

Navigating the Challenges of Remote Research in Times of Crisis and Beyond

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Abstract. Crises such as the COVID-19 pandemic put heavy restrictions on researchers who mainly follow a qualitative, ethnographic stance that typically relies on immersion in the setting, bringing remote research into the spotlight. In this paper, we describe how we, as qualitative researchers, responded to the crisis by comparing our experiences in conducting remote interviews in two German contexts: 1) with employees from a video game company during the summer of 2020 and 2) with several political and non-political actors in a rural region during autumn 2020 to summer 2021. Drawing on these experiences, we provide lessons learned for times when physical distancing is necessary but also beyond. While we faced some challenges and limitations, such as technical difficulties and a lack of contextual insights on-site, we also found a more profound quality in the absence of the regular interview setting. Thus, we advocate retaining some procedures and alternative ways as future practice.

Introduction

The COVID-19 pandemic brought numerous changes in people's private and work lives, from lockdowns, contact bans, and travel restrictions to physical distancing measures (Beaunoyer et al., 2020; Wang & Tang, 2020) and also had a lasting impact on aspects of academic life that rely on in-person contact, e.g., conference visits, lectures, and our focus here, research activities. While there is a critical need to consider and document individuals' experiences of the crisis from a qualitative

perspective (Teti et al., 2020), such studies face challenges compared to purely quantitative large-scale investigations. Having to find alternatives to collect data, many qualitative researchers relying on an ethnographic and face-to-face approach to fieldwork turned to information and communications technology (ICT) to conduct 'remote research' (e.g. Dupuis & Renaud, 2020; Roy & Uekusa, 2020). From the era before and during the pandemic, two relevant lines of discourse have unfolded, dealing with i.) pragmatisms and ethics of qualitative remote research and ii.) social aspects and technical affordances of virtual meetings. While we can borrow from these insights, studies from pre-pandemic times did not consider the crisis's new circumstances and potential lasting impacts (Vindrola-Padros et al., 2020) since various domains experienced significant changes during the crisis, leading to fragmented work and policy shifts that affected informal processes (Waizenegger et al., 2020) as well as physical distancing and remote work impact spatial and psycho-social factors.

With this in mind and as diverse populations increasingly use remote communication technologies (Beaunoyer et al., 2020; Brohi et al., 2020; Rahman et al., 2020; Vaishya et al., 2020), it is essential to critically review qualitative methods to adapt existing methodologies and develop new approaches without physical co-presence in order to understand the long-term impacts of changing research strategies and co-production relationships (Roy & Uekusa, 2020; Vindrola-Padros et al., 2020). In this paper, we build on previous reports (Hensen et al., 2021; MacLean et al., 2021; Simons, 2019; Vindrola-Padros et al., 2020; Webber-Ritchey et al., 2021) and emphasize the need for innovative remote research methods, sharing our experiences conducting remote interviews in two German contexts during the pandemic (MacLean et al., 2021).

Related Work

Remote ethnography, or digital ethnography (Pink et al., 2015), has roots in World War II when ethnographers conducted distant fieldwork due to mobility restrictions (Postill, 2016) and employed various remote qualitative methods, including telephone (Mealer & Jones RN, 2014), videoconferencing (Sedgwick & Spiers, 2009), and instant messaging interviews (Kaufmann & Peil, 2020), as well as co-design (MacLeod et al., 2016). The pandemic intensified the focus on remote research, particularly for qualitative studies (Dupuis & Renaud, 2020; Roy & Uekusa, 2020), prompting the development of collective knowledge like Deborah Lupton's (2020) "Doing Fieldwork in a Pandemic." From pre-pandemic and recent studies, two main discourses emerge: first, remote fieldwork is not a mere "second best" option (Postill, 2016, S. 68) but offers increased flexibility, practicality, efficiency, and adaptiveness compared to face-to-face research (Buckle, 2021; Dupuis & Renaud, 2020; Hensen et al., 2021). The term 'research pragmatism' (Smaling, 1994) captures this idea, recognizing various factors influencing data

collection, including ethical considerations such as data privacy, security, and informed consent (Hensen et al., 2021; Janghorban et al., 2014; Kaufmann & Peil, 2020; Staudacher & Kaiser-Grolimund, 2016). Second, we have to consider the social aspects and affordances of virtual meetings: building trust and rapport is more challenging for remote research than offline work (Hensen et al., 2021; MacLean et al., 2021; Webber-Ritchey et al., 2021), particularly with unfamiliar researchers (Lo Iacono et al., 2016; Seitz, 2016), since spatial distance and lack of face-to-face interactions can create insecurities (DeSanctis et al., 1999), and remote research cannot fully replicate personal interactions or convey subtle body language cues (McCull & Michelotti, 2019; Novick, 2008). However, these challenges can be mitigated by repeating remarks, asking follow-up questions about nonverbal communication, and observing facial expressions when webcams are used (Lechuga, 2012; Seitz, 2016). Video interviews can offer authenticity comparable to face-to-face conversations by providing access to verbal, nonverbal, and social cues (Sullivan, 2012) while maintaining flexibility and privacy (Hanna, 2012). Even if physical contact information is still lacking (Podjed, 2021; Roy & Uekusa, 2020), voice-only interviews can reduce emotional distress for sensitive topics (Mealer & Jones RN, 2014; Sipes et al., 2019), and different interview methods may not necessarily yield diverging results (Sturges & Hanrahan, 2004).

The shift towards remote approaches during crises like the pandemic necessitates a further reflection on methodology (Hensen et al., 2021), as few authors have discussed the challenges and practical issues faced in conducting this type of research on time (Vindrola-Padros et al., 2020) and in terms of crisis readiness. In pandemic times, this has become crucial as organizations have had to rapidly adapt to remote work and ensure the well-being of their employees by providing adequate infrastructure, changing work practices to respond to new work and life conditions, and handling multiple and diverse interruptions at the individual and organizational levels (Caldeira et al., 2022). We contribute to these ongoing discussions, emphasizing the need to adapt remote ethnographic methods to address the evolving landscape of qualitative research. Like many other researchers, the pandemic has compromised our qualitative approach since it builds on ethnographic and co-design approaches to fieldwork. Therefore, we utilized a multiple-case-study approach (Yin, 2014) to present and compare insights from two remote interview studies. In the following, we systematically share our experiences (Ellis et al., 2011), offering valuable insights (Roy & Uekusa, 2020).

Research Context

Our first study in setting A occurred during the summer of 2020, between the first and second waves of the pandemic in Germany. We conducted an interview study collaborating with 20 employees from a medium-sized German video game company from a larger city. Already accustomed to the organization, we reinitiated

our collaboration amid the pandemic. Our contact person forwarded our request to a workforce and property management employee who played an integral role in developing strategies to respond to the March 2020 COVID-19 outbreak. During an informal talk in May of 2020 via MS Teams with this employee, we thus received the first insights and, subsequently, started with the interview phase.

Regarding our sample, we strived for variety in terms of gender, background, duration in the company, occupation, responsibility, relationship status, and living conditions. We contacted employees we had worked with before, and the majority responded positively to our request to participate voluntarily in our study (seven overall). Our initial interviewees then suggested other interview partners. At the time of our study, most participants were still in their home offices. The age of our participants ranges from 25 to 52 years. Our sample consisted of eight female and 12 male employees and three couples. Initially, we shifted the interview study to a virtual space, using remote interviews as the best practice. Since our research partner already used Microsoft's business communication platform Teams and relied more heavily on it during the crisis, we used it to conduct our interviews. Familiar with the organizational context, two researchers conducted the (expert) interviews: while one researcher was mainly responsible for guiding the interviews, the other took protocols and occasionally asked questions. The interview length ranged from approximately 45 minutes to two hours, with most of the interviews lasting roughly 60 to 90 minutes. Our interview guidelines broadly covered the home office situation before COVID-19, experiences during the ongoing pandemic, and personal lessons learned for the future. Our questions involved the household situation, productivity, technical solutions, maintenance of work tasks, remote collaboration and virtual meetings, resilience, and time management. We recorded the interviews with the feature in MS Teams, and our participants made these data accessible to us.

We realized the second interview study in setting B with twelve participants as part of a project that dealt with digital citizen participation to gather information about a citizen wind farm's ongoing process and its possible citizen participation measures. Our participants live in two rural, remote areas with less than 30.000 inhabitants. Compared to setting A, their age range of 24-84 was much broader. Four were female, and six were male. The study occurred from October 2020 to July 2021, and participation was voluntary. Our interview guidelines broadly covered questions regarding political positions, civic participation experiences, and media usage behavior. During this period, the fourth author conducted twelve interviews. We recruited one politician (four overall) from each of the parties represented in the council in the region by personally approaching them via telephone and e-mail without previous personal contact. For this, we collected contact details from a council information system. In this way, we also contacted NGO participants (two overall), whose contact details we took from the organizations' respective websites. We initially recruited citizens (two overall)

through a participatory design workshop offline in pre-pandemic times in early 2020 and through personal networks. Due to the pandemic, we conducted one-on-one interviews via Zoom. For analysis purposes, we only used the extracted audio tracks. The interview length ranged from approximately 40 minutes to two hours, with most of the interviews lasting roughly 60 to 90 minutes.

Experiences

Matters of Space

In our study, participants were forthcoming, and we observed no reluctance to disclose their experiences and opinions; this was true for both new and already familiar participants in setting A and B. In setting A, the discussion topics were wide-ranging, including personal sentiments about the pandemic, household situations, homeschooling, mental health problems, resilience strategies, coping with stress, and work-life balance. Several participants took advantage of lockdown time to reflect on their living situations, while others were comfortable debating serious topics or criticizing conservative work processes. We observed the same in setting B: participants were forthcoming, showed no reluctance to answer the actual questions related to the project, and opened up regarding their sentiments about the pandemic; e.g., a 62-year-old politician expressed dissatisfaction with how the public sector dealt with digitalization matters during the crisis, pointing out that especially data protection measures are restrictive.

Justified by the abovementioned indications, we established rapport quickly in a virtual meeting room. The 'shared' crisis created a joint degree of rapport and influenced the conversations' topics, and we found that the locality played an important role. We observed three different kinds of 'spaces:' i.) the private space; ii.) the shared office space with the possibility of colleagues being present in the same room; and iii.) (quasi-)isolated rooms within the office (e.g., dedicated, reserved meeting rooms or offices where no co-workers were present). We had never been confronted with this kind of complexity before since we usually had face-to-face interviews, which took place in our participants' executive rooms, homes, or at the university. Various personal factors and preferences thus influence questions of space: we felt it made a difference in how much the researchers opened up about their concerns and elicited a similar level of understanding from our participants when they worked from their home offices rather than in their relatively anonymous (shared) office buildings. At the same time, some participants felt more comfortable giving interviews at the office because they are calmer than in their home situation. This aspect was also observable regarding the use of webcams of the participants situated at home when we could also look into people's homes (and vice versa) which was beneficial in building a feeling of authenticity.

In setting A, some participants willingly allowed such insights (e.g., showing us their pets or game-related goods) as a way of self-presentation. Others hesitated to give a more extensive glimpse into private spaces because of the spatial and especially family situation and decided to blur their background. In setting B, only one participant used a virtual background; all other participants used neutral backgrounds. A distinction that became particularly apparent is related to the visibility of the recording process since the devices are less visible in remote interviews, encouraging participants to open and share more freely. This finding is consistent with previous research showing that technology-mediated communication can positively impact communication and social interaction (Walther & Parks, 2002). In particular, reduced visibility can help create a more relaxed and informal atmosphere: when participants feel safe, they are more likely to speak freely without fear of negative consequences or judgment (Edmondson, 2018). However, this can also have potential drawbacks since participants are less aware of the recording process, leading to discomfort or distrust. Additionally, reduced visibility can make it more difficult for researchers to ensure the quality of the data, as they cannot observe nonverbal cues as closely.

Technical Affinity and Challenges

Our findings indicate that, from a technical standpoint, age and occupational background did not significantly impact the success of our remote meetings in both settings. The participants' affinity and expertise with technology in the video game company setting enabled us to conduct our meetings seamlessly, with remote meetings being a common practice. Similarly, in setting B, we encountered a few problems setting up the interview situations, and there was no significant difference between age and occupational groups. Our study shows that older participants with varying experience levels, such as an 84-year-old who received a smartphone and laptop from his grandchildren before the pandemic, could quickly adapt to technology-mediated communication. This finding supports that age alone cannot be used to generalize knowledge of technology-mediated communication (e.g. Vines et al., 2015). However, participants with more experience and expertise in using technology were better suited to adapt to remote communication tools.

Despite the participants' technical expertise, our study uncovered several technology-related challenges: in some cases, sporadic connectivity losses and other technical difficulties disrupted the interview flow. In one interview in setting A, the participant's computer crashed, so it had to be rebooted, resulting in a delay. While recording interviews via MS Teams was a convenient way to receive audio files for transcriptions, technical challenges required a laborious workaround and extra work from our participants to provide us with the audio. These technical issues occurred because our university's data center was blocking access to the

audio files on MS Teams after the interview, which meant that participants had to upload the files to the company server and provide us with a download link.

We found that using webcams during interviews had several benefits regarding technical equipment since this created a more personal and convenient experience, which helped establish trust and provided additional talking points. However, some participants did not have webcams available. We conducted all non-webcam interviews with already familiar participants except for one. While the lead of user research analysis believed less in the relevance of webcams for everyday business communication, he acknowledged that video conferencing could facilitate better communication for sensitive topics such as annual performance reviews (Sipes et al., 2019).

Flexibility, Efficacy, and Control

Our research experiences during the COVID-19 pandemic differed significantly from our previous studies in organizational settings, particularly in setting A. Offline research in the pre-pandemic period required on-site visits on dedicated days, which led to a lack of flexibility and canceled appointments. The crisis brought the benefit of flexibility in home office situations, allowing participants to integrate research requests into their schedules more efficiently. In setting B, we found that a remote approach increased the willingness of politicians and administrative officials to participate, shortening the time required to schedule interviews from several weeks to just a few days, allowing us to conduct more efficient research and overcome limitations in terms of geographic location and infrastructure. In addition, a calmer, more efficient, and flexible atmosphere at home also applied to us as researchers: traveling to the company has previously been a burden, and our remote study thus paid back regarding our time resources. In setting A, as a result, the interview process provided an efficiency previously unknown to us, with $\frac{3}{4}$ of the interviews conducted within just a month, whereas, before the pandemic, we could only visit the company twice a month over a quarter-year and collect seven interviews within that time. We observed this also in setting B since the areas are rural and difficult to reach in terms of infrastructure. Using remote interviews, we overcame these limitations, and in setting A, e.g., they also relieved the company's responsibility to accommodate us and prevented our attendance from disturbing business processes.

In setting A, we used MS Teams for the interviews, which had several advantages: participants scheduled and initiated the meetings, provided the recording, and gave us download links. This approach gave them control over the interview and increased trust. The use of corporate means also offered benefits in terms of security, as the software was already trusted and utilized in everyday business activities. In setting B, we used Zoom, and participants received invitations after arranging the appointment. After a technical check, our

participants saved and confirmed the recording, which increased control and trust. Overall, the situation offered more flexibility than on-site or telephone interviews.

Lessons Learned and Conclusion

Analyzing the pandemic's dynamics and deriving lessons learned from a crisis is crucial for unlocking the potential for long-lasting collective learning processes (Egner et al., 2015). We think that qualitative research is essential to understand a crisis' social implications (Teti et al., 2020) via 'rapid research' (Hensen et al., 2021; Vindrola-Padros et al., 2020), which means it could be considered "unethical not to carry out the studies during the pandemic" (Vindrola-Padros et al., 2020, S. 2197). We are confident that putting our request to our participants in both settings after the first lockdown phase was acceptable (Buckle, 2021), although such decisions depend on the research settings. Concerning our setting A, the video game industry can be considered one of the 'winners' in the pandemic from a strictly economic perspective (Nicola et al., 2020), compared to more sensitive fields such as medicine and health care (Buckle, 2021; Hensen et al., 2021), or markets confronted with existential concerns (Buckle, 2021; Roy & Uekusa, 2020). In addition, and this is equally crucial, we had the impression that "the interviews were a therapeutic process, where (the participants) could freely narrate their experiences to an external party and feel that their voice was heard" (Vindrola-Padros et al., 2020, S. 2197). Our sentiments were that sharing their experiences during a persistent crisis brought emotional support to our participants; representing ourselves as equally affected by the pandemic aided bonding.

Our gained experiences leave us self-critical that, although reflectiveness and openness are essential prerequisites for a researcher mentality, we hardly questioned the fundamentals and practices of our research processes before the pandemic. Our experiences during the crisis showed us that research could be conducted more practically post-pandemic, supported by increased options because of more manageable and additional access to the research field, offering greater flexibility and efficiency (e.g. Buckle, 2021). Furthermore, we anticipate that we can include more participants from various backgrounds in remote research practices in future studies, which can benefit all parties involved, especially regarding time and cost savings. The fact that a broad audience appropriated video chat services during the pandemic (Beunoyer et al., 2020; Brohi et al., 2020; Rahman et al., 2020; Vaishya et al., 2020) supports this shift. With our experiences, we also feel that we built future competencies regarding 'crisis readiness' (Caldeira et al., 2022) since we can now rely on a set of online and offline methods applied to meet the fluid context conditions within an ongoing crisis (Gruber et al., 2020).

Despite that, future research should investigate the ecological impacts of remote research. While we saved resources by not traveling to the company's office, we should not underestimate the environmental 'rebound effects' of, e.g., CO₂

emissions created by increased use of digital streaming (Baumer & Silberman, 2011; Freire-González & Vivanco, 2020). Furthermore, our previously gained familiarity with the field proved beneficial in gaining access to participants and understanding the context; subtle sentiments researchers pick up when visiting an enterprise (Podjed, 2021; Roy & Uekusa, 2020) to conduct interviews on-site were lost with our remote approach so that relying solely on a digital approach in a post-COVID future seems myopic. Instead, organizational researchers will probably be confronted with more reciprocity of contexts and convergence; this will undeniably be the case with a sustained shift to hybrid work settings (Felstead & Reuschke, 2021), bringing new complexities, especially regarding the three 'spaces' we sketched, but also opportunities for ethnographic research to generate unique insights and facing challenges in terms of a multi-sided ethnography (Akemu & Abdelnour, 2020). Thus, remote ethnography can complement face-to-face research and vice versa (Podjed, 2021).

Most participants were at home and using their cameras, so we looked inside the people's homes (and the other way around). From an ethnographic perspective, this raises ethical considerations regarding data privacy, unintended disclosure of information, and further analysis of the data material. Moreover, having a stable internet connection (Sedgwick & Spiers, 2009) and the necessary equipment (Hensen et al., 2021) is the first prerequisite for participants to attend a remotely conducted study. From an ethical standpoint, this matter is essential as empowering the marginalized and vulnerable is crucial for qualitative (remote) research, especially during a crisis (Roy & Uekusa, 2020). Nonetheless, there are also chances that participants can be acquired more easily remotely (Akemu & Abdelnour, 2020; Barratt & Maddox, 2016; Brown et al., 2021; Dodds & Hess, 2020; MacLean et al., 2021; Teti et al., 2020; Webber-Ritchey et al., 2021).

Building trust and rapport is essential in qualitative research to obtain significant insights (Mealer & Jones RN, 2014; Webber-Ritchey et al., 2021), and despite the challenges of remote research, we established rapport quickly, and participants were willing to discuss sensitive topics. Our participants also suggested additional interview partners, and some volunteered for future interviews. Our shared experience of working from home and concerns about the pandemic likely contributed to the trustful relationship (Brooks et al., 2020; Dey et al., 2021; MacLean et al., 2021; Vindrola-Padros et al., 2020) since we created an intimate and enriching atmosphere for both parties (Munhall, 2007; Webber-Ritchey et al., 2021) by showing empathy and disclosing our sentiments. As technology was the enabler to realize such interactions in times of physical distancing and allowing spatial flexibility, we can derive some implications from a socio-technical side: with remote techniques such as telephone interviews lacking the possibility to express 'nonverbal cues' (Buckle, 2021; Roy & Uekusa, 2020; Webber-Ritchey et al., 2021), webcams, though not a substitute, at least proved to be a step forward (e.g. Janghorban et al., 2014). Thus, while videoconferencing tools usually cannot

adequately replicate personal interactions and cannot convey the subtle notions of body language (e.g., McColl & Michelotti, 2019), they gave us a different access mode: we found that providing all parties involved with more flexibility regarding their location, depending on their affordances and preferences, evoked a more relaxed and less 'intimidating' appeal to the interviews. Ergo, we theorize that even if physical access decreased, access to participants' inner thoughts and opinions could improve if their spatial situation, such as their home, reflects a familiar and trusting environment – which can be challenging in pandemic times (Buckle, 2021). This aspect is even more true regarding a reduction of visibility of the researcher on-site since this can provide unique opportunities for more introverted individuals to participate. In this context, we subjectively felt that the virtual approach created a more egalitarian interview situation: the 'classic' interview situation potentially evokes a power imbalance (Velardo & Elliott, 2021) compared to a remote situation in which all attendees see each other in equally sized frames on a screen. Overall, we can thus back claims that remote research should not be regarded as inferior to offline research (Postill, 2016) but rather as a complementary option.

Furthermore, running virtual interview sessions requires careful consideration regarding the choice of applications since each platform must be checked for modality, availability, and security, as showed our experiences with different video systems. In this context, putting the interviewees in control of the process and using familiar software (Gefen, 2000) was arguably the most powerful feature, as it facilitated trust. Future research should address data privacy and security matters, not only from an ethical but also from a technical side (Grandinetti, 2021; Hensen et al., 2021; Mealer & Jones RN, 2014), regarding the different services and technologies. During our study, we experienced technical drawbacks (Dupuis & Renaud, 2020), and flexibility helped us navigate critical situations. Regarding technical aspects, future research could dive deeper into the potentials of, e.g., video-calling spaces (Song et al., 2021) or virtual reality, which could provide exciting features (Bennett, 2020) and the purpose of anonymity (Barratt & Maddox, 2016; Hensen et al., 2021). More work is also needed to compare the complexities and contingencies of diverse research contexts.

Furthermore, our research activities covered solely individual interviews, a format that arguably offered the lowest threshold compared to other remote approaches used during the pandemic, e.g., interactive systems for remote ethnography (Ju et al., 2021) or digital ethnography of the internet's sphere (Góralaska, 2020). Our focus also excludes remote approaches to co-design (De Bleecker et al., 2018). Nevertheless, the general shift to a virtual space provided valuable lessons learned for researching in times of crisis and proved to be a catalyst for positive change for a post-pandemic era, respectively the 'new normal.'

References

- Akemu, O., & Abdelnour, S. (2020). Confronting the Digital: Doing Ethnography in Modern Organizational Settings. *Organizational Research Methods*, 23(2), 296–321. <https://doi.org/10.1177/1094428118791018>
- Barratt, M. J., & Maddox, A. (2016). Active engagement with stigmatised communities through digital ethnography. *Qualitative Research*, 16(6), 701–719. <https://doi.org/10.1177/1468794116648766>
- Baumer, E. P. S., & Silberman, M. S. (2011). When the implication is not to design (technology). *Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems - CHI '11*, 2271. <https://doi.org/10.1145/1978942.1979275>
- Beaunoyer, E., Dupéré, S., & Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, 111, 106424. <https://doi.org/10.1016/j.chb.2020.106424>
- Bennett, N. P. (2020). Telematic connections: Sensing, feeling, being in space together. *International Journal of Performance Arts and Digital Media*, 16(3), 245–268. <https://doi.org/10.1080/14794713.2020.1827531>
- Brohi, S. N., Jhanjhi, N., Brohi, N. N., & Brohi, M. N. (2020). *Key Applications of State-of-the-Art Technologies to Mitigate and Eliminate COVID-19* [Preprint]. <https://doi.org/10.36227/techrxiv.12115596.v2>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Brown, C. A., Revette, A. C., de Ferranti, S. D., Fontenot, H. B., & Gooding, H. C. (2021). Conducting Web-Based Focus Groups With Adolescents and Young Adults. *International Journal of Qualitative Methods*, 20, 1609406921996872. <https://doi.org/10.1177/1609406921996872>
- Buckle, C. (2021). Research during the COVID-19 pandemic: Ethics, gender and precarious work. *International Journal of Housing Policy*, 1–15. <https://doi.org/10.1080/19491247.2020.1857907>
- Caldeira, C., R.B. de Souza, C., Machado, L., Perin, M., & Bjørn, P. (2022). Crisis Readiness: Revisiting the Distance Framework During the COVID-19 Pandemic. *Computer Supported Cooperative Work (CSCW)*. <https://doi.org/10.1007/s10606-022-09427-6>
- De Bleecker, I., Bleecker, I. D., & Okoroji, R. (2018). *Remote Usability Testing*. Packt Publishing. <https://www.safaribooksonline.com/library/view/title/9781788999045/?ar?orpq&email=^u>
- DeSanctis, G., Staudenmayer, N., & Wong, S. S. (1999). Interdependence in virtual organizations. *Journal of Organizational Behavior*, 6, 81.
- Dey, N., Mishra, R., Fong, S. J., Santosh, K. C., Tan, S., & Crespo, R. G. (2021). COVID-19: Psychological and Psychosocial Impact, Fear, and Passion. *Digital Government: Research and Practice*, 2(1), 1–4. <https://doi.org/10.1145/3428088>
- Dodds, S., & Hess, A. C. (2020). Adapting research methodology during COVID-19: Lessons for transformative service research. *Journal of Service Management*, 32(2), 203–217. <https://doi.org/10.1108/JOSM-05-2020-0153>
- Dupuis, M. J., & Renaud, K. (2020). Conducting „In-Person“ Research During a Pandemic. *Proceedings of the 21st Annual Conference on Information Technology Education*, 320–323. <https://doi.org/10.1145/3368308.3415420>
- Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. John Wiley & Sons, Inc.
- Egner, H., Schorch, M., & Voss, M. (2015). *Learning and calamities: Practices, interpretations, patterns*.
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An Overview. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 12(1), Article 1. <https://doi.org/10.17169/fqs-12.1.1589>
- Felstead, A., & Reuschke, D. (2021). A flash in the pan or a permanent change? The growth of homeworking during the pandemic and its effect on employee productivity in the UK.

- Information Technology & People, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/ITP-11-2020-0758>
- Freire-González, J., & Vivanco, D. F. (2020). Pandemics and the environmental rebound effect: Reflections from COVID-19. *Environmental and Resource Economics*, 1–4.
- Gefen, D. (2000). E-commerce: The role of familiarity and trust. *Omega*, 28(6), 725–737. [https://doi.org/10.1016/S0305-0483\(00\)00021-9](https://doi.org/10.1016/S0305-0483(00)00021-9)
- Góralaska, M. (2020). Anthropology from Home. *Anthropology in Action*, 27(1), 46–52. <https://doi.org/10.3167/aia.2020.270105>
- Grandinetti, J. (2021). Pandemic Pedagogy, Zoom, and the Surveillant Classroom: The Challenges of Living Our Advocacies in a Pandemic. *Communication, Culture and Critique*, tcab021. <https://doi.org/10.1093/ccc/tcab021>
- Gruber, M., Eberl, J. M., Lind, F., & Boomgaarden, H. G. (2020). Qualitative Interviews with Irregular Migrants in Times of COVID-19: Recourse to Remote Interview Techniques as a Possible Methodological Adjustment. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, Vol. 22 No. 1 (2021). <https://doi.org/10.17169/FQS-22.1.3563>
- Hanna, P. (2012). Using internet technologies (such as Skype) as a research medium: A research note. *Qualitative Research*, 12(2), 239–242. <https://doi.org/10.1177/1468794111426607>
- Hensen, B., Mackworth-Young, C. R. S., Simwanga, M., Abdelmagid, N., Banda, J., Mavodza, C., Doyle, A. M., Bonell, C., & Weiss, H. A. (2021). Remote data collection for public health research in a COVID-19 era: Ethical implications, challenges and opportunities. *Health Policy and Planning*, 36(3), 360–368. <https://doi.org/10.1093/heapol/czaa158>
- Janghorban, R., Roudsari, R. L., & Taghipour, A. (2014). Skype interviewing: The new generation of online synchronous interview in qualitative research. *International Journal of Qualitative Studies on Health and Well-Being*, 9(1), 24152. <https://doi.org/10.3402/qhw.v9.24152>
- Ju, W., Mandel, I., Weatherwax, K., Takayama, L., Martelaro, N., & Willett, D. (2021). Remote Observation of Field Work on the Farm. *arXiv:2103.03163 [cs]*. <http://arxiv.org/abs/2103.03163>
- Kaufmann, K., & Peil, C. (2020). The mobile instant messaging interview (MIMI): Using WhatsApp to enhance self-reporting and explore media usage in situ. *Mobile Media & Communication*, 8(2), 229–246. <https://doi.org/10.1177/2050157919852392>
- Lechuga, V. M. (2012). Exploring culture from a distance: The utility of telephone interviews in qualitative research. *International Journal of Qualitative Studies in Education*, 25(3), 251–268. <https://doi.org/10.1080/09518398.2010.529853>
- Lo Iacono, V., Symonds, P., & Brown, D. H. K. (2016). Skype as a Tool for Qualitative Research Interviews. *Sociological Research Online*, 21(2), 103–117. <https://doi.org/10.5153/sro.3952>
- Lupton, D. (Hrsg.). (2020). *Doing fieldwork in a pandemic (crowd-sourced document)*. <https://docs.google.com/document/d/1clGjGABB2h2qbduTgfqribHmog9B6P0NvMgVuiHZCl8/edit?ts=5e88ae0a#>
- MacLean, L., Rahman, N., Turner, R., & Corbett, J. (2021). *Original article: Disrupted Fieldwork: Navigating Innovation, Redesign, and Ethics during an Ongoing Pandemic*. <https://doi.org/10.5281/ZENODO.4046546>
- MacLeod, H., Jelen, B., Prabhakar, A., Oehlberg, L., Siek, K., & Connelly, K. (2016). Asynchronous Remote Communities (ARC) for Researching Distributed Populations. *Proceedings of the 10th EAI International Conference on Pervasive Computing Technologies for Healthcare*. 10th EAI International Conference on Pervasive Computing Technologies for Healthcare, Cancun, Mexico. <https://doi.org/10.4108/eai.16-5-2016.2263322>
- McCull, R., & Michelotti, M. (2019). Sorry, could you repeat the question? Exploring video-interview recruitment practice in HRM. *Human Resource Management Journal*, 29(4), 637–656. <https://doi.org/10.1111/1748-8583.12249>
- Mealer, M., & Jones RN, J. (2014). Methodological and ethical issues related to qualitative telephone interviews on sensitive topics. *Nurse Researcher*, 21(4), 32–37. <https://doi.org/10.7748/nr2014.03.21.4.32.e1229>
- Munhall, P. L. (2007). The landscape of qualitative research in nursing. In P. L. Munhall (Hrsg.), *Nursing research: A qualitative approach* (5. Aufl., S. 3–31). Jones & Bartlett.

- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185–193. <https://doi.org/10.1016/j.ijvs.2020.04.018>
- Novick, G. (2008). Is there a bias against telephone interviews in qualitative research? *Research in Nursing & Health*, 31(4), 391–398. <https://doi.org/10.1002/nur.20259>
- Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., & Tacchi, J. (2015). *Digital ethnography: Principles and practice*. Sage.
- Podjed, D. (2021). Renewal of Ethnography in the Time of the COVID-19 Crisis. *Sociologija i prostor*, 59(219), 267–284. <https://doi.org/10.5673/sip.59.0.10>
- Postill, J. (2016). Doing remote ethnography. In L. Hjorth, H. Horst, A. Galloway, & G. Bell (Hrsg.), *The Routledge Companion to Digital Ethnography* (London, S. 61–69).
- Rahman, Md. S., Peeri, N. C., Shrestha, N., Zaki, R., Haque, U., & Hamid, S. H. A. (2020). Defending against the Novel Coronavirus (COVID-19) outbreak: How can the Internet of Things (IoT) help to save the world? *Health Policy and Technology*, 9(2), 136–138. <https://doi.org/10.1016/j.hlpt.2020.04.005>
- Roy, R., & Uekusa, S. (2020). Collaborative autoethnography: “Self-reflection” as a timely alternative research approach during the global pandemic. *Qualitative Research Journal*, 20(4), 383–392. <https://doi.org/10.1108/QRJ-06-2020-0054>
- Sedgwick, M., & Spiers, J. (2009). The Use of Videoconferencing as a Medium for the Qualitative Interview. *International Journal of Qualitative Methods*, 8(1), 1–11. <https://doi.org/10.1177/160940690900800101>
- Seitz, S. (2016). Pixelated partnerships, overcoming obstacles in qualitative interviews via Skype: A research note. *Qualitative Research*, 16(2), 229–235. <https://doi.org/10.1177/1468794115577011>
- Simons, R. N. (2019). Collaborative Video Game Design Work and Diversity. *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*, 1–4. <https://doi.org/10.1145/3290607.3299079>
- Sipes, J. B. A., Roberts, L. D., & Mullan, B. (2019). Voice-only Skype for use in researching sensitive topics: A research note. *Qualitative Research in Psychology*, 1–17. <https://doi.org/10.1080/14780887.2019.1577518>
- Smaling, A. (1994). The pragmatic dimension. *Quality and Quantity*, 28(3), 233–249. <https://doi.org/10.1007/BF01098942>
- Song, J., Riedl, C., & Malone, T. W. (2021). Online Mingling: Supporting Ad Hoc, Private Conversations at Virtual Conferences. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, 1–10. <https://doi.org/10.1145/3411764.3445776>
- Staudacher, S., & Kaiser-Grolimund, A. (2016). WhatsApp in Ethnographic Research: Methodological Reflections on New Edges of the Field. *Basel Papers on Political Transformations, 10 Mobilities-In and out of Africa*, Article 10 Mobilities-In and out of Africa.
- Sturges, J. E., & Hanrahan, K. J. (2004). Comparing Telephone and Face-to-Face Qualitative Interviewing: A Research Note. *Qualitative Research*, 4(1), 107–118. <https://doi.org/10.1177/1468794104041110>
- Sullivan, J. R. (2012). Skype: An appropriate method of data collection for qualitative interviews? *The Hilltop Review*, 6(1), 10.
- Teti, M., Schatz, E., & Liebenberg, L. (2020). Methods in the Time of COVID-19: The Vital Role of Qualitative Inquiries. *International Journal of Qualitative Methods*, 19, 160940692092096. <https://doi.org/10.1177/1609406920920962>
- Vaishya, R., Haleem, A., Vaish, A., & Javaid, M. (2020). Emerging Technologies to Combat the COVID-19 Pandemic. *Journal of Clinical and Experimental Hepatology*, 10(4), 409–411. <https://doi.org/10.1016/j.jceh.2020.04.019>
- Velardo, S., & Elliott, S. (2021). Co-Interviewing in Qualitative Social Research: Prospects, Merits and Considerations. *International Journal of Qualitative Methods*, 20, 160940692110549. <https://doi.org/10.1177/16094069211054920>
- Vindrola-Padros, C., Chisnall, G., Cooper, S., Dowrick, A., Djellouli, N., Symmons, S. M., Martin, S., Singleton, G., Vanderslott, S., Vera, N., & Johnson, G. A. (2020). Carrying Out Rapid

- Qualitative Research During a Pandemic: Emerging Lessons From COVID-19. *Qualitative Health Research*, 30(14), 2192–2204. <https://doi.org/10.1177/1049732320951526>
- Vines, J., Pritchard, G., Wright, P., Olivier, P., & Brittain, K. (2015). An age-old problem: Examining the discourses of ageing in HCI and strategies for future research. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 22(1), 1–27.
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429–442. <https://doi.org/10.1080/0960085X.2020.1800417>
- Walther, J. B., & Parks, M. R. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. *Handbook of interpersonal communication*, 3, 529–563.
- Wang, Z., & Tang, K. (2020). Combating COVID-19: Health equity matters. *Nature Medicine*, 26(4), 458–458. <https://doi.org/10.1038/s41591-020-0823-6>
- Webber-Ritchey, K. J., Simonovich, S. D., & Spurlark, R. S. (2021). COVID-19: Qualitative Research With Vulnerable Populations. *Nursing Science Quarterly*, 34(1), 13–19. <https://doi.org/10.1177/0894318420965225>
- Yin, R. (2014). *Case Study Research: Design and Methods* (5. Aufl.). SAGE.