Backstage researching resilience researchers – dilemmas and principles for data collection in the resilience in healthcare research program

Researching resilience

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Abstract

Purpose – Resilience in healthcare is fundamental for what constitutes quality in healthcare. To understand healthcare resilience, resilience research needs a multilevel perspective, diverse research designs, and taking advantage of different data sources. However, approaching resilience researchers as a data source is a new approach within this field and needs careful consideration to ensure that research is trustworthy and ethically sound. The aim of this short "backstage" general review paper is to give a snapshot of how the Resilience in Healthcare (RiH) research program identified and dealt with potential methodological and ethical challenges in researching researcher colleagues.

Design/methodology/approach – The authors first provide an overview of the main challenges and benefits from the literature on researching researcher colleagues. Second, the authors demonstrate how this literature was used to guide strategies and principles adopted in the RiH research process.

Findings – The paper describes established principles and a checklist for data collection and analysis to overcome potential dilemmas and challenges to ensure trustworthiness and transparency in the process.

Originality/value — Mining the knowledge and experience of resilience researchers is fundamental for taking the research field to the next step, and furthermore an approach that is relevant across different research fields. This paper provides guidance on how other research projects can approach researcher colleagues in similar ways to gain new insight, build theory and advance their research field based on insider competence.

Keywords Resilience in healthcare, Researching researchers, Insider research, Methodological challenges and strategies, Research ethics

Paper type General review

Introduction

Resilience engineering is on the agenda and has been for several years with research focusing on complex adaptive systems and how systems are able to perform and sustain performance under varying conditions – both expected and unexpected (Fairbanks *et al.*, 2014; Hollnagel *et al.*, 2006; Hollnagel, 2014; Wiig and Fahlbruch, 2019). Key elements of resilience are the ability to anticipate, monitor, respond and learn from what goes well and what goes wrong

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International Journal of Health Governance Emerald Publishing Limited 2059-4631 DOI 10.1108/IJHG-07-2022-0068 (Hollnagel, 2017). Resilience engineering research has moved from high-risk industries such as oil and gas, critical infrastructure, and aviation into the healthcare context, and steadily continues to progress in the field (Braithwaite *et al.*, 2015; Hollnagel *et al.*, 2013, 2019; Wiig and O'Hara, 2021).

Resilient healthcare is fundamental to what constitutes quality in healthcare service provision (Aase et al., 2020). In an organizational resilience perspective, resilience is conceptualized as a multilevel phenomenon and enacted as adaptive capacity to change as a foundation for high-quality care (Wiig et al., 2020). In our research, we define healthcare resilience as "the capacity to adapt to challenges and changes at different system levels, to maintain high quality care" (Wiig et al., 2020, p. 1). Understanding resilience in healthcare is fundamental to ensure healthcare quality, and exploration of the phenomenon from a multilevel perspective and using multiple data sources and designs is required (Berg et al., 2018: Wiig et al., 2020). Diverse research designs have been employed to understand resilience in healthcare (Berg et al., 2018; Ellis et al., 2019; Iflaifel et al., 2020). However, to further advance the field of resilience in healthcare, there is a need to go beyond single-site case-based studies, towards learning from multi-site and multidisciplinary research (Aase et al., 2020). Furthermore, calls have been made for researchers to apply a range of methodologies when exploring resilience in healthcare (Berg et al., 2018; Iflaifel et al., 2020). Using resilience researchers as a data source is one such novel approach and thus needs careful consideration and reflections on methodological challenges and how to proceed.

The resilience in healthcare (RiH) research program

The Resilience in Healthcare (RiH) research program is a five-year study conducted across Norway, England, the Netherlands, Australia, Japan and Switzerland (2018–2023) (Aase et al., 2020). The research program's objective is to reform and extend the understanding of quality in healthcare by developing, implementing and evaluating a theoretical and practical framework of resilience in healthcare (Aase et al., 2020). The RiH program is led by researchers from SHARE – Centre for Resilience in Healthcare at the University of Stavanger, Norway. The SHARE Centre includes more than 70 researchers conducting research on quality and safety in healthcare. The Centre was established in 2017 and the founding research group has been developing its research portfolio and has grown since its inception in 2005 (Annual Report, 2018, 2019, 2020, 2021).

Parts of the empirical data material in the RiH program include data from previous and ongoing quality and safety in healthcare research projects affiliated to the SHARE Centre. Project inclusion is based on an agreed protocol and a resilience screening process (Aase *et al.*, 2020). Researchers in the included projects are in this paper referred to as "resilience researchers", as they conduct research related to healthcare quality in line with our resilience screening process. Researchers from the RiH program have therefore collected data from other SHARE research projects, by ways of interviews, focus group interviews and document analysis. This implies possible methodological and ethical challenges related to what is commonly known in the literature as "researching researchers" or "insider research", where the researcher potentially knows or has established friendships or working relationships in the research context (e.g. Brannick and Coghlan, 2007; Chavez, 2008; Greene, 2014; McDermid *et al.*, 2014; McEvoy, 2001; Taylor, 2011; Wiles *et al.*, 2006).

In this paper, insider research is defined as collecting data from a researcher colleague about their research project, via interviews, focus groups or observation, after screening and including projects according to the RiH program research protocol (Aase *et al.*, 2020). Potential challenges in the RiH program were related to RiH program researchers and study participants engaging in data collection while at the same time being colleagues, friends,

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supervisors, project managers or otherwise having personal and professional knowledge of each other. This data collection was necessary to provide a sound basis for our understanding of resilience in the RiH project. Hence, being particularly careful regarding recruitment, approach, conduct and feedback to involved resilience researchers was crucial.

Aim

This paper aims to demonstrate how the RiH research program: (1) identified key methodological and ethical dilemmas of researching resilience researchers, (2) established principles to ensure trustworthiness in the data collection and analysis in the RiH program and (3) developed a checklist for the assessment of conflict of interest and transparency for use within and beyond the RiH program.

By giving insight into the backstage of the research program and how we handled these challenges, this article contributes to inform other researchers who potentially face similar dilemmas and challenges in their research activities and processes. Researching resilience researchers themselves is a new approach and our effort to ensure that research in the field is trustworthy and ethically sound, and thereby reliable for resilience engineering work forms the rationale for the article. The article does not report results from our research or experiences from those involved in our research activities.

Main text

Brief overview of methodological and ethical dilemmas and challenges

The literature identifies several methodological and ethical pros and cons in insider research. Advantages of insider research are knowledge of the research environment and participants, natural interaction where researchers are less likely to pass on judgements to participants, and access to the field (Greene, 2014). Disadvantages reported relate to threats to objectivity, compromised validity, relational power issues and shifting social identities where the researchers become overfamiliar with the community under study (Bryman and Cassell, 2006; Greene, 2014).

Further ethical challenges arising from insider research are related to consent, data ownership, and management of confidentiality and anonymity (Wiles *et al.*, 2006). When researchers collect data from other research projects, there are also potential risks of identifying findings that the interviewees or observed parties want to publish themselves. Furthermore, there may be a risk of being recognized as the research community is small, and it may be unclear what the informants consent to when being approached by a colleague (McDermid *et al.*, 2014).

Strategies to overcome dilemmas and challenges

The methodological and ethical dilemmas and challenges must be handled throughout recruitment, data collection and analysis, and potential risks should be mitigated by transparent procedures and practice when researching researchers. The literature suggests several strategies that researchers can employ to ensure trustworthiness (e.g. Fleming, 2018; Greene, 2014; McEvoy, 2001; Taylor, 2011; Wiles *et al.*, 2006). These include written informed consent with a clear description of the research aim, data ownership, anonymity and use of data; member checks of interviews; to debrief and discuss findings within research groups to increase reflexivity and self-critique; triangulation of data, analysis and methods; to maintain field journals; and the use of tools to avoid potential bias such as speaking with others, stream of consciousness writing, interviewing oneself, and speaking with others about the experiences to create distance to the familiar world.

Establishing principles for data collection

Based on the literature and discussions in multiple meetings, the research team agreed on the following ten principles for data collection in the RiH research program, where this involves researchers being an insider:

- (1) Recruitment of research projects and affiliated researchers through a formal approach via email, which includes the written informed consent form and a formal description of the study purpose in the email. The consent form has a clear description of the aim of the project and of the data collection, as well as aspects related to anonymity, data storage and procedures for withdrawing from the project.
- (2) When there is an ongoing or previous formal relationship between the researcher and the recruited participant (e.g. leader/subordinate, supervisor/previous supervisor relationship, project manager/project member), be clear about the purpose of the contact and the aim of the research. If the researcher considers there is too much of a power imbalance, or conflicting relationships or roles, another researcher or a research assistant should carry out the specific data collection activity if possible.
- (3) Use researcher triangulation by involving several researchers in the data collection and analysis process. This allows for a swapping of the involved researchers' tasks if existing friendships or collegial relationships are a problematic issue in any of the research projects included in the sample.
- (4) In an interview situation, be specific that it is about data collection in the RiH research program and that the conversation is going to focus on this only. Use the interview guide actively. Avoid referring to discussions that might have touched upon the research topic at an earlier point in time, by the researcher or the participant (e.g. during a lunch break or an informal discussion). This implies being specific and asking follow-up questions if the participant refers to a previous discussion with the researcher, for example, by saying "you know, like we talked about last week" or "like you know in my project".
- (5) Use tape-recording, if possible, in the interviews. Take notes during observations. Conduct member checks by sending the transcripts to the participants to avoid any misunderstandings and allow modifications. Member checks is an offer, not a requirement for the participants.
- (6) Grey zones can occur. If researchers find it difficult to reveal data because of the trusting relationship with the participant; or participants have informed the researcher that "this is off the record"; or when an observation or conversation falls into "grey area" where the researcher understands what is being said or done because of prior familiarity with a project and not because of their role as researcher, it is suggested that the researcher seek formal validation of their interpretation from the participants. This will help to protect the researcher-friend and friend-researcher relationship. Therefore, transcripts can be validated by participants.
- (7) Practice systematic peer debriefs and discussions in research team meetings after interviews and observation to ensure self-critique, distance to the field, peer discussions, and critical thinking and improvement. The RiH program integrated debriefs as part of regular meeting agendas or established specific debriefing meetings.
- (8) Researchers write a research diary during data collection with critical reflections, stream of consciousness, and keep track of reflections, problems and relevant ideas for ensuring trustworthiness, and map the development in the data collection process.

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- (9) To ensure anonymity and adherence to the prior research consent, participating researchers can be offered to see draft publications if the RiH researchers are in doubt about anonymity being preserved; if there is potential to reveal findings that the participating researcher would consider as "stealing their findings"; or if there is a risk of identifying individual researchers due to quotes or project descriptions that might be in conflict with preserving their anonymity. However, such situations should normally not come up as interviews and transcripts would have been discussed with or read by the participants at an earlier stage.
- (10) If the RiH researchers are in doubt about, for example, anonymity, friendships or role conflicts, they are each responsible for raising the issue concerned and discussing it in the RiH project team meetings.

The guidelines can be considered a reflexive tool with the purpose of bringing these aspects upfront of researchers' minds. Guidelines cannot guarantee that researchers will make accurate determinations of potential conflicts of interest or determination of who is insider or not. However, using a reflexive tool such as these guidelines is meant to help and support researchers in this process, by being easy to read, based on the literature and developed through multiple discussions in a group of researchers. For each included project in the RiH program, the RiH team discussed potential role conflicts such as supervisory roles (ongoing/completed), friendships (close/distant) and close working collaborations (co-author/project collaboration/teaching). These discussions were ongoing during the recruitment and data collection stages and challenges were discussed in regular researchers' meetings. These discussions and other aspects of friendship, personal knowledge, professional hierarchies and other potential biases should continuously be reflected upon during similar research activities.

To further exemplify, data collection from one of the included projects implied recruiting and interviewing a current PhD candidate supervised by one of the researchers in the RiH team. The team discussed how this PhD candidate needed to feel free to say no to participate in an interview. Discussions included how emails should be sent formally, and that no contact should be engaged informally during, e.g. lunch breaks or in the office corridor when casually bumping into each other. Through this approach, potential conflicts of interest were thoroughly discussed within the research team, resulting in a research team member without close ties to the PhD candidate conducting the formal invitation and interview process. The discussions in the research team were mainly related to the importance of separating the PhD supervisor from the entire process to avoid any kind of pressure to participate felt on the part of the PhD candidate.

For each recruitment and data collection activity in the RiH program, similar reflections were performed by the RiH research team, according to the guidelines. We experienced that most of the researchers invited to participate accepted the invitation, though some also rejected the invitation. The rejections were not questioned by the team in any circumstances. The interviews were conducted strictly according to the interview guide which ensured that the focus always stayed on the participants' respective projects and the task of data collection. When requested, the interview guide was provided to the invited participants, to ensure that they would feel comfortable with the overall aim and topics of the interview before deciding to participate or not.

The use of guidelines and reflexive tools, like we have exemplified here, should always be subject to further improvement and reflection in line with research activities, experiences and new literature in the field. In this way, it may incorporate new elements (e.g. third-party involvement, video recordings, information exchange and data collection methods) or exclude elements which are deemed dysfunctional in the existing approach. We argue that such an approach will encourage researchers' continued reflection and thus improve the quality of our research activities and results.

Checklist for conflict of interest and transparency in RiH

To ease usability of the ten principles, we developed a short checklist for assessing conflicts of interest and ensuring transparency in the research:

- Recruitment of projects by formal approach via email, including a written informed consent form and a formal description of the purpose of the study in the email.
- (2) If there is an ongoing or previous formal relationship between a researcher and recruited participant, be clear about the purpose of the contact and the research aim.
- (3) If there is a perceived conflict of interest, involve a research assistant or another researcher from the RiH team in the data collection.
- (4) Use tape-recording, if possible, in the interviews. Take notes during observations.
- (5) Offer member checks of transcripts to participants if they are interested.

The checklist can be considered a simplified reflexive tool with the purpose of bringing these aspects upfront of researchers' minds. This is also included as an appendix (Appendix) to ease access and practical use for those wishing to research researchers.

Conclusion

In this short "backstage" paper, we have shown how the RiH research program (Aase *et al.*, 2020) developed principles for research reflection and the handling of potential methodological and ethical dilemmas facing researchers researching resilience from the inside. By establishing principles and techniques for data collection, we argue that it is possible to take advantage of insider research in the RiH program, while ensuring trustworthiness in the data collection and in the subsequent analytical process. The knowledge from the resilience researchers is fundamental for taking the resilience research field to the next step. By being informed by the diverse perspectives on resilient healthcare from the different included projects and associated researchers, the RiH research program has resulted in new theoretical perspectives that have significantly expanded the understanding of resilience in healthcare (e.g. Haraldseid-Driftland *et al.*, 2022; Lyng *et al.*, 2021, 2022a, b).

Future research should focus on how guidelines, reflection tools and literature in the resilience field need continuous improvement to handle potential methodological challenges to advance the field. Our paper did not report results and only focused on the use of a methodological approach and how we developed tools to aid our research. Therefore, we suggest future research should also explore the experiences of resilience researchers who are part of data collection activities as "insiders", as this could further improve current tools, guidelines, practices and the empirical literature in this novel field.

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Ethical approval and consent to participate: The RiH Program is approved by the Norwegian Centre for Research Data, ref. nr. 864334. All methods were carried out in accordance with relevant guidelines and regulations. All participants signed written informed consent forms to participate in the study and were informed that they at any point were free to withdraw their participation.

Data availability: The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Conflict of interest: The authors declare that they have no competing interests.

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Appendix

The supplementary material for this article can be found online.

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