants talk at once.

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From 2005 till 2007 he was a project architect in a private firm in Johor Bahru before joined UPM as a tutor and later became Senior Lecturer in the Department of Architecture. His study is focusing towards management in the Built Environment and specialised in the issues of housing and construction industry. He also an active member of Qualitative Reasearch Association Malaysia (QRAM) and a Professional Trainer for ATLAS.ti.

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