Research Supervision During COVID-19: A Comparison Between Supervisors' and Supervisees' Experiences

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Abstract

The COVID-19 pandemic shaped teaching, learning, and research activities and imposed an urgent online transition. Technology was extensively used to facilitate research and mentoring purposes, including research supervision. The importance of this research project stems from the need to explore the experiences of research students and research supervisors during the pandemic to assess the way their role and experiences have been impacted, the difficulties they faced and how these can be resolved in the future and/or inform future practice. This study reflects on findings from small-scale qualitative research at City, University of London, exploring the retrospective accounts of doctoral students, based on online focus groups and supervisors, using online interviews, during the pandemic to assess its impact in digital research supervision. The data was analysed using thematic and discourse analysis and suggests that some of the key changes that occurred in research supervision were changes in the working environment, the stressful setting, and the relationship between supervisors and supervisees. Although technology offered opportunities for collaboration and a shift in traditional power dynamics, it also amplified existing issues concerning the style of supervision and the interaction among mentors and mentees. Considering these gaps, the paper informs digital research supervision and recommends how we could reconceptualise doctoral pedagogy to develop hybrid formats beyond the context of the pandemic.

Keywords: Digital Research Supervision, COVID-19, Doctoral Pedagogy, Supervisor-Supervisee Relationship, Supervision Style

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Introduction

Since the outbreak of the COVID-19 pandemic, teaching, learning and research activities have been taking place online (Rasheed et al., 2020). Education has significantly been impacted with the transition to virtual learning and technology has been extensively used to facilitate research, teaching, and mentoring purposes (Adedoyin & Soykan, 2020). Research supervision was transformed in this context as research could only be practiced online as well as supervision meetings, working on collaboration projects etc. More importantly, doctoral supervision lies between customised scaffolding teaching (Albertyn & Bennett, 2021) and research mentoring (Bruce & Stoodley, 2013) which makes it difficult to assess the impact of the pandemic and explains to an extent why this has not been widely discussed over the pandemic period.

This research paper addresses the need to explore the retrospective accounts of research students and research supervisors during the pandemic to assess the way their role and experiences have been impacted, the difficulties they faced and how these can be resolved in the future and/or inform future practice. Also, although technology has been used extensively in research supervision, the modes of engagement are rarely addressed, and limited research has been focusing on digital research supervision (Dowling & Wilson, 2017). Considering the sudden and complete abundance of face-to-face supervision during the pandemic, it is essential to examine the role of technology, the benefits that offers to research students and advisors and how we can sustain and further develop these going forward.

Literature Review

Working towards a PhD has often been described as a "doctoral journey" where supervision plays a significant role in the timely completion of the PhD (Nash & Winstone, 2017) but also on shaping the researcher's experience and future academic identity (Hounsell, et al., 2008) from being a student to becoming a scholar (Kaur, Kumar & Noman, 2021). At the same time, little attention has been placed on the supervisors' understanding of the educational relationship with their students, the way they engage with them and the identity formation process of "becoming a supervisor" (Halse, 2011). Generally, effective doctoral supervision is seen as "a complex, multifaceted, and unstable process" (Grant, 2003) which expects the adaptability of advisors and researchers to develop and perform diversified roles (Mainhard, et al., 2009) and agree on a supervision framework that meets their needs and preferences (Watts, 2008, 2010; Wisker, 2012). Different models of research supervision and supervisor-supervisee relationship have been suggested overtime (key supervision models discussed in Andriopoulou & Prowse, 2020), but I will focus on Lee's model (2008; 2018) that offers a comprehensive framework of doctoral research pedagogy and demonstrates potential in delivering transformative doctoral learning experiences (Kaur, Kumar & Noman, 2021). According to Lee (2018), research supervision involves five elements:

- o *Functional*: this element focuses on the project management, setting and meeting deadlines, giving practical advice, and observing the researcher's progress.
- o *Enculturation:* encouraging the researcher to develop an academic identity by participating in research and teaching communities, as well as engaging with academic life such as research collaboration and publication.
- o *Critical thinking*: inspiring the researcher to critically and proactively question their research, reflecting on their work, making decisions and being able to justify them convincingly while being intellectually present throughout the research process.

- o *Emancipation:* empowering the doctoral student to control their research and academic pathway. This stage is developed gradually as the researcher progresses and becomes confident and independent learner.
- o Relationship development: reinforcing a relationship with the research student based on dialogue and interaction. This can be facilitated through practices of encouragement, recognition of achievement and pastoral support.

These elements are at times used in combination in research supervision depending on the coregulation and scaffolding of the learning processes which describe the transition of the doctoral student to an independent, self-regulated learner (Agricola et al., 2019), but often academics might adopt one sole approach with their research students. In both cases the disruption of face-to-face supervision, research and teaching practices prohibits these processes and thus poses a risk in PhD research completion. According to Manathunga's work (2005), some of the most warning signs when students experience difficulties with their doctoral studies are changing their research topic or plan of work, avoiding submitting work for review, avoiding communicating with the supervisory team and isolating themselves from the school and other students. Due to the pandemic and the uncertainties this caused, a lot of research students might have found themselves in at least one of these situations because their research plan had to adapt the new circumstances (for example conducting online research) and self-isolation was unavoidable considering the lockdown restrictions. Based on Zaheer's and Munir's work (2020), lacking face-to-face interaction and physical presence prohibits the establishment of a trustworthy relationship between advisors and doctoral students. This might impact the frequency and the quality of online supervision meetings but also the confidence of both parties to communicate concerns and develop a plan/pattern of collaboration for the successful completion of the doctorate. Considering that PhD research has been linked to isolation and loneliness, this emergency digital mode of supervision might cause increased stress, exhaustion (Devine & Hunter, 2017), lack of confidence and motivation or even depression and other mental health issues (Brown, 2013), especially due to the covid-19 anxiety that was added (Nash, 2021). Consequently, the risks of candidature's extension (Park et al., 2011), PhD failure and risen drop-out rates grow (Devos et al., 2017).

Technology, however, has offered an online environment that transforms education including research supervision (Dowling & Wilson, 2017) potentially enhancing collaboration and dialogue (Maor, Ensor & Fraser, 2016). This includes practices related to the actual research (for example training sessions, conducting research online etc.) but also relationships (such as online supervision, sharing files, participating in virtual research communities). Based on a previous research, informal mediated supervision was practiced using "What's up" instant messaging and the findings suggested the establishment of a meaningful relationship among supervisors and supervisees, frankness of conversations and disruption of traditional hierarchical relations (Rambe & Mkono, 2018). Thus, it is important to purposively invest on building online supervisory relationships and make good use of technology for communication and collaboration (Jacobsen, Friesen & Becker, 2021). Nevertheless, there is lack of research on digital research supervision especially during the pandemic and the learning mechanisms and practices that were used to replicate previous face-to-face or blended models of supervision. This study uses the rapid transition to online research supervision during the pandemic as an opportunity to improve our understanding of digital doctoral supervision and the lived experiences of supervisors and supervisees to inform research supervision framework, pedagogy, and practice.

Methodology and Methods

I conducted a small-scale qualitative project informed by the interpretative paradigm (Bryman, 2004). I combined two ethnographic online research methods using the Zoom conferencing technology as it quickly became popular during the pandemic. The data was collected online as it was considered the most suitable method (and context) to discuss retrospective experiences of digital research supervision. Three online interviews with research supervisors and three online focus groups with research students were conducted between April and July 2023.

Interviews are particularly helpful when this involves busy professionals like academics. I used a semi-structured format to allow participants to focus on the aspects that concern them around digital research supervision, allow new questions to emerge and to emphasize on their lived experiences. Focus groups consist of small groups of people who are brought together explore attitudes and perceptions, feelings, and ideas about a specific topic (Kitzinger, 1994). This method was selected to explore research students' perspectives to encourage a discussion of their experiences but also promote solidarity among people who might face similar challenges and concerns (Nakou, 2022b).

Given that this research project involved human participants ethical approval had been granted from my institution. Participation was voluntary and the data was kept anonymous and confidential. Upon the participants' informed consent, the interviews and focus groups were video recorded via zoom. The data was safely kept until the completion of the project, all quotes were anonymised, and pseudonyms were used. All data was deleted from the devices of the researcher once the paper was completed.

Sampling and Participants

As this research investigates research supervision in the pandemic the population consists of research students who were enrolled by January 2020 and PhD advisors who have been actively supervising research students since January 2020. I used purposive sampling to include different fields of expertise within City University of London and explore the ways research supervision was conducted during the pandemic. Overall, I conducted three online interviews with supervisors and three online focus groups including four participants with supervisees from City University of London. Amazon vouchers were used as incentives for the doctoral students to participate in the study. The profiles of the participants are described in the tables below

Table 1: Profiles of the supervisors interviewed, created by the researcher.

Supervisors Profiles	School/Department at City	Digital literacy (self-evaluation)
Professor Helen	School of Social Policy & Public affairs	Competent user, self-trained
Professor Jonathan	School of Communication & Creativity	Uncomfortable using technology, need for training and support
Dr Sue	Learning Enhancement and Development Educational Research Centre	Proficient user, familiar with digital teaching methods, staff trainer

The research supervisors were selected from different schools of City University of London. Some self-evaluate themselves as proficient or competent users of digital technology, while others felt uncomfortable using technology and would have welcomed training and support during the pandemic to meet the needs for online teaching, research supervision and mentoring. Overall, the participants drew on different and unique competences, digital literacies, and experiences that produced rich data.

The PhD researchers in the online focus groups comprised another diverse group as some were attending a doctoral research programme in Sociology, International Politics, Psychology, Journalism, and Criminology. Additionally, I had a wide range of experiences deriving from UK, European, and International doctoral students as their status shape their doctoral journey.

Table 2: Profiles of the supervisees who participated in the focus groups, created by the researcher.

Doctoral researchers' profiles	School/Department at City	Student status	Year of Study during 2020
Mary	Sociology	International	Year 2
Ben	Journalism	International	Year 1
James	Psychology	European	Year 1
Vivian	Psychology	UK	Year 2
Linda	Sociology	UK	Year 1
Catherine	Criminology	European	Year 1
Anna	International Politics	International	Year 3
Stephanie	Sociology	UK	Year 4
Dina	International Politics	International	Year 2
Emma	Sociology	International	Year 1
George	International Politics	European	Year 1
Tanya	Sociology	International	Year 1

Furthermore, most of the researchers who took part were in their first year of study during the COVID-19 pandemic (2020-2021), but I also managed to identify and access participants in their second, third, and final year of study. Finally, all the doctoral researchers self-evaluated themselves as strong, confident users of digital technology (full profiles available in Table 2).

Findings

During the interviews and the focus groups as an ice-breaking activity to initiate the discussion I invited supervisors and supervisees to summarise in a few words their experiences (Nakou, 2022a). Unsurprisingly, the participants' reflections were highly diverse, unique, and contextual. As illustrated in the word cloud (Figure 1) the description of digital supervision during COVID-19 received different and often conflicting positive and negative connotations. Some elements of digital supervision were seen as comfortable, flexible, and collaborative while other parts came across as challenging, isolating, and confusing.

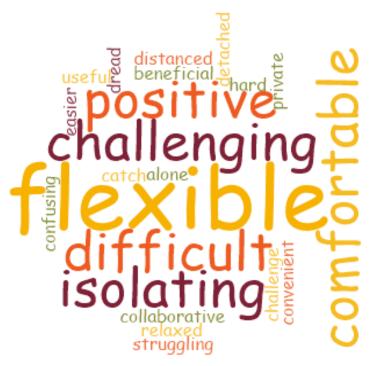


Figure 1: Word cloud with in-vivo descriptions of digital supervision during COVID-19.

Produced by the researcher using NVivo.

Working Remotely

The COVID-19 pandemic catalysed a profound transformation in the landscape of digital research supervision, reshaping the dynamics between supervisors and students in academia. One of the most significant changes was the dramatic shift in working environments and daily routines. Previously, scholars and their supervisees often navigated through shared office spaces and tangible calendars marked with face-to-face meetings, which fostered spontaneous interactions and a sense of physical presence.

I think it was tough situation was like very challenging. It felt different sending somebody an email and scheduling a call instead of like going and kind of having a conversation. Being in the PhD office, having an interaction with other PhD students

feels also really important for me, and having the space- that is kind of not in like the room that I'm sleeping in makes a big difference to separate my time for relaxation and my work.

However, as illustrated in the quote above, the pandemic dismantled these conventional structures, forcing researchers to adapt to remote working conditions. This often meant working in an isolated environment, converting your home into an office space, and often having increased workload outside of normal working hours. The digital realm became the new nexus for scholarly engagement, substituting 'desk traffic' with an influx of virtual notifications and Zoom appointments as one of the supervisors mentioned:

I have also been really aware sometimes that we've booked the supervision, and then somebody's put something in my calendar straight afterwards, and they do quite often overrun.

While this shift increased the flexibility of scheduling, it also presented challenges such as the blurring boundaries between different aspects of academic work and personal life and the need for heightened self-discipline in time management. All these elements may result in the automation of the research supervision practice and the lack of a strong relationship between supervisors and supervisees.

At the same time, the shift to remote work during the pandemic led to a newfound flexibility in scheduling, emphasizing the 'anywhere and anytime' nature of digital research supervision. Face-to-face meetings were replaced by virtual interactions, erasing the constraints of geographical proximity. This change in the frequency of meetings provided both researchers and supervisors with greater flexibility in managing their time and accommodating diverse schedules. It allowed for more frequent check-ins, quick problem-solving, and ad-hoc discussions, fostering a dynamic and agile approach to research supervision as it was noted during the focus groups:

And with online meetings we could do it from anywhere. So, the workspace made me feel a bit more relaxed, even though I had the supervision meeting, I can do this by the beach, I can do this at home in an environment where I feel safe.

Researchers were no longer confined to rigid office hours, and supervisors could provide support as needed, promoting a more adaptable and responsive research environment. Moreover, this neutral setting changed traditional hierarchies and dynamics which are associated with institutional settings, such as meeting in the supervisor's office. The physical distance imposed by remote work dismantled the traditional hierarchy that often existed in face-to-face supervision, creating a more neutral space for collaboration. Researchers could become masters of their research domains, using digital tools to organise, analyse, and present their work. This shift emphasised a collaborative and peer-like relationship between supervisors and researchers, where expertise was shared and co-created, resulting in more empowered and self-driven researchers. This flexibility underscored the potential for a hybrid model of research supervision that combines the benefits of face-to-face interactions with the convenience of digital connectivity, offering a promising avenue for the future of academic mentorship.

Living Under Stress

Moreover, the pandemic introduced a new layer of complexity to the academic journey by requiring scholars and researchers to 'curry on' within an exceptionally stressful context. The pressures of global health concerns, remote learning, and often constrained access to research facilities posed significant obstacles to research progress. At the same time, some of the participants fall ill or experienced the loss of family and friends, while having to continue their PhD research and required support from their advisors, as one of the supervisees shared:

My dad died right at the beginning of lockdown. I told my supervisors, and they did everything they could to support me through that. They were like academic parents for me at that time. (...) During supervision, both my supervisors would be there, I would have given them some work beforehand, in the first half we would be catching up, personal chit chat, and me crying, you know, just like emotional support. And then we talked about the work, and the next supervision.

Supervisors, recognising these challenges, had to take on the role of not only mentors but also empathetic supporters, helping students navigate the emotional and psychological toll of the pandemic. This normalisation of coping with difficult situations and strong emotions is reflected also in the experiences of supervisors. For example, one of the academics shared her concerns about her international supervisee who was located outside of the UK during the pandemic and had to resolve visa issues and safety concerns further exacerbated in the context of a global pandemic.

I knew that the Covid situation there was much worse than in Europe because, even though there were very many statistics, and there wasn't very much news. People I knew were falling ill and dying. So, I was very worried about him and his family. I knew that there was like there were real serious risks in terms of health, and security as well, so yeah, it was quite tense and worrying. I was trying to work out what my responsibility was in terms of enabling him to continue with his PhD but at the same time not putting himself and other people at risk.

Obviously, the shift in supervision dynamics showcased the need for resilience and adaptability of both supervisors and students, as they learned to persevere in the face of adversity, emphasizing not only scholarly progress but also mental and emotional well-being. Sadly, often there was little institutional support provided to both parties from the university to navigate these challenges or provision of practical and emotional support.

In fact, there were aspects of digital supervision and institutional policies that caused extra pressure to supervisors and supervisees. the university uses a 'Research Manager' platform were supervision meeting details and summaries should be added upon the completion of meetings to keep a record of the PhD candidature and the research progression. Although this tool in principle aims to support the researchers and their advisors often is understood as immigration checker -specifically for international students with visa requirements who are required to fill in a form every month, which adds to the existing stressful context.

Whether or not we had supervision once a month doesn't mean that we're not engaged with our studies. There should be a different way to like, prove our engagements and I think the system, or like how the mechanics of supervision can actually affect relationships between supervisors and supervisors.

Every month my student gets an email saying: 'your last meeting was this and it's time to prepare your next'. I complained very loudly about this, it's very threatening, because people know that their visa depends on this, and that's not a good environment.

Instead of adding pressure to research students and advisors, it is essential for doctoral schools and universities to explore informal ways to check in with the concerned parties. Feedback is important but it needs to be delivered to meet the preferences and needs of the doctoral students.

Digital Relationships and Collaborations

The disruption of relationships and collaboration was another pivotal aspect of the pandemic's impact on digital research supervision. The traditional mentor-student relationship, characterized by face-to-face interactions, was replaced with a more virtual and mediated connection. Collaborative projects, once fostered through in-person meetings, had to adapt to remote tools, which, while enabling continued work, lacked the intimacy and spontaneity of physical collaboration. Supervisors found themselves navigating uncharted waters, striving to maintain meaningful connections with their students through screens and emails.

I had asked my son to help me set up Zoom and then I was feeling very nervous about turn-taking, switching on the mic during the supervision. It was difficult for me to focus on the actual agenda for discussion.

Moreover, they highlighted the need for further training and support that should have been provided during the pandemic to identify gaps in digital literacies and offer solutions. Others faced issues buying the necessary equipment or establishing a stable internet access. This shift also amplified the importance of clear communication, adaptability, and innovative approaches to sustaining research collaborations in the absence of physical presence.

Another significant change was the widespread adoption of digital tools for collaboration and feedback. The pandemic accelerated the integration of technology into research supervision processes. Virtual communication platforms (Zoom, Microsoft Teams, and Skype) and collaborative tools (OneDrive shared documents) became essential for maintaining research momentum. Researchers and supervisors harnessed these digital resources to bridge the physical gaps, allowing for real-time collaboration and seamless feedback exchange.

My experience of online supervision is very positive. It works really well and feels really private. We can easily look at documents together. Both of us as supervisors were able to add our comments on OneDrive, so that would be really helpful. It makes it much more, as you say, collaborative, but also quite time efficient.

This digital evolution not only enhanced the efficiency of research supervision but also enriched the quality of feedback, enabling more nuanced and structured discussions. It demonstrated that technology could serve as an effective enabler of research collaboration, offering opportunities for more comprehensive and dynamic engagement between supervisors and researchers.

Focusing on the Real Issues

Interestingly, amidst the profound digital transformation of research supervision brought about by COVID-19, participants' concerns shifted away from the digital technology itself and the technical issues that obstructed supervision. Instead, their primary concerns focused on the more abstract and human aspects of the supervisory process such as the style of supervision and the nature of the supervisor-supervisee relationship (Figure 2). The shift to digital platforms didn't merely alter the logistics of supervision; it challenged the very essence of how mentorship and guidance were provided. Researchers were not merely looking for technical guidance; they were seeking a supervisory style that could adapt to the virtual realm, offering support, encouragement, and clear communication tailored to the unique challenges of remote work.

Furthermore, the existing issues in research supervision were exacerbated within the digital ecosystem and the context of a health crisis. While the digital tools offered convenience, they also magnified existing disparities in access to resources and created new challenges in terms building a strong relationship among supervisors and supervisees. The health crisis itself added a layer of stress and uncertainty that permeated the supervisory process. The need to balance health concerns, remote work, and research progress became an additional burden. Yet, within these challenges, participants identified opportunities for critical thinking, functional progress, and emancipation specifically regarding the management of their research but also in setting the supervision meeting agenda.

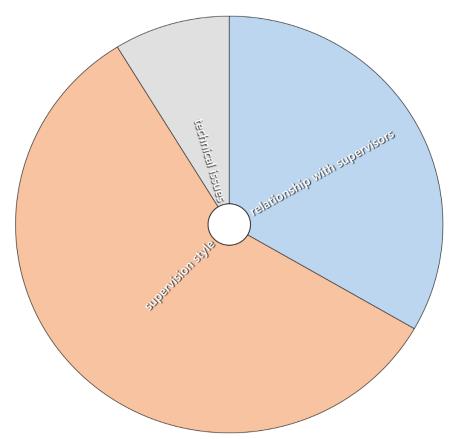


Figure 2: Distribution of key themes regarding supervision: technical issues (grey), relationship with supervisors (blue), and supervision style (orange).

Produced by the researcher using NVivo.

Importantly, the shift to a more transactional and outcome-oriented approach meant less focus on relationship building and the process of enculturation of doctoral researchers into the essence of academic life, which both shape the future of academic mentorship. While some found this shift to be liberating, others lamented the potential loss of the rich, holistic learning experiences that traditional mentorship provided.

Concluding Remarks

Training and support are paramount in realising the potential of hybrid supervision. Institutions should invest in programs that help both doctoral supervisors and researchers navigate the nuances of this new paradigm and provide institutional support. It's essential to design a supervisory style that meets the needs of all involved parties, recognising that one size does not fit all. Flexibility in approach, tailored to individual preferences and circumstances, will be a cornerstone of effective hybrid supervision. Furthermore, there is an opportunity to institutionalise informal and flexible formats of feedback and progression that do not threaten the doctoral researchers. This approach can lead to more productive and fulfilling research experiences for all exploring areas to support both research supervisors and supervisees, specifically during times of crisis and stressful circumstances (Figure 3).

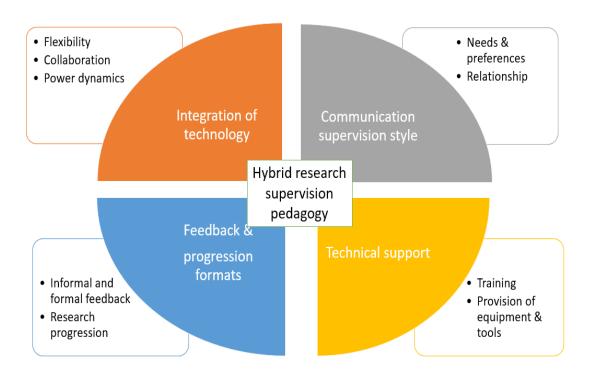


Figure 3: Areas that could be improved in hybrid doctoral supervision models: integration of technology (orange), communication supervision style (grey), feedback and progression formats (blue), and technical support (yellow). Produced by the researcher.

In conclusion, the era of hybrid research supervision is upon us, offering the best of both digital and in-person worlds. It's a dynamic, adaptable, and innovative approach that has the potential to transform the way research is conducted and supported. By harnessing the strengths of digital tools, fostering balanced power dynamics, investing in training and support, tailoring supervisory styles, and institutionalising flexible formats, we can unlock the full potential of hybrid research supervision and empower a new generation of scholars to thrive in an ever-evolving academic landscape.

References

- Adedoyin, O. & Soykan, E. (2020) 'Covid-19 pandemic and online learning: the challenges and opportunities', *Interactive Learning Environments*, pp. 1-13.
- Agricola, B. et al. (2020) 'Shifting Patterns in Co-regulation, Feedback Perception, and Motivation During Research Supervision Meetings', *Scandinavian Journal of Educational Research*, 64(7), pp. 1030-1051.
- Albertyn, R. & Bennett, K. (2021) 'Containing and harnessing uncertainty during postgraduate research supervision', *Higher Education Research & Development*, 40:4, pp. 661-675, DOI:10.1080/07294360.2020.1775559
- Andriopoulou, P. & Prowse, A. (2020) 'Towards an effective supervisory relationship in research degree supervision: insights from attachment theory', *Teaching in Higher Education*, 25(5), pp. 648-661. DOI:10.1080/13562517.2020.17314
- Archibald, M., Ambagtsheer, R., Casey, M., & Lawless, M. (2019) 'Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants', *International Journal of Qualitative Methods*, 18, pp. 1-8.
- Brown, P. (2013) 'Loneliness at the bench: Is the PhD experience as emotionally taxing as it is mentally challenging?' *Science and Society*, pp. 405-409.
- Bryman, A. (2004) Social Research Methods (2nd ed.). New York: Oxford University Press.
- Daymon, C., & Holloway, I. (2002) *Qualitative research methods in public relations and marketing communications*. London: Routledge.
- Denscombe, M. (2010) *The good research guide: For small-scale social research projects* (4th ed.). London: Open University Press.
- Devine, K. & Hunter, K. H. (2017) 'PhD student emotional exhaustion: the role of supportive supervision and self-presentation behaviours', *Innovations in Education & Teaching International*, 54(4), pp. 335-344.
- Dowling, R. & Wilson, M. (2017) 'Digital doctorates? An exploratory study of PhD candidates' use of online tools', *Innovations in Education and Teaching International*, 54:1, pp. 76-86, DOI:10.1080/14703297.2015.1058720
- Flick, U. (2007) An introduction to qualitative research (4th ed.). London: Sage Publications.
- Halse, C. (2011) 'Becoming a supervisor: the impact of doctoral supervision on supervisors' learning', *Studies in Higher Education*, 36(5), pp. 557-570, DOI:10.1080/03075079.2011.594593
- Hennick, M. (2007) *International focus group research: A handbook for the health and social sciences*. New York: Cambridge University Press.

- Hollander, J. A. (2004) 'The social contexts of focus groups', *Journal of contemporary ethnography*, 33(5), pp. 602-637.
- Jacobsen, M., Friesen, S. & Becker S. (2021) 'Online supervision in a professional doctorate in education: Cultivating relational trust within learning alliances', *Innovations in Education and Teaching International*. DOI:10.1080/14703297.2021.1991425
- Kaur, A., Kumar, V. & Noman, M. (2021) 'Partnering with doctoral students in research supervision: opportunities and challenges', *Higher Education Research & Development*, DOI:10.1080/07294360.2020.1871326
- Kitzinger, J. (1995) 'Qualitative research. Introducing focus groups', *BMJ*, 311, pp. 299-302.
- Krueger, R. A., & Casey, M. A. (2000) Focus groups: A practical guide for applied research (3rd ed.). Thousand Oaks: Sage Publications.
- Lee, A. (2008) 'How are doctoral students supervised? Concepts of doctoral research supervision', *Studies in Higher Education*, 33(3), pp. 267-281.
- Manathunga, C. (2005) 'Early warning signs in postgraduate research education: a different approach to ensuring timely completions', *Teaching in Higher Education*, 10 (2), pp. 219-233.
- Maor, D., Ensor J., & Fraser, B. (2016) 'Doctoral supervision in virtual spaces: A review of research of web-based tools to develop collaborative supervision', *Higher Education Research & Development*, 35:1, pp. 172-188, DOI:10.1080/07294360.2015.1121206
- Mason, J. (2002) *Qualitative Researching* (2nd ed.). London: Sage Publications.
- Morgan, D. (1997) *Focus groups as qualitative research* (2nd ed.). London: Sage Publications.
- Nakou, P. (2022a) 'Resilience in qualitative research during COVID-19: The case of online focus groups', *Sentio Journal, Special Issue 4*, pp. 65-75.
- Nakou, P. (2022b) 'Reflections on insider focus groups', *Sentio Journal, Special Issue* 4, pp. 126-130.
- Patton, M. (1990) Qualitative evaluation and research methods. London: Sage Publications.
- Phillips, L., & Jorgensen, M. W. (2002) *Discourse Analysis as Theory and Method*. London: Sage Publications.
- Rambe, P. & Mkono, M. (2018) 'Appropriating WhatsApp-mediated postgraduate supervision to negotiate "relational authenticity" in resource-constrained environments', *British Journal of Educational Technology*, 50 (2), pp. 702–734.
- Rasheed, R. A., Kamsin, A. & Abdullah, N. A. (2020) 'Challenges in the online component of blended learning: A systematic review', *Computers & Education*, 144, pp. 1-17.

- Robson, C. (2000) The research of the real world: A tool for social scientists and professional researchers (2η ed.). Gutenberg.
- Rubin, H. J., & Rubin, I. (2005) *Qualitative Interviewing: The art of hearing data* (2nd ed.). London: Sage Publications.
- Silverman, D. (2000) *Doing Qualitative Research. A Practical Handbook.* London: Sage Publications.
- Tesch, R. (1990) *Qualitative Research: Analysis Types and Software Tools*. London: Routledge.
- Turner, B. K. (2003) Focus group interviews. In F. K. Stage, & K. Manning (Eds.), *Research in the college context: Approaches and methods*. New York: Routledge, pp. 49-62.
- Wisker, G. (2012) *The Good Supervisor: Supervising Postgraduate and Undergraduate Research for Doctoral Theses and Dissertations*. 2nd ed. London: Palgrave Macmillan.
- Zaheer, M. & Munir, S. (2020) 'Research supervision in distance learning: issues and challenges', *Asian Association of Open Universities Journal*, 15 (1), pp. 131-143.

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