

Changing Social Research Practices in the Context of Covid-19: Updated Rapid Evidence Review – Synthesis of the 2021 Literature

Executive summary

This Rapid Evidence Review synthesises evidence available in academic publications from 2021 to update the review of evidence from 2020 <https://eprints.ncrm.ac.uk/id/eprint/4458/>. Once again the aim has been to chart how social research methods have been successfully adapted for, or designed for use within, the pandemic conditions of Covid-19. Searching six databases for 2021 papers identified a potential 4,354 papers of interest (compared with the 922 of 2020). Of these papers, 2,006 met the inclusion criteria (compared to 95 from the 2020 literature). The papers span 45 countries and discuss many of the same methods from 2020 review: surveys and rapid surveys, interviews, group interviews and focus groups, autoethnographic and ethnographic methods, and expressive and participatory methods. Additionally, papers address workshop-based methods via videoconferencing and whiteboarding platforms, outdoor and hybrid outdoor/online methods, adaptation of home visit methods to online and adaptation of randomised control trials. Key methods learning from 138 publications were synthesised to address the main aim, adding to the knowledge base from the 64 papers synthesised in 2020.

Much of the 2021 literature reinforces the key messages from 2020 about methods that have apparently thrived or were well-suited to the social conditions of Covid-19 and those that have been minorly, through to radically, adapted. New topics have also arisen, including conducting in-person interviews with masks and from a distance, hygiene/safety protocols for in-person survey and other methods, and participant preferences when give the option of being interviewed in person or online. The evidence indicates that the impact of changes to the social world from Covid-19 on social research practices involves more than just the pivot to online methods. It includes: adapting recruitment processes, innovation in methods, designing for flexibility and speed and for research from people's homes, coping with different impacts on different groups and the potential to miss engagement of some groups, and strengthening relationships with stakeholders and within research teams. The 2021 literature shows not just the stress on urgency of methodological response (making research happen), but continuing concern with research quality (making research valid and trustworthy) and research relationships (making research ethical). A new theme in the literature is the longevity or permanence of changes to methods in the face of uncertainty about what social changes will last and what new changes will arise (making research sustainable). We conclude that methodological discussion has expanded to consider the future and that researchers have found ways not just to get through a crisis, but to carry on over a prolonged period of disruption, better prepared for further contextual crises.

Introduction

Changing Social Research Practices in the Context of Covid-19: Rapid Evidence Review (Nind, Coverdale & Meekin, 2021) reported on the academic evidence available to the research community on methodological responses to the Covid-19 pandemic. The review synthesised key messages in the literature published in 2020, that is, the urgent adaptations and responses to the social disruption impacting social research. This report updates that review by synthesising the literature from 2021 when the research community had made further adjustments, when more of the initial methodological responses had been published, when lockdowns were lifting, and when uncertainty was continuing to disrupt research planning.

Review aim

The aim of the review reported here was to synthesise the academic evidence available to the research community on how social research methods have been successfully adapted for, or designed to be utilised within, the pandemic conditions of Covid-19, with a particular view to seeing what the 2021 literature adds to the 2020 picture.

Background context

The ESRC provided the initial impetus for exploring how researchers are managing during Covid-19 restrictions, primarily focusing on physical/social distancing, and how this is changing research practices. The NCRM Executive was involved in an initial review of the key social research methods being affected and the practices undergoing change. The research team made an initial review of social media and grey literature to refine their focus. User involvement in the rapid review process was maintained throughout by linking the review to the programme of knowledge exchange workshops in the wider project. The proposed programme of work, including an update to the initial rapid evidence review, was agreed with the funding body.

Question development and refinement

The review question, shaped by early dialogue with the funders and NCRM Executive was delineated as: ***How have social research methods been successfully adapted or designed for use within pandemic conditions?*** This question was unchanged for this update.

Methods

The Knowledge to Action Rapid Evidence Review process of Khanguara et al. (2012) was adapted for this research. The process involved searching, identifying and selecting articles, and analysing those selected as meeting the inclusion criteria. The information gleaned was synthesised using descriptive summary with recommendations for training and methodological development based on examples and evidence. In keeping with other Rapid Evidence Reviews, this review assessed 'what is already known about a policy or practice issue, by using systematic review methods to search and critically appraise existing research' (Grant & Booth, 2009, p.94). The completeness of the process was determined by the time constraints, thus

grey literature was excluded (and scrutinised in a separate process for the first main report). Similarly, there was rigour and transparency in that the search strategy and sources are explicit and identification of relevant material was criterion-based. There were, though, concessions to the depth and breadth of a usual systematic review process (see Butler et al., 2005) which meant extracting only key variables in terms of the most practically applicable headline messages and simplifying the quality appraisal process (see p. 7).

Identifying publications

The identification strategy involved searching for articles in the following databases:

- Scopus
- Web of science
- PsycINFO main (EBSCO folder)
- ERIC (ProQuest folder)
- Social Science Premium Collection (ProQuest folder) (criminology, education, international bibliography of the social sciences, linguistics, politics, and sociology collections plus social science database)

Search terms used for searching the bibliographic databases included the following sets in combination:

Terms to indicate that the paper is about applying, developing or adapting research methods i.e.:

("research method*" OR methodology* OR qualitative OR quantitative OR fieldwork OR survey* OR interview* OR "focus group*" OR observation* OR *ethnog*)

AND

Terms to indicate that the methods were applied, developed or adapted to the social conditions and public health mandates accompanying Covid-19 (including maintaining physical distance; necessity to cover faces, restrictions on touch and access to buildings) i.e.:

(Covid* OR coronavirus OR pandemic OR lockdown OR "social distan*" OR "face cover*" OR face mask*)

The key terms were developed in collaboration with University of Southampton specialist librarians who advised on the use of indexing languages for specific databases.

The parameters of the searches were set to search titles and keywords only for the first methods-related string (because the term "method*" is mentioned in most abstracts) and titles, keywords and abstracts for the second search string. Additionally, the searches were set to select only papers published in the English language, during the period 1 January 2021-31 December 2021, with alerts set up during the initial 2020 rapid evidence review helping to make the search process more efficient. During the filtering process papers published in journals with

a Social Science or methodological orientation provided a focus for finding the most relevant papers.

The database search was supplemented with forward and backward citation analysis of selected papers within these databases and additional hand-searching of relevant special issues. While the 2021 update was largely a replication of the 2020 design, initial database searches indicated a substantial increase in the volume of publishing about Covid-19 in 2021 picked up by the search strategy (Database A, see Figure 1). Some of this explicitly discussed methodological adjustments for the pandemic, while for some these were implicit. The volume required a significant adjustment to the process of decision-making concerning which papers were selected for inclusion in the next stage (Database B), resulting in a more targeted focus on papers with explicit reference to methodological adaptation. While this limited the mapping of other papers proportionally in comparison with the 2020 corpus, it enabled us to maintain the same the rigour in processing the final stages of criteria selection (Database C) and synthesis (Database D).

Screening and selection of studies

Studies were identified that met **ALL** of the following criteria:

Scope

- i. Focuses on social research methods (used by researchers in any discipline)
- ii. Provides description and/or rationale for the fit of the research methods that have been (or were in train to be) applied, developed or adapted to the social conditions and public health mandates accompanying Covid-19

Paper Type

- iii. Journal article report or discussion of individual empirical studies or synthesis/review of these; or peer-reviewed published conference proceedings (other conference papers will be covered in the review of the grey literature)
- iv. Written in English

Timespan

- v. Published 1 January 2021 - 31 December 2021.

Studies were **excluded** if they met **ONE** of the following exclusion criteria:

Scope

- i. DOES NOT focus on social research methods (Exclude 1)
- ii. DOES NOT provide description and/or rationale for the fit of the research methods for the social conditions and public health mandates accompanying Covid-19 (Exclude 2)

Paper type

- iii. NOT a Journal article report or discussion of individual empirical studies or synthesis/review of these or peer-reviewed published conference proceedings (Exclude 3)
- iv. NOT written in English (Exclude 4)

Timespan

- v. NOT published 1 January 2021 - 31 December 2021 (Exclude 5)

Screening of studies identified from databases using the search strategy was conducted in four steps: three stages proceeding through a series of graduated filters followed by a fourth selection of the most relevant studies for the synthesis (see Table 1).

Stage	Output
i. Identifying all studies with potential to meet the inclusion criteria	Database A – all studies retrieved
ii. Scrutinising the titles (and where necessary also the abstracts and methods sections); applying the inclusion and exclusion criteria to papers in Database A. This primarily enabled exclusion of papers (that were clearly not about the research methods in pandemic conditions). Screening was applied to a wide and as comprehensive a range of papers as possible in the time using this search strategy.	Database B – all studies that appeared to meet the inclusion criteria
iii. Scrutinising full papers for all studies in Database C; applying the inclusion and exclusion criteria	Database C – all studies that met the inclusion criteria
iv. Selection of papers that would be included in the narrative synthesis according to their potential to answer the research question	Database D – studies for inclusion in narrative synthesis

Table 1. Study screening and filtering stages

One researcher (Coverdale) conducted the bulk of the search with a sample of the databases searched by a second researcher (Nind) to provide a point of comparison and double check the application of the search strategy and inclusion/exclusion criteria. Papers that indicated selecting a particular method for a study in Covid-19 conditions but provided little or no detail were mapped to add to our broad picture of evidence about methods in the social milieu. Only when rationale or new evidence about adapting or using the method in Covid-19 times could be gleaned were papers allocated for in-depth read. Both researchers were involved in the decision-making on any grey area papers.

Narrative synthesis of included studies

Keywording represented a preparation stage ahead of the narrative synthesis of the included studies. It allowed the building of a picture of the published literature focusing on: the kinds of research conducted; where; in which conditions; and utilising or adapting which types of research methods. It also allowed identification of studies to include in the narrative synthesis. This process did not attempt to assess the quality of the studies at this stage. The keywording strategy was designed to assign generic and review-specific keywords as follows:

Generic:

- Paper reference details tied to a paper ID number
- Source (indicating databases/handsearching)
- Country
- Discipline
- Participant groups
- Study type

Review-specific:

- Research method
- Constraining conditions
- Key contribution (free text)
- Recommendation

In the fourth filtering stage, a smaller selection of Database C papers were selected for inclusion in the narrative synthesis based on their potential to answer the research question. These papers became Database D. Database D papers were appraised for a) relevance – appropriateness for answering the research question, and b) quality.

As this review was concerned with the way in which methods were used and adapted to generate data in pandemic conditions (argument-based), relative quality values were not ascribed to studies based upon checklists and quality was not used as a reason to exclude papers. Ordinarily, the inclusion of low-quality studies when synthesising data can give rise to inaccurate conclusions, hence only papers meeting methodological minimum adequacy standards are included. However, in the absence of agreed standards for quality appraisal of normative literature for systematic reviews, an *all things considered* conclusion of low/medium/high quality was reached (with a recorded audit trail, Popay et al. 2006) in which the quality appraisal took into account:

- the clarity of focus of the paper
- attention to the methodological literature
- attention to theory
- depth of rationale for the method/adaptation of method
- consideration of ethical challenges
- evidence of reflexivity
- technical merit (clear and appropriate description)
- internal coherence (fit of method to objective, paradigm and challenge)
- evidence of testing the method to produce viable findings
- clarity of the basis for the conclusions
- the authors' own evaluation of the strengths and limitations.

This allowed the reviewers to consider the extent to which the paper was valid for its own purpose and for the purpose of the systematic review (see Garside, 2014).

Map 1 tabulated the paper characteristics: *Reference, source, country, discipline, participant group, study type, research method, constraining conditions, key contribution and recommendation.*

Map 2 recorded: *Reference, aim pertaining to methods development, context, all things considered quality, core findings, and authors' conclusions.*

Additionally, papers were all given a recommendation from the following:

- **Recommendation 1a – (meets inclusion criteria and) merits an in-depth read** as there is detailed material about the rationale for the method being a good fit for Covid-19 social conditions or reflection on or evidence about those methods
- **Recommendation 1b – (meets inclusion criteria) but useful only for descriptive map** as states connection between the method and Covid-19 social conditions but does not go into detail or report or reflect on the fit or effectiveness
- **Recommendation 2 – (does not meet inclusion criteria but) reserve as potential for further reading** as the paper discusses potentially useful methods for Covid-19 social conditions and could be useful for creation of project resources
- **Recommendation 3 – (does not meet inclusion criteria but) store for use as background** as paper provides useful contextual material about Covid-19 social conditions

Narrative synthesis was developed using the above data extraction process to provide organisational structure. The quality appraisal was used to judge weight given to each paper's contribution. Reading of the full text papers to retain context was necessary to interpret each paper's contribution to answering the systematic review research question. Common threads, headline messages and practical pointers were identified and synthesised in the narrative.

Table 2 shows the numbers involved in the stages and Figure 1 shows the flow of the process.

	2020	2021
Database A*		
Web of Science Core Collection	486	2,591
Scopus	395	1,608
PsycINFO	15	98
ERIC	0	0
Social Science Premium Collection (ProQuest)	26	57
Database A Total	922	4,354
Database B		
Hand sifted papers from Database A	81	260
Book chapters from Kara & Khoo (2020)	33	N/A
Database B Total	114	260
Database C		
Recommendation 1a	64	138
Recommendation 1b	31	68
Total papers/chapters mapped	95	206
Recommendation 2	12	14
Recommendation 3	7	40
Database D		
Total papers/chapters included in the synthesis	64	138

Table 2: Numbers of papers at each stage of the process

*Totals include duplications that were identified during hand sifting

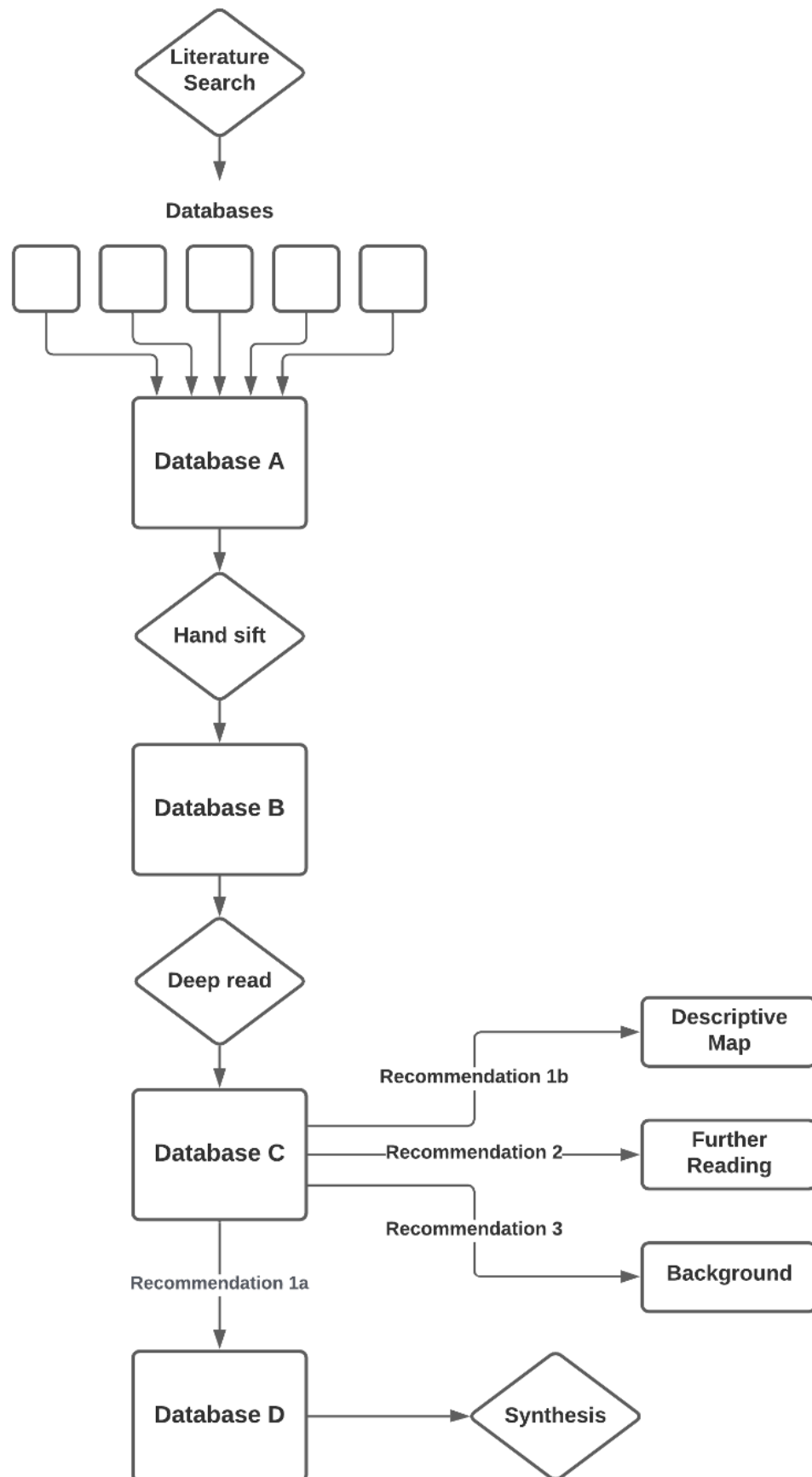


Figure 1: Flowchart to show the methods process

Findings

A further review of the literature on methods evolution in the pandemic has been published on the topic of digital interviews (Thunberg & Arnell, 2021). There have been special issues again, for example, *Journal of Mixed Methods Research* on COVID-19 and Novel Mixed Methods Methodological Approaches During Catastrophic Social Changes; the American Sociological Association *Footnotes on Sociologists and Sociology During COVID-19*; *Higher Education Research Communications* on Implications of COVID-19 on Higher Education; *Qualitative Social Work* on Reflections on a Pandemic: Disruptions, Distractions, and Discoveries. Mostly, however, special issues identified through the search have focused on substantive issues.

The findings are structured beginning with descriptive mapping and moving to synthesis.

Mapping the selected articles

Researchers were reporting in the English language, on methods use and adaptation:

- in studies in the USA (36), UK (23), Australia, (14), Canada (10), India (10), Italy (6), South Africa (5), and 38 other countries;
- in studies in social science disciplines plus public health, healthcare and many more disciplines (see Appendix);
- in publications that spanned empirical papers, methodological papers/protocols, commentary/position/opinion papers, theoretical/conceptual papers, reviews/systematic reviews, reflective essays, letters and editorials;
- in studies with diverse participants including academics (the self), professionals, children and young people, older people, lone parents, disabled people, people with Covid-19, people in education, health and care settings, indigenous people, migrants and refugees and people experiencing homelessness, people in war zones, prisoners;
- in relation to surveys and rapid surveys, recruitment practices, interviews and focus groups, workshop-based methods, Q methodology, rapid qualitative analysis, remote/virtual observation, autoethnography, online ethnography/netnography, sensory methods, participatory and expressive methods, think aloud, (virtual) mapping, material methods, digital/secondary data/ social media analysis;
- for the physical (social) distancing conditions of Covid-19 public health mandates, under time pressure and in the context of travel restrictions/bans, quarantine periods and lockdowns with restricted rights to movement/public assembly, closure of schools, non-essential businesses and hospitality venues and their re-openings, plus prevalent psychological distress and anxiety.

To provide a descriptive overview of the findings, the research question (***How have social research methods been successfully adapted or designed for use within pandemic conditions?***) was de-constructed to report:

- a) What methods have been employed or adapted?
- b) What evidence is there of their success?
- c) What pandemic conditions were driving the changes?

d) What was different between 2020 and 2021 and what does this tell us about the sustainability of methodological adaptations? What methods have been employed or adapted?

Table 3 shows the methods and changing research practices the papers were discussing:

2020	2021
Adaptation of surveys , including recruitment methods and mode changes from in-person interview mode to postal mode, computer-assisted telephone interview (CATI) mode, online mode and mixed modes	Adaptation of surveys , including recruitment methods and mode changes from in-person interview mode to postal mode, computer-assisted telephone interview (CATI) mode, online mode and mixed modes Combining mobile phone survey and pre-existing survey data to generate rapid data on the impacts of the Covid-19 Use of email pre-alerts for web surveys
Employment of rapid surveys	Employment of rapid surveys
Introduction of pandemic-specific supplementary surveys and use of sub-samples to mitigate threats to validity	Use of pandemic-specific supplementary surveys and use of sub-samples to mitigate threats to validity
Adaptation of qualitative individual or group interviews , including shift from in-person interviews to telephone or online interviews	Adaptation of qualitative individual or group interviews , including shift from in-person interviews to telephone or online interviews and practice of offering choice of interview mode
Employment of ethnographic, diary and expressive methods	Employment of ethnographic, diary and expressive methods
Adaptation to cultural probe methods	Employment of online ethnographies
Utilising the support of communities and community leaders in participatory research	Utilising the support of communities and community leaders in different kinds of research
	Adaptation of in person workshop-based methods to online versions facilitated by video conferencing (Zoom) and online collaborative whiteboarding platform (Miro)
	Development of outdoor methods and hybrid outdoor/online methods
	Adaptation to home visits to become online
	Adaptation of RCTs

Table 3: Methods and practices topics 2020 and 2021

What evidence is there of their success?

Some of the adaptations/methods are reported to be successful, most notably those listed in Table 4.

2020	2021
Using targeted Facebook advertising for recruitment to achieve balanced survey samples	Using online recruitment for diverse, geographically spread participation, quicker response rates and lower dropout rates Targeted use of social media and mobile health apps, using celebrities and social media influencers to promote recruitment Using pre-existing sampling frames for balanced samples
Offering postal as well as online modes for including elderly people in surveys	Offering multiple modes options for including elderly people in surveys
Providing a telephone option in surveys to achieve good response rates, especially with 3-4 repeat attempts	Minimising phone interview length for effective surveys Using top-up for mobile use as an incentive for lower-income population engagement in surveys Call-back protocols to increase response rates Calling at different times and using female enumerators to increase women's participation in phone surveys
The move from in-person interviews to online or telephone individual interviews	The move from in-person interviews to online or telephone individual interviews Using two researchers in virtual interviews, dividing interview and technical roles
The use of autoethnographic, diary and expressive methods	The use of autoethnographic, diary and expressive methods
Getting support from community leaders/communities in participatory research	Utilising community leaders for recruiting for research and building rapport
	Adapting RCT protocols to allow continuation

Table 4: Successful adaptations reported 2020 and 2021

Details of the methodological adaptations found to be effective are included below.

What pandemic conditions were driving the methods/changes in methods?

Much of the 2021 literature pertained to the early 2020 period of the pandemic and:

- the need for 'social' (actually physical) distancing to keep people safe including national variations in public health mandates which were particularly problematic for cross-national studies;

- closure of sites for research (e.g. schools);
- forced cancellation of events and interruptions to services;
- travel restrictions or travel bans;
- social and emotional dimensions - stress, anxiety, changing priorities, daily routines, workplaces and living conditions; and
- interaction with other social changes.

In addition, some of the 2021 pertained to new developments including:

- ‘opening up’ and lifting of restrictions, which meant uncertainty for researchers and management of vulnerabilities and safety protocols.

Synthesis

To synthesise the 2021 literature, we use the same structure as for the 2020 review to show what the evidence says about, in the wake of the Covid-19 pandemic, (i) making research happen; (ii) making research valid and trustworthy; and (iii) making research ethical.

Additionally, we synthesis evidence on making research sustainable, addressing the longevity and embeddedness of changing research practices in what remains an uncertain world. We recognise that these are not discrete categories and that there is considerable overlap in the intersection of efficacy, ethics and epistemology.

Making research happen

Survey research has been seriously impacted by Covid-19 and this featured strongly in the 2020 review. The 2021 literature shows that to make survey research happen during the pandemic researchers have continued to design (or re-design) surveys to address urgent concerns related to the effect of Covid-19, for example on childhood poverty (Crivello & Favara, 2021), mental health (Seligson et al., 2021) and the plight of migrants (Tanner, 2021). Adapting surveys has mostly meant developing rapid surveys (HZ Rahman et al., 2021; Ramlagan et al., 2021) and changing survey modes (Crivello & Favara, 2021; Lin et al., 2021; Walker et al., 2021) and lengths (HZ Rahman et al., 2021) to cope with the need to function remotely. Seligson et al. (2021) highlight the redesigning of survey protocols because the majority of researchers were working from home. There have been innovations too, such as utilising mobile phone surveys and pre-existing survey databases to generate rapid and insightful data on the impacts of the Covid-19 pandemic (HZ Rahman et al., 2021) or utilising WhatsApp calls between researcher, respondent and cultural mediator (Walker et al., 2021).

In promoting and **recruiting** for surveys, Purewal et al. (2021) advocates a ‘multi-pronged’ and ‘multi-channel’ approach. The switch to online recruitment has revealed newfound advantages, including opportunities for more diverse and geographically spread participation, quicker response rates and lower dropout rates (Halliday et al., 2021; Oliffe et al., 2021; Purewal et al., 2021). Other studies include experimenting with email alert pre-notifications to improve response rates to web surveys (Frandell et al., 2021).

In terms of **efficacy**, rapid research has been achieved by a combination of using pre-existing, national-level, mobile phone interview sampling frames, minimising interview length by restricting to five focused questions, using close-ended questions related to direct experiences rather than subjective opinions, teamworking and webinar-based dissemination (HZ Rahman et al., 2021). Increased response rates among low income, high-density groups have been achieved through targeted use of social media and mobile health apps at low cost, utilising celebrities and social media influencers to promote the surveys (Ramlagan et al., 2021). The use of CATI-mobile phone surveys has grown substantially in India during the pandemic (Nagpal et al., 2021) where top-up for mobile phone use is commonly seen as the most effective incentive in lower-income households. Menon et al. (2021) recommend limiting phone surveys to 20-minutes, using simple semantic scales and shorter answer categories, and developing a call-back protocol to increase response rates. Intra-household relations and gendered digital inequalities in phone use have been particularly highlighted in these India-based studies: the majority male ownership of mobile phones and the prevalence of male gatekeeping inhibits women's representation in phone surveys. Men are usually first to pick up the phone and are often unwilling or unable to pass the phone. A survey of front-line health workers found that 65% of female respondents were on speakerphone for at least some portion of their survey (Menon, et al., 2021). Hence, calling at different times of the day to improve response rates, the use of female enumerators, the rescheduling of calls and a structured call-back protocol are recommended (Agarwal, 2021; Hersh et al., 2021; Khalil et al., 2021).

New in 2021 is data on **experimental research**, specifically adapting a randomised control trial - previously using home visits, in situ video and developmental assessments to collecting synchronous data online addressing the challenges of internet access, video-conferencing platforms, assessment and video quality (Solís-Cordero et al., 2021) and adapting a mixed methods design (Bueddefeld et al., 2021) to meet safety protocols and retain rigour.

In **qualitative studies**, effective methods for recruiting and maintaining contact with participants became increasingly reliant on collaborating with local stakeholders and organisations, and through the use of snowball sampling (Lane et al., 2021; Panter-Brick et al., 2021; Renosa et al., 2021). The 2021 evidence on making research happen also continues to focus on the pivot from in-person to online **interviews** (Melis, Sala & Zaccaria, 2021; Self, 2021) and focus groups (Howlett, 2021; Nobrega et al., 2021), with the doing of fieldwork in cyberspace somewhat platform/device-dependent (Howlett, 2021). There are further reports of adapting in-person interviews to interviewing by telephone, particularly making use of mobile phone apps (Kaufmann et al., 2021). The evidence shows researchers making use of the affordances of the new technologies becoming established for access and networking (Meskell, Houghton & Biesty, 2020) as well as data generation, such as research workshops using video conferencing (Zoom) and online collaborative whiteboarding platforms (Miro) (Constantin et al., 2021). Workshops generally have the potential to democratise the research process (Shamsuddin et al., 2021), with additional tools through online modes (e.g., online whiteboarding, virtual post-its, mind mapping and voting functions) presenting new opportunities for the co-construction of knowledge. However, observations of participant interactions (usually pertinent data from in-person workshops) may be compromised by the online environment.

There are innovations reported too, with researchers experimenting with possibilities for safely using **outdoor/in situ methods** or hybrid outdoor/online methods (Shareck et al, 2021) and voice interview conducted during a participant's morning walk (Howlett, 2021). Some indoor in person research is reported but in with methods situated within the challenges associated with school re-openings, ongoing distance protocols and the threat of re-imposed lockdown and closure (Pascal & Bertram, 2021). Also new has been the development and integration of digital methods to exploit big data and geo-located data (De Falco & Romeo, 2021) and the 'weaving together' of online ethnographies with other virtual methods and secondary data (Krause et al., 2021). Sedysheva (2021) highlights the potentially massive increase in data in adopting online ethnography and the need to be selective in choosing sources.

Researchers have adopted flexible, adaptable, and creative **approaches to engaging with participants**, with Kobakhidze et al. (2021), for example, offering the choice of interviews by phone, video, email and in-person. Several noted the flexibility of telephone interviews for participants (Khalil et al., 2021; Tarrant et al., 2021). Schlegel et al (2021) opted to pivot from focus groups to individual online interviews, as the virtual environment was not considered appropriate for wider discussion of the sensitive topic of sexual and reproductive health. Khalil et al. (2021) advise researchers using primarily remote methods to ideally include some in-person interaction, even for a brief period, to establish some degree of rapport with participants.

In terms of **efficacy**, the key messages from 2020 have been reinforced, that is, using multiple and diverse recruitment modalities can help researchers identify, contact, and recruit a diverse sample (Kim et al., 2021) including older people when community leaders and local stakeholders are involved (Melis et al., 2021); online and telephone interviews are effective despite the challenges of digital access (Melis et al., 2021) and missing visual cues (Walker et al. 2021) and opportunities to provide comfort and empathy through touch (Webber-Ritchey et al. 2021). Studies indicate researchers are well practiced in using online technologies, and as participants have become more familiar with using online methods, Self (2021) challenges the perception that the face-to-face interview remains the 'gold standard' for qualitative research. Research relationships established in person have been maintained online (Walker et al., 2021) and new relationships have been built, sometimes aided by expressions of support from community leaders and local stakeholders (Melis et al., 2021) or more practical suggestions during informal 'virtual coffees' with them (Roberts, Pavlakis & Richards, 2021).

Continued examples of the online pivot in 2021 reinforce claims of cost and time reductions, enhanced participant recruitment and greater flexibility and convenience (for researchers and participants) (Alanazi et al., 2021; Self, 2021; Tesson et al., 2021). **Online and mixed-mode methods** were seen as particularly effective in migration research, for their flexibility and suitability to the dynamic and unpredictable movement of specific groups (Andrejuk, 2021; Gruber et al., 2021). Kaufmann et al. (2021) present the **Mobile Instant Messaging Interview (MIMI)** as a low-cost, easily feasible and short-term implemented approach, useful for capturing mundane, routinized and less reflected practices. They also highlight the potential to use MIMI as part of mixed methods or longitudinal studies to maintain contact with participants. In their research with refugees, Panter-Brick et al. (2021) also found WhatsApp to be the most frequently used method of communication.

Roberts et al. (2021) found it effective to use two researchers in **virtual interviews**; one to build rapport and trust and conduct the interview, and one to monitor, prompt, make notes, and attend to technical tasks such as screen sharing. In online interviewing `co-presence' rather than 'co-location' was found to maintain or intensify intimacy (Howlett, 2021). In virtual interviews with men discussing intimate partner relationship breakdowns, Oliffe et al. (2021) note the therapeutic value of the home environment for participants, prompting relaxed, natural and spontaneous reactions. Conversely, researchers report participants choosing not to turn on their cameras during virtual interviews to reveal home environments, limiting visual cues and increasing the researchers' attentiveness to the participants' voice and intonation (Kobakhidze et al., 2021; Rashid et al., 2021). For some researchers, the disruptive nature of conducting online interviews provided useful data, gaining insight into the participants' home environments, with 'parents "hiding out" in home offices, cars, porches, garages, or backyards... frequently interrupted by kids asking for help or with their young children snuggled next to them on the couch' (Averett, 2021, p. 323).

In online **focus groups**, Halliday et al. (2021) observe participants tend to talk over each other less than they do in face-to-face groups, while Ramia et al. (2021) suggest there is less tendency for participants to create cliques or 'microalliances' online than in face-to-face groups. Santhosh, Rojas & Lyons (2021) found that the threat of distractions affecting the quality of online focus groups could be mitigated with careful preplanning and practice sessions. Even with cameras on, 'choppy purviews' limit insight and understanding from what is observed (Oliffe et al., 2021). Given that online interviews and focus groups are more likely to be video-recorded than those conducted in-person (which tend to be audio-recorded only), Pocock et al. (2021) discuss how additional visual material may be included in analyses.

Researchers have demonstrated the ability to adapt **supplementary written and visual methods** when transferring to online interviews and focus groups. In virtual focus groups run by Nobrega et al. (2021), the traditional use of post-it notes were replicated by collecting two- to five-word responses through the chat feature, which were collated and numbered in a cloud-based spreadsheet. However, Jairath et al. (2021) note the difficulties in implementing visual timeline mapping in online interviews to help participants contextualise their experiences. In their participatory action research, Ramia et al. (2021) successfully adapted the Photovoice method virtually, acknowledging this requires considerably greater time investment and reliable connectivity. Lomax et al. (2021) navigated their shift to conducting participatory research with children online through the co-production of creative, digitally mediated methods by using the children's own drawings, photographs and music. Group interaction online may be particularly suitable for vulnerable groups and young people, as it reduces some of the barriers associated with shyness and social inhibitions (Ramia et al., 2021). In transferring their developmental studies online, Chuey et al. (2021) highlight the challenge of keeping children attentive and engaged, recommending breaking sessions into series of short multiple, distinct activities.

The 2021 literature again shows that changing research practices may be about changing the **pace of research**, responding rapidly (Meskell, Houghton & Biesty, 2020), having to pause (Villarosa et al., 2021) or delay (Crivello & Favara, 2021). More positively, the pivot to online permitted flexibility, for instance for scheduling remote focus groups/interviews at 'non-

traditional' times to accommodate the schedules and workloads disrupted by Covid-19 (Santhosh et al., 2021). Increasing the pace of data collection and analysis requires a trade-off, balancing speed and rigour in time-critical research (Rolf et al., 2021). As part of their rapid research project, Rolf et al (2021) devised the 'RITA' (Rapid Identification of Themes from Audio) model of analysis, which included the development of a shared online space for the widely dispersed rural based researchers based on an innovative use of tagging to identify resources and data.

Ethnographies have often had to be radically changed to take into account distancing measures as Arya & Henn (2021) discuss in detail; this involves finding new ways to build rapport, engage in participant observation and access events. Finding new ways to spend time in shared activities and spaces to build trust was for them 'an unexpected benefit of online interaction that can be used in future research design' (p. 12). In their ethnographic study in a Covid ward, Halberg et al. (2021) provide excellent insight into the participant-as-observer role of nursing researchers adopting a dual position to become fully integrated into the daily routines of colleagues as they worked together in a heightened crisis situation. During traditional in-person fieldwork, researchers become familiar with local environments, which become points of reference with participants in interviews. In place of this in pandemic restrictions there has been enhanced the use of digital resources such as news reports and Google Maps (Kim et al., 2021). Kobakhidze et al. (2021) emphasise the triangulation of multiple data sources, namely the use of interviews with secondary data (administrative, marketing and web-based materials). In their ethnographic study of an annual religious festival which had moved online, Cocco and Bertran (2021) note how home environments and cultural artefacts became additional sources of knowledge when during virtual interviews participants 'spontaneously chose to reveal their emotional attachment and devotion to the Saint by showing paintings or sculptures' (p. 119).

Often, making qualitative research happen during the pandemic has been about finding effective ways to capture data on the everyday realities. In this arena, the interview has survived in phone and online formats, sometimes using the technologies familiar to people in their everyday lives (Walker et al., 2021). **Autoethnographic methods**, though, have been strongly in evidence in 2021 as in 2020. In terms of efficacy, autoethnography has required little adjustment for Covid-19 conditions, and thereby flourished in some cases with new variations. By incorporating a sensory method, Allen's (2021) use of 'smellwalks' in her local community provided opportunities for new embodied and material knowledge about the experience of lockdowns, particularly the everyday, mundane and small details of life. In her autoethnographic study, Smith (2021) presents the home environment as a valid research environment, particularly for women whose voices are otherwise marginalised or excluded. Similarly, Ragavan (2021) presents the balcony as a liminal space between home and field and as a spatial framing of knowledge production. Highlighting the ubiquitous male gaze on women in the Indian street, it also serves as a gendered safe space, to glimpse the outside world and engage with neighbours.

Group or **collaborative autoethnographies** from early career researchers were particularly evident. These have facilitated people linking up through online meetings or virtual support groups, and sharing individual reflective writing tasks (narrative thoughts, poetry, diaries etc),

with strong emphasis on the emotional aspects of research (Martel et al., 2021) or underpinned by feminist epistemology (Rutter et al., 2021). Dai & Amberg (2021) combined speculative ethnography, blending the tradition of speculative fiction with digital autoethnography, to explore the Chinese student experience in the US during the pandemic.

The use of flexible and **creative remote methods** - photo-elicitation, spatial map drawing, and oral diaries - can provide a deeper insight into the daily lived experiences of participants in their natural setting, particularly 'taken-for-granted aspects' of everyday life (Isaacs et al., 2021). The use of digital diaries (largely text-based by participant choice) proved effective in a UK Public Health study exploring young people's experience of the pandemic (Scott et al., 2021), involving prolonged engagement, creativity and therapeutic benefits. Maycock (2021) adopted a traditional medium in his participatory action research in which, despite challenging levels of literacy and unreliable deliveries, prisoners serving long-term sentences corresponded with the researcher through a series of prompted letter writing exercises. In a joint research study, co-developed and conducted by community researchers working with local advisors and students, Paganini et al. (2021) blended place-based research through photovoice and food environment maps with less conventional methods, which provided space for creativity, abstraction, and emotions: the sharing poems and music, dancing and yoga and the joint production of a podcast. Similarly, a team of researchers and filmmakers collaborated with women in poor neighbourhoods in Columbia to co-produce research using smartphones and digital platforms to develop remote participatory video projects (Marzi, 2021) and Coan and Losztyn (2021) found peer researchers were empowered by the shift to remote working through being distanced from the physical presence of the academic researcher.

Making research valid and trustworthy

The 2021 literature adds to the picture of concerns about what changing research practices does to the validity and trustworthiness of the research. As we have discussed in relation to efficacy above, some concerns about continuing research in the pandemic pertain to distorting research through less than ideal recruitment practices (such as using social media (Ramlagan et al., 2021)), selection **bias** (De Man et al., 2020), doing research rapidly (which risks poor survey design and non-representative samples particularly in low-and middle-income countries with greater socioeconomic disparities and digital divides (De Man et al., 2020)). Bueddefeld et al. (2021) show how the pandemic could force design changes as they adapted their experimental mixed methods design to an explanatory sequential design (with a survey, an interpretive video, naturalistic observations, personal meaning maps, interviews and the new method of comprehension assessments) to maintain the trustworthiness and rigor of their research when changing protocols. Jairath et al. (2021) emphasise the need to consider the **credibility and transferability** of findings when developing a strategic research design. Furthermore, Mwambari, Purdeková and Bisoka (2021) reflect on the risks that accompanied moving to online methods for reducing complexity of social phenomena and omission of important aspects of lived experiences. Saltzman et al. (2020) discuss the threats to validity in longitudinal research at this uncertain time. Panter-Brick et al. (2021) draw on test vs. retest data to compare online and in-person versions of their surveys to provide a good measurement of **reliability and validity**. H.Z. Rahman et al. (2021) advocate keeping rapid research rigorous through careful targeting based on policy needs and making use of Global South leadership.

As Seligson et al. (2021) observe, transitions in survey modes often necessitate changes in sampling frames, creating threats to validity, and Lin et al. (2021) highlight the challenges of sample **representativeness** and the high risk of selection bias. According to Tanner (2021), uneven phone coverage and ownership present particular threats to the representativeness of survey samples, though he argues internet-based surveys generally encounter worse sample bias. Many of the survey studies reviewed outline the primary tools for mitigating these risks, such as developing robust sampling frames and quota sampling strategies, and the use of analytical weighting.

Young & Bell (2021) stress authors should address how the pandemic impacted on the internal and external **validity** of their studies, including describing methodological adaptations to enhance the trustworthiness of their findings. They note how: 'Traditional threats to validity are amplified, including the presence of confounding variables associated with the pandemic, such as increased loneliness and depression' (p. 275). Moreover, 'Maturation effects may emerge as individuals adapt to new demands across the course of the pandemic. Selection and attrition biases, as well as observations collected during unusual times or situations, threaten study generalizability' (p. 275). Dales and Kotman (2021) promote **reflexivity** as the way forward, which they argue, is often largely neglected in quantitative research.

Researchers also observe how participants' increased focus on Covid at the expense of other issues can compromise **interview data** (Seligson et al., 2021; Wall et al., 2021), requiring researchers attending to not only what was discussed, but also what was not discussed. Teti et al. (2021) conclude participants will invariably talk about crises such as the pandemic, so researchers should modify their interview protocols to incorporate this. Ultimately, the trustworthiness of interview methods in online modes are aided by the increased familiarity with online communication of interviewers and interviewees. The pandemic has changed the modes and places in which interviews take place but researchers have adapted rapport building practices and shown that interviews can still be trusted to provide deep insights (Isaacs et al., 2021).

In summary, the 2020 literature made a big contribution to methodological debates on the theme of trusting methods and findings in Covid times. The 2021 literature was rather less explicitly focused on this.

Making research ethical

The evidence from the 2020 literature made it clear that changing research practices in response to the pandemic raised many ethical issues, particularly in relation to how Covid-19 was amplifying **societal divisions, inequities and the risk of over-burdening or excluding** particular groups from research. Teti et al. (2021) remind us that marginalised communities have been disproportionately affected by the pandemic. The literature from 2021 reinforces this message, for example, in their online interviews with teenage Syrian migrants who are resettled in Canada, Salam et al. (2021) observed that their participants' privacy was often compromised in their home environments. The 2021 literature also echoes some of the ways in which researchers were addressing ethical challenges. One example was being 'very conscious of the additional stress all participants are experiencing [and being] constantly vigilant to ensure that the project is perceived as a support to those involved rather than as an additional burden'

(Pascal & Bertram, 2021, p. 27), another was similarly collaborating with other research groups to reduce the risk of duplicating research and over-burdening participants (De Man et al., 2021).

Several studies highlight the cathartic and empowering nature of **telephone interviews**. Participants can find them less invasive than other modes, demonstrating a willingness to disclose intimate and emotional details (Tarrant et al., 2021), and the relative privacy and reduced distraction can provide agency and a safe and relaxed space to voice opinions and discuss sensitive topics and challenging life experiences (Khalil et al., 2021; Renosa et al., 2021; Serekoane et al., 2021). Ayra & Henn (2021) describe researchers and participants 'being forthcoming about well-being and mental health challenges' (p. 12) as critical to building honest and deep research relationships. Sollis et al. (2021) employed a supplementary survey to measure the impact of research participation during Covid-19. They found participants with financial and mental health concerns to be particularly prone to experiencing distress, and they recommend that future studies should, where possible, incorporate similar experiments to better understand the wellbeing impacts of research participation. Ethical challenges include attending to researcher well-being (SA Rahman et al., 2021), and Mabasa and Themane (2021) highlight the need for more research into the psychological experiences of researchers during crises like the pandemic. Specifically, Luciani et al. (2021) question the lack of research into the ethical viability of recruiting frontline health workers for research during a public health crisis such as Covid-19.

Ahluwalia-Cameron (2021) provides a view of the doctoral experience during pandemic, where loss of income and childcare supports negatively impacted productivity. For Sedysheva (2021), the pandemic highlighted the need for greater institutional mental health support for doctoral researchers, as she shares her own experiences: 'The ruining of all my research travel plans, the quarantine and added feelings of uncertainty have all contributed to pushing me toward a deep personal crisis... when I found myself in a situation of complete uncertainty and anxiety, I was almost unable to conduct any work' (p. 83).

In contrast, Kobakhidze et al. (2021) were surprised at the willingness and enthusiasm of teachers, parents and administrators to participate in their study on kindergarten education despite increased schedules and responsibilities. They suggest that participating in research offered welcome opportunities for personal and professional connection. Averett (2021) similarly reflects on the eagerness of parents to participate in her research: 'I've never had an easier time recruiting participants... I found that parents were not just willing to talk, they were eager, even desperate, to do so' (p. 322).

In terms of protecting physical health rather than emotional well-being, several studies describe researchers cautiously **returning to in-person observations and interviews**, implementing social distancing, and developing enhanced safety precautions and protocols (Lau et al., 2021; Sumesh & Gogoi, 2021). When providing participants with iPads and portable hotspot devices, Shepperd et al. (2021) maintained a rigorous safety protocol, wearing masks and maintaining social distancing with participants, and using hand sanitisers, disinfectant wipes and zip-lock bags. In their observations in licensed premises following their reopening, Fitzgerald et al. (2021) restricted fieldwork to before 11pm and to premises offering advance booking to ensure that fieldworkers had a table, putting the ethics of care above the **representativeness** and

validity of data in linking alcohol consumption and Covid transmission risks. In a rapid qualitative study into rough sleeping, Parkin et al. (2021) conducted socially distanced recruitment through onsite leaflet dropping but still chose to conduct interviews by telephone.

The pandemic deepened the emotionality of ethnographic research, highlighting the importance of building **trust and empathy** with participants (Ponting, 2021). In the shift to virtual ethnography, Serekoane et al. (2021) describe fieldworkers' 'experiential displacement' and reflect on the challenges of building and sustaining rapport and trust with participants. Ethnographic fieldwork also continued to highlight the reliance on, and empowerment of, local researchers. As Nambiar et al. (2021) conclude, 'the onus is now on us to sustain, nourish and extend those relationships so that we may all be able to grow our knowledge and contribution' (p. 5). For Hermans et al. (2021), this requires inclusive and holistic research approaches that prioritise the independent and equitable involvement of partners and enable and empower local researchers through increased funding and open access to data and resources.

Averett (2021) emphasises the role of interview-based research as an example of **feminist praxis and ethic of care** during a social crisis and, reflecting on the challenges of conducting remote interviews from home with a toddler, Ahluwalia-Cameron (2021) established a shared understanding with many participants who were also mothers working from home, leading to 'authentic discussions about what was happening in their lives and workplaces' (p. 5).

In the 2020 literature, the use of online interviews continued to expose the digital divide, but also highlighted **inequalities beyond digital access**: social stigma related to home environments, lack of access to safe, quiet, and private spaces, and additional burdens on participants (e.g., childcare) (Lathen & Laestadius, 2021). Several researchers position the impact of Covid-19 in context with other social and physical challenges, reminding us that the pandemic is not necessarily the only crisis people are experiencing, and acknowledging the 'layered vulnerabilities' (Salam et al., 2021) of some participant groups. In their study of disaster recovery following tornados in Tennessee, Kim et al. (2021) describe how the pandemic actually provided a less emotional, mutually relatable topic for participants to discuss, helping researchers create empathy and providing the opportunity to shift the conversation towards the research topic.

In relation to research in the Global South researchers are urged to consider how online exchanges and platforms can eclipse the vital aspects of immersion in the context and trust-building (Mwambari et al., 2021). Covid-19 interacted with factors such as poverty as in the study by Lusambili et al. (2021) in which participating refugee women in Kenya were too poor to buy face masks. As reported in the first rapid evidence review, researchers were advocating data collection by community members rather than outsider researchers when Covid-19 complicated existing barriers and divisions (Lusambili et al., 2021; HZ Rahman et al., 2021) in order to give local researchers agency in research process and build more equitable collaborations (Mwambari et al., 2021). However, they note the epistemological justice (and therein ethical) point that changing research practices for Covid-19 'risk of re-colonisation [as the] turn away from the ethnographic privileging of emic views has the real potential to promote top-down, etic knowledge, "universal theoretical models" privileging dominant epistemes, and technical/non-critical paradigms. Acknowledging her privileged position as a Global North

researcher able to travel back to her home country, Kuiper (2021) explores disparities in perceptions of risk are 'shaped by different cognitive orientations, values, and cultural ideologies' (p. 13). Similarly, Asante et al. (2021) provides a critical perspective on the power dynamics between African and US academics and how risk perceptions reinforce existing hierarchical structures, drawing on a feminist ethics of care to outline new opportunities in collaborative fieldwork and the co-production of knowledge.

In terms of beneficence, once again the literature shows how social researchers have sought to do good through their research in the pandemic, such as finding rapid answers on how to best address Covid-19 (Crivello & Favara, 2021) or understanding how social systems, eco-systems and the impacts of Covid-19 relate as crucial to solving future major sustainability issues (Santana et al., 2021). Keeping research going during Covid-19 was for some an ethical issue in itself, especially when related health issues were emerging (Villarosa et al., 2021) or vulnerable families were involved (Roberts et al., 2021). This might mean re-prioritising (Villarosa et al., 2021) or refocusing questions (Roberts et al., 2021) to address the most urgent needs. It might mean attending to researcher wellbeing and using participatory methods so that distressed people, organizations and researchers can collaborate to their mutual interest for positive social change (Santander et al. 2021).

Making research sustainable

The 2021 research literature supports the analysis of what social researchers have been doing, not just to make research happen in the crisis periods of the initial lockdowns, but as things have continued to change. This means the social research community has increasingly considered the futures of methods. This includes not just pivoting to online but dealing with the fatigue of months spent online and overall toll of the pandemic on people and research. With **uncertainty** dominating research for many with ongoing pandemic conditions constantly evolving, it is clear that methodological and ethical issues will require continued reviewing and reflection, and researchers will need to continue to be transparent in reporting methods adaptations and how these impacted their analysis and dissemination of findings (Pocock et al., 2021). Several authors reflect on the unpredictability and pervasiveness of Covid in an 'unfolding era' of 'divergent pandemic timelines' (Newman et al., 2021).

Methodological adaptations during Covid have required a process of unlearning and re-learning (Renosa et al. 2021), prompting researchers to ask fundamental questions of their research practice (Lane et al. 2021). Viewing the pandemic as an opportunity to rectify inequalities in how fieldwork is conducted, Krause et al. (2021) advocate greater use of 'field citizens', highlighting the role of partnership building based on mutual trust and shared responsibilities. Many researchers have critically reflected on the implications for **future practice** and health researchers in particular have had to be responsive and agile, improvising and re-strategising to continue doing timely, effective, and impactful research (Seligson et al., 2021; Varma et al., 2021). In their survey of health researchers in Germany, Bratan et al. (2021) report non-Covid studies being severely disrupted by the pandemic, as many researchers were forced to abandon or delay their projects in favour of front-line care. The authors recommend implementing steps to improve long-term resilience in health research, including greater flexibility in research designs and greater acceptability of digital methods. Tremblay et al. (2021)

reflect on how some of the clinical and healthcare practice responses to Covid-19, such as introducing virtual consultations, could be adopted by researchers in the short and long term. Similarly, the quick design adaptations made by Bueddefeld et al. (2021) to adhere to public health protocols have stimulated innovation and the leveraging of technology to replace in-person experience in a form of methodological bricolage that becomes the new standard to take forward in future studies.

S.A. Rahman et al. (2021) advocate critical reflection on how to increase and embed **resilience** in future projects in which researchers can be 'more aware of when to adapt and change and when to take a break, pause, and evaluate' (p. 8). They seek to 'provide guidelines, reflections, and insights to those who have weighed their options and have chosen to continue doing research during a crisis as well as to those looking to build resilience in their research projects and plan for unexpected disruptions' (p. 2). Such resilient, sustainable research practice includes 'detailed and robust contingency planning' and consideration of the affordance of online methods in any post-Covid study. Similarly, Ramlagan et al. (2021) propose further exploration of the potential to enhance participation in safe, efficient research through virtual means is needed for a sustainable research model. This approach is reflected in the completely virtual mixed methods design in the protocol of Saltzman et al. (2021) designed for an uncertain future.

Looking forward, researchers can minimise the impact of crises and other disruptions through strategic and **adaptive research design and enhanced risk assessment** (Hermans et al., 2021). For Krause et al. (2021), the experience of doing research during the pandemic has made contingency planning a central part of research designs, through which researchers must 'anticipate the unforeseeable' by being more flexible, building better relations, and finding innovative and creative ways to collect data. Jairath et al. (2021) recommend a pragmatic approach that is responsive to changing circumstances and is partly guided by participants. Drawing on their experiences in community-based participatory research, Teti et al. (2021) emphasise greater skill sharing, flexibility, and adaptiveness to participant needs, further empowering key stakeholders to contribute to research designs. Lane et al. (2021) present a positive and opportunistic perspective, describing disruption in the research process as an opportunity to be productive in related academic activities, developing new skill sets and knowledge. Drawing on her own autoethnographic work, Smith (2021) advocates exploring a more ethical and inclusive approach: 'Pandemic-triggered lockdowns should prompt a reevaluation of academic research norms, particularly in relation to researchers and research topics which sit uncomfortably within established methodologies and output metrics' (p. 12).

Conclusions, implications and recommendations

The first rapid evidence review showed that ‘no researcher now needs to start from a blank page: others have gone before them, documenting the rationale for the methods decisions they have made’. The updated rapid evidence review shows how researchers have continued to adapt research practices and methods to make them fit for the evolving context.

We recommend that researchers make use of the rapid evidence reviews, in combination with the other project resources such as the NCRM Wayfinder guides, so that they are more prepared and informed about the options available to them. Based on the evidence reviewed, we again stress the need to address the significant ethical and epistemic challenges alongside the practical and technical challenges in times of crisis and ongoing uncertainty. Researchers have found ways not just to get through a crisis, but to carry on over a prolonged period of disruption. It is important now to learn from the process, so that the best of the methodological adaptations can become embedded in research practices that are flexible and sustainable.

References

*indicates included in the rapid evidence review

- *Andrejuk, K. (2021) Online qualitative research in immigrant communities: opportunities and challenges during the pandemic. *Ask: Research and Methods*, 29(1).
<https://doi.org/10.18061/ask.v29i1.0004>
- *Agarwal, B. (2021) Reflections on the less visible and less measured: gender and COVID-19 in India. *Gender & Society*, 35(2). <https://doi.org/10.1177/08912432211001299>
- *Ahluwalia-Cameron, A. (2021) Dissertation data collection during a global pandemic: barking dogs, crying babies, and feminist social work. *Affilia*.
<https://doi.org/10.1177/08861099211048244>
- *Alanazi, A.S., Wharrad, H., Moffatt, F. et al. (2021) Q Methodology in the COVID-19 era. *Healthcare*, 9(11). <https://doi.org/10.3390/healthcare9111491>
- *Allen, L. (2021) The smell of lockdown: Smellwalks as sensuous methodology. *Qualitative Research*. <https://doi.org/10.1177/14687941211007663>
- *Arya, D. & Henn, M. (2021) COVID-ized ethnography: Challenges and opportunities for young environmental activists and researchers, *Societies* 11(2),58 <https://www.mdpi.com/2075-4698/11/2/58>
- *Asante, C., Burack, S., Chileshe, M. et al. (2021) Co-producing knowledge and care in team-based fieldwork in the Covid-19 era. *Anthropology Southern Africa*, 44(4).
<https://doi.org/10.1080/23323256.2021.1974908>
- *Averett, K.H. (2021) A feminist public sociology of the pandemic: Interviewing about a crisis, during a crisis. *Gender, Work & Organization*. <https://doi.org/10.1111/gwao.12616>
- *Benson, T., Pedersen, S., Tsalis, G. et al. (2021) Virtual co-creation: a guide to conducting online co-creation workshops. *International Journal of Qualitative Methods*, 20.
<https://doi.org/10.1177/16094069211053097>
- *Bratan, T., Aichinger, H., Brkic, N. et al. (2021) Impact of the COVID-19 pandemic on ongoing health research: an ad hoc survey among investigators in Germany. *BMJ Open*, 11(12).
<http://dx.doi.org/10.1136/bmjopen-2021-049086>
- *Bueddefeld, J., Murphy, M., Ostrem, J., Halpenny, E. (2021) Methodological bricolage and COVID-19: An illustration from innovative, novel, and adaptive environmental behavior change research, *Journal of Mixed Methods Research*. <https://doi.org/10.1177/15586898211019496>
- Butler, G., Deaton, S., Hodgkinson, J., Holmes, E. & Marshall, S. (2005) *Quick but not Dirty: Rapid Evidence Assessments as a Decision Support Tool in Social Policy*. Available from:
http://www.gsr.gov.uk/downloads/new_research/archive/quick_not_dirty05.pdf

- *Campbell, L.R. (2021) Doctoral research amidst the Covid-19 pandemic: Researcher reflections on practice, relationships, and unexpected intimacy, *Qualitative Social Work* 20(1-2), 570-578.
- *Chuey, A., Asaba, M., Bridgers, S. et al. (2021) Moderated online data-collection for developmental research: methods and replications. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2021.734398>
- *Coan, S. & Kristian, L. (2021) Learning from adapting an established face-to-face peer research approach to remote delivery during the Covid-19 pandemic. *Sage Research Methods*. (In Press) <https://eprints.leedsbeckett.ac.uk/id/eprint/8181/>
- *Cocco, C. & Bertran, A. (2021) Rethinking religious festivals in the era of digital ethnography. *Social Analysis*, 65(1). <https://doi.org/10.3167/sa.2021.650107>
- *Constantin, A., Alexandru, C., Korte, J., Wilson, C., Fails, J.A., Sim, G., Read, J.C. & Eriksson, E. (2021) Distributing participation in design: Addressing challenges of a global pandemic. *International Journal of Child-Computer Interaction*, 28.
<https://doi.org/10.1016/j.ijcci.2021.100255>
- *Cooper, F. & Jones, C. (2022) Co-production for or against the university: student loneliness and the commodification of impact in COVID-19, *Qualitative Research Journal*, 22(1), 81-95. <https://doi.org/10.1108/QRJ-02-2021-0016>
- *Crivello, G. & Favara, M. (2021) COVID-19 and the 'ethics of disruption': Current dilemmas facing longitudinal research in low- and middle-income countries. *Methodological Innovations*
<https://doi.org/10.1177/2059799121994223>
- *Dai, Y. & Amberg, B. (2021) We have to survive, first: speculative ethnographies of Chinese student experience during COVID-19. *Cultural Studies ↔ Critical Methodologies*, 22(1).
<https://doi.org/10.1177/15327086211050041>
- *Dales, L. & Kottmann, N. (2021) Surveying singles in Japan: qualitative reflections on quantitative social research during COVID time. *International Journal of Social Research Methodology*. <https://doi.org/10.1080/13645579.2021.1998758>
- *De Falco, C.C. & Romeo, E. (2021) Social sciences research methods regarding COVID-19 pandemic. A PRISMA systematic review. *Culture e Studi del Sociale*, 6(1).
<http://www.cussoc.it/index.php/journal/article/view/175/132>
- *De Man, J., Campbell, L., Tabana, H. & Wouters, E. (2021) The pandemic of online research in times of COVID-19. *BMJ Open*. <http://dx.doi.org/10.1136/bmjopen-2020-043866>
- *Dos Santos Marques, I.C., Theiss, L.M., Johnson, C.Y. et al. (2021) Implementation of virtual focus groups for qualitative data collection in a global pandemic. *The American Journal of Surgery*, 221(5), 918-922. <http://dx.doi.org/10.1016/j.amjsurg.2020.10.009>

- *Douedari, Y., Alhaffar, M., Duclos, D., Al-Twaish, M, Jabbour, S. & Howard, N. 2021. We need someone to deliver our voices': reflections from conducting remote qualitative research in Syria. *Conflict and Health* 15(1), 1-10. <https://doi.org/10.1186/s13031-021-00361-w>
- *Fetters, M.D. & Molina-Azorin, J. (2021) Special issue on COVID-19 and novel mixed methods methodological approaches during catastrophic social changes. *Journal of Mixed Methods Research*, 15(3), 295-303. <http://dx.doi.org/10.1177/15586898211029100>
- *Fitzgerald, N., Uny, I., Brown, A. et al. (2021) Managing COVID-19 transmission risks in bars: an interview and observation study. *Journal of Studies on Alcohol and Drugs*, 82(1). <https://doi.org/10.15288/jsad.2021.82.42>
- *Frاندell, A., Feeney, M.K., Johnson, T.P. et al. (2021) The effects of electronic alert letters for internet surveys of academic scientists. *Scientometrics*, 126. <https://doi.org/10.1007/s11192-021-04029-3>
- Garside, R. (2014) Should we appraise the quality of qualitative research reports for systematic reviews, and if so, how? *Innovation: The European Journal of Social Science Research*, 27(1), 67-79.
- Grant, M.J. & Booth, A. 2009. A typology of reviews: an analysis of 14 review types and associated methodologies, *Health Information and Libraries Journal* 26, 91–108.
- *Gruber, M., Eberl, J.-M., Lind, F. et al (2021). Qualitative Interviews with irregular migrants in times of COVID-19: Recourse to remote interview techniques as a possible methodological adjustment. *Forum: Qualitative Social Research*, 22(1). <http://dx.doi.org/10.17169/fqs-22.1.3563>
- *Halberg, N., Jensen, P.S. & Larsen, T.S. (2021) We are not heroes-The flipside of the hero narrative amidst the COVID19-pandemic: A Danish hospital ethnography. *Journal of Advanced Nursing*, 77(5). <https://doi.org/10.1111/jan.14811>
- *Halliday, M., Mill, D., Johnson, J. et al. (2021) Let's talk virtual! Online focus group facilitation for the modern researcher. *Research in Social and Administrative Pharmacy*, 17(12). <https://doi.org/10.1016/j.sapharm.2021.02.003>
- *Hart, D. (2021) COVID times make 'deep listening' explicit: changing the space between interviewer and participant. *Qualitative Research*. <https://doi.org/10.1177/14687941211027780>
- *Hermans, K., Berger, E., Biber-Freudenberger, L. et al. (2021) Crisis-induced disruptions in place-based social-ecological research - an opportunity for redirection. *Ecological Perspectives for Science and Society*, 30(2). <https://doi.org/10.14512/gaia.30.2.3>
- *Hersh, S., Nair, D., Komaragiri, P.B. et al. (2021) Patchy signals: capturing women's voices in mobile phone surveys of rural India. *BMJ Global Health*, 6(5), <http://dx.doi.org/10.1136/bmjgh-2021-005411>

*Howlett, M. (2021) Looking at the 'field' R through a Zoom lens: Methodological reflections on conducting online research during a global pandemic. *Qualitative Research*
<https://doi.org/10.1177/1468794120985691>

*Isaacs, A., Squires Gallagher, C. & Hawkes, C. (2021) How is COVID-19 shaping families' relationships with food and the food environment in England? A qualitative research protocol. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/1609406921991371>

*Jairath, N.N., Benetato, B.B., O'Brien, S.L. et al. (2021) Just-in-time qualitative research: methodological guidelines based on the COVID-19 pandemic experience. *Nursing Research*, 70(3). <https://doi.org/10.1097/NNR.0000000000000504>

*Johnson, B. & Odhner, K. (2021) Focus groups from home: Conducting virtual focus groups during the COVID-19 pandemic and beyond. *College & Research Libraries News*, 82(6), 258.
<http://dx.doi.org/10.5860/crln.82.6.258>

*Karanasios, S. (2021) The pursuit of relevance and impact: A review of the immediate response of the information systems field to COVID-19. *Information Systems Journal*.
<https://doi.org/10.1111/isj.12372>

*Kaufmann, K., Corinna Peil, C. & Bork-Hüffer, T. (2021) Producing in situ data from a distance with mobile instant messaging interviews (MIMIs): Examples from the COVID-19 pandemic. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/16094069211029697>

*Khalil, K., Das, P., Kammowanee, R. et al. (2021) Ethical considerations of phone-based interviews from three studies of COVID-19 impact in Bihar, India. *BMJ Global Health*, 6(5).
<http://dx.doi.org/10.1136/bmjgh-2021-005981>

Khangura, S. et al. 2012. Evidence summaries: the evolution of a rapid review approach, *Systematic Reviews*, 1-10.

*Kim, J.J., Williams, S., Eldridge, E.R. et al. (2021) Digitally shaped ethnographic relationships during a global pandemic and beyond. *Qualitative Research*.
<https://doi.org/10.1177/14687941211052275>

*Kim, N.H., Wilson, N., Mashburn, T., Reist, L., Westrick, S.C., Look, K., Kennelty, K. & Carpenter, D. (2021) Lessons learned recruiting: A diverse sample of rural study participants during the COVID-19 pandemic. *International Journal of Drug Policy*
<https://doi.org/10.1016/j.drugpo.2021.103344>

*Kobakhidze, M.N., Hui, J., Chui, J. et al. (2021) Research disruptions, new opportunities: re-imagining qualitative interview study during the COVID-19 pandemic. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211051576>

*Krause, P., Szekely, O., Bloom, M. et al (2021) COVID-19 and fieldwork: Challenges and solutions. *PS: Political Science & Politics*, 54(2), 264-269.
<http://dx.doi.org/10.1017/S1049096520001754>

- *Kuiper, G. (2021) Emotional risk assessments in the field: Leaving Tanzania during the COVID-19 pandemic. *Ethnography*. <https://doi.org/10.1177/14661381211002856>
- *Lane, K.L., Cabell, S.Q. & Drew, S.V. (2021) A productive scholar's guide to respectful, responsible inquiry during the COVID-19 pandemic: moving forward. *Journal of Learning Disabilities*, 54(5). <https://doi.org/10.1177/00222194211023186>
- *Lathen, L. & Laestadius, L. 2021 Reflections on online focus group research with low socio-economic status African American adults during COVID-19. *International Journal of Qualitative Methods* 20. <https://doi.org/10.1177/16094069211021713>
- *Lau, D.T., Sosa, P., Dasgupta, N. et al (2021) Impact of the COVID-19 pandemic on public health surveillance and survey data collections in the United States. *American Journal of Public Health*, 111(12), 2118-2121. <http://dx.doi.org/10.2105/AJPH.2021.306551>
- *Lin, Y-H., Chen, C-Y., & Wu, S-I. (2021). Efficiency and quality of data collection among public mental health surveys conducted during the COVID-19 pandemic: Systematic review. *Journal of Medical Internet Research*, 23(2). <http://dx.doi.org/10.2196/25118>
- *Lomax, H., Smith, K., McEvoy, J. et al (2021) Creating online participatory research spaces: insights from creative, digitally mediated research with children during the COVID-19 pandemic. *Families, Relationships and Societies*. <https://doi.org/10.1332/204674321X16274828934070>
- *Luciani, M., Strachan, P.H., Conti, A. et al. (2021) Methodological and practical considerations in rapid qualitative research: lessons learned from a team-based global study during COVID-19 pandemic. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211040302>
- *Lusambili, A.M., Ochieng, S., Nyikuri, M.M. & Shumba, C.S. (2021) Conducting qualitative research during COVID-19: reflections on methods and challenges when interviewing marginalized refugee women. *F1000Research* <https://doi.org/10.12688/f1000research.29977.1>
- *Mabasa, L.T. & Themane, M.J. (2021) Experiences of educational researchers in the use of the case study design during the Covid-19 Pandemic: Lessons from a South African rural setting. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211022567>
- *Martel, K., Raupp, M., Hadi, A.A. et al. (2021) Isn't it ironic horizontal ellipsis !?! Mobility researchers go sedentary: A group auto-ethnography on collective coping and care in pandemic times. *Gender, Work & Organisation*, 29(1). <https://doi.org/10.1111/gwao.12734>
- *Marzi, S. (2021) Participatory video from a distance: co-producing knowledge during the COVID-19 pandemic using smartphones. *Qualitative Research*. <https://doi.org/10.1177/14687941211038171>
- *Maycock, M. (2021) 'I Do not appear to have had previous letters'. the potential and pitfalls of using a qualitative correspondence method to facilitate insights into life in prison during the

Covid-19 pandemic. *International Journal of Qualitative Methods*, 20.

<https://doi.org/10.1177/16094069211047129>

*Melis, G., Sala, E. & Zaccaria, D. (2021) Remote recruiting and video-interviewing older people: A research note on a qualitative case study carried out in the first Covid-19 Red Zone in Europe. *International Journal of Social Research Methodology*.

<https://doi.org/10.1080/13645579.2021.1913921>

*Menon, S., Sonderegger, P. & Totapally, S. (2021) Five questions to consider when conducting COVID-19 phone research. *BMJ Global Health*, 6. <https://doi.org/10.1136/bmjgh-2020-004917>

*Meskell, P., Houghton, C. & Biesty, L. (2021) Opening windows behind closed doors: Reflections on working qualitatively during a pandemic. *International Journal of Qualitative Methods* <https://doi.org/10.1177/16094069211008313>

*Mwambari, D., Purdeková, A. & Bisoka, A.N. (2021) Covid-19 and research in R conflict-affected contexts: distanced methods and the digitalisation of suffering. *Qualitative Research* <https://doi.org/10.1177/1468794121999014>

Nagpal, K., Mathur, M.R., Biswas, A. et al. (2021) Who do phone surveys miss, and how to reduce exclusion: recommendations from phone surveys in nine Indian states. *BMJ Global Health*, 6(5). <http://dx.doi.org/10.1136/bmjgh-2021-005610>

*Nambiar, D., Benny, G. & Usaidali (2021) Telephony and trade-offs in fieldwork with the 'unreached': on the conduct of telephonic interviews with indigenous study participants in southern India. *BMJ Global Health*, 6(5). <http://dx.doi.org/10.1136/bmjgh-2021-006261>

*Newman, P.A., Gut, A. & Black, T. (2021) Ethical considerations for qualitative research methods during the COVID-19 pandemic and other emergency situations: navigating the virtual field. *International Journal of Qualitative Methods*.

<https://journals.sagepub.com/doi/10.1177/16094069211047823>

*Nobrega, S., El Ghaziri, M., Giacobbe, L. et al. (2021) Feasibility of virtual focus groups in program impact evaluation. *International Journal of Qualitative Methods*.

<https://doi.org/10.1177/16094069211019896>

*Oliffe, J.L., Kelly, M.T., Montaner, G.G. et al. (2021) Zoom interviews: benefits and concessions. *International Journal of Qualitative Methods*, 20.

<https://doi.org/10.1177/16094069211053522>

*Paganini, N., Ben-Zeev, K., Bokolo, K. et al. (2021) Dialing up critical feminist research as lockdown dialed us down: how a pandemic sparked community food dialogs in Cape Town, South Africa. *Frontiers in Sustainable Food Systems*. <https://doi.org/10.3389/fsufs.2021.750331>

*Panter-Brick, C., Dajani, R., Hamadmad, D. et al. (2021) Comparing online and in-person surveys: assessing a measure of resilience with Syrian refugee youth. *International Journal of Social Research Methodology*. <https://doi.org/10.1080/13645579.2021.1919789>

*Parkin, S., Neale, J., Roberts, E. et al. (2021) Conducting rapid qualitative research amongst people with experience of rough sleeping in London during the COVID-19 pandemic. *Research Methods in Medicine & Health Sciences*, 2(4), 124-139.

<https://doi.org/10.1177/26320843211061301>

*Pascal, C. & Bertram, T. (2021) What do young children have to say? Recognising their voices, wisdom, agency and need for companionship during the COVID pandemic. *European Early Childhood Education Research Journal*, 29(1). <https://doi.org/10.1080/1350293X.2021.1872676>

*Pocock, T., Smith, M. & Wiles, J. (2021) Recommendations for virtual qualitative health research during a pandemic. *Qualitative Health Research*.

<https://doi.org/10.1177/10497323211036891>

*Ponting, S.S.-A. (2021) Responding to organizational identity change: ethnographic insights from multinational hotel subsidiaries. *Journal of Hospitality and Tourism Technology*.

<https://doi.org/10.1108/JHTT-09-2020-0242>

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N. with Duffy, R.K. (2006) *Guidance on the Conduct of Narrative Synthesis in Systematic Reviews*. London: ESRC Methods Programme.

*Purewal, S., Ardiles, P., Di Ruggiero, E. et al. (2021) Using social media as a survey recruitment strategy for post-secondary students during the COVID-19 pandemic. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 58.

<https://doi.org/10.1177/00469580211059305>

*Racionero-Plaza, S., Vidu, A., Diez-Palomar, J. et al. (2021) Overcoming limitations for research during the COVID-19 pandemic via the communicative methodology: the case of homelessness during the Spanish home confinement. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211050164>

*Ragavan, S. (2021) Between field and home: notes from the balcony. *Cultural Geographies*.

<https://doi.org/10.1177/14744740211020506>

*Rahman, H.Z., Matin, I., Banks, N. & Hulme, D. (2021) Finding out fast about the impact of Covid-19: The need for policy-relevant methodological innovation. *World Development*, 140.

<https://doi.org/10.1016/j.worlddev.2020.105380>

*Rahman, S.A., Tuckerman, L., Vorley, T. & Gherhes, C. (2021) Resilient research in the field: Insights and lessons from adapting qualitative research projects during the COVID-19 pandemic. *International Journal of Qualitative Methods*

<https://doi.org/10.1177/16094069211016106>

*Ramlagan, S., Shean, Y.L., Parker, S., Trollip, K., Davids & A. & Reddy, S.P. (2021) Pushing the boundaries: Adapting research methodology to document the COVID-19 pandemic from a socio-behavioural perspective in a low/middle level income country: the case of South Africa.

*Rania, N., Coppola, I. & Pinna, L. (2021) Adapting qualitative methods during the COVID-19 era: factors to consider for successful use of online photovoice. *The Qualitative Report*, 26(8). <https://doi.org/10.46743/2160-3715/2021.4863>

*Rashid, N.A., Khuan Lee, K. & Jamil, N.A. (2021) Conducting qualitative research in the new norms: Are we ready? *Nursing & Health Sciences*, 23(4) <https://doi.org/10.1111/nhs.12872>

*Renosa, M.D.C., Mwamba, C., Meghani, A. et al. (2021) Selfie consents, remote rapport, and Zoom debriefings: collecting qualitative data amid a pandemic in four resource-constrained settings. *BMJ Global Health*, 6(1). <http://dx.doi.org/10.1136/bmigh-2020-004193>

*Roberts, J.K., Pavlakis, A.E. & Richards, M.P. (2021) It's more complicated than it seems: Virtual qualitative research in the COVID-19 era. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211002959>

*Rolf, F., Campbell, N., Thompson, S. et al. (2021) Australians' experience of the COVID-19 pandemic: advantages and challenges of scaling up qualitative research using large-scale rapid analysis and building research capacity across rural Australia. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211051937>

*Rutter, N., Hasan, E., Pilson, A. et al. (2021) It's the end of the PhD as we know it, and we feel fine horizontal ellipsis because everything is fucked anyway: utilizing feminist collaborative autoethnography to navigate global crises. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211019595>

*Salam, Z., Nouvet, E. & Schwartz, L. (2021) Reflections of methodological and ethical challenges in conducting research during COVID-19 involving resettled refugee youth in Canada. *Journal of Medical Ethics*. <http://dx.doi.org/10.1136/medethics-2021-107291>

*Saltzman, L.Y., Terzis, L.D., Hansel, T.C., Blakey, J.M., Logan, D & Bordnick, P.S. (2021) Harnessing technology for research during the COVID-19 Pandemic: A mixed methods diary study protocol. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/1609406920986043>

*Santana, F.N., Hammond Wagner, C., Berlin Rubin, N., Bloomfeld, L.S.P.,Bowe, E.R., Fischer, S.L., Santos, B.S., Smith, G.E., Muraida, C.T & Wong-Parodi, G. (2021) A path forward for qualitative research on sustainability in the COVID-19 pandemic. *Sustainability Science*, 16. <https://doi.org/10.1007/s11625-020-00894-8>

*Santhosh, L., Rojas, J.C., Lyons, P.G. (2021) Zooming into focus groups: Strategies for qualitative research in the era of social distancing. *ATS Scholar*. <https://doi.org/10.34197/ats-scholar.2020-0127PS>

- *Schlegel, E.C., Tate, J.A., Pickler, R.H. et al. (2021) Practical strategies for qualitative inquiry in a virtual world. *Journal of Advanced Nursing*, 77(10). <https://doi.org/10.1111/jan.15000>
- *Scott, S., McGowan, V.J. & Visram, S. (2021) 'I'm gonna tell you about how Mrs Rona has affected me'. exploring young people's experiences of the COVID-19 pandemic in North East England: A qualitative diary-based study. *International Journal of Environmental Research and Public Health*, 18(7). <https://doi.org/10.3390/ijerph18073837>
- *Sedysheva, A. (2021) Doing Qualitative Research during the Covid-19 Pandemic of 2020. *Ask: Research and Methods*, 29(1). <https://doi.org/10.18061/ask.v29i1.0005>
- *Self, B. (2021) Conducting Interviews During the COVID-19 Pandemic and Beyond. *Forum: Qualitative Social Research*, 22(3). <https://doi.org/10.17169/fqs-22.3.3741>
- *Seligson, A.L., Alroy, K.A., Sanderson, M. et al (2021) Adapting survey data collection to respond to the COVID-19 pandemic: Experiences from a local health department. *American Journal of Public Health*, 111(12), 2176-2185. <http://dx.doi.org/10.2105/AJPH.2021.306515>
- *Serekoane, M., Marais, L., Pienaar, M. et al. (2021) Fieldworker reflections on using telephone voice calls to conduct fieldwork amidst the Covid-19 pandemic. *Anthropology Southern Africa*, 44(4). <https://doi.org/10.1080/23323256.2021.2002701>
- *Shamsuddin, A., Sheikh, A. & Keers, R.N. (2021) Conducting Research Using Online Workshops During COVID-19: Lessons for and Beyond the Pandemic. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/16094069211043744>
- *Shareck, M., Alexander, S., Glenn, N.M. 2021. In-situ at a distance? challenges and opportunities for health and place research methods in a post-COVID-19 world, *Health and Place* 69, 102572.
- *Shepperd, J.A., Pogge, G., Hunleth, J.M. et al. (2021) Guidelines for Conducting Virtual Cognitive Interviews During a Pandemic. *Journal of Medical Internet Research*, 23(3). <https://doi.org/10.2196/25173>
- *Solis-Cordero, K., Lerner, R., Marinho, P. et al. (2021) Overcoming methodological challenges due to COVID-19 pandemic in a non-pharmacological caregiver-child randomly controlled trial. *International Journal of Social Research Methodology*. <https://doi.org/10.1080/13645579.2021.1933067>
- *Sollis, K., Biddle, N., Edwards, B. et al. (2021) COVID-19 Survey Participation and Wellbeing: A Survey Experiment. *Journal of Empirical Research on Human Research Ethics*, 16(3). <https://doi.org/10.1177/15562646211019659>
- *Smith, C. (2021) A screen of one's own: the domestic caregiver as researcher during Covid-19, and beyond. *Australian Feminist Studies*. <https://doi.org/10.1080/08164649.2021.2010180>
- *Stelson, E. (2021) COVID and Camus: Reflections on The Plague, collective experience, and qualitative inquiry during a pandemic. *Qualitative Social Work* 20(1-2), 41-47.

- *Stone, W.J. & Baker, K.M. (2021) A roadmap: Social distancing physical activity data collection to protect those with intellectual disabilities. *Journal of Intellectual Disabilities*.
<https://doi.org/10.1177/17446295211009655>
- *Sumesh, S.S & Gogoi, N. (2021) Collecting the 'Thick Descriptions': A Pandemic Ethnography of the Lived Experiences of Covid-19 Induced Stigma and Social Discrimination in India. *Journal of Loss and Trauma*. <https://doi.org/10.1080/15325024.2021.1947019>
- *Tanner, J.C. (2021) The pitfalls and potential of high-frequency phone surveys during COVID-19. *Forced Migration Review*, (66), 55-57.
<https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/issue66/tanner.pdf>
- *Tarrant, A., Way, L. & Ladlow, L. et al. (2021) 'Oh sorry, I've muted you!': Issues of connection and connectivity in qualitative (longitudinal) research with young fathers and family support professionals. *International Journal of Social Research Methodology*.
<https://doi.org/10.1080/13645579.2021.1986313>
- *Tesson, S., Swinsburg, D. & Kasparian, N.A. (2021) Maintaining momentum in infant mental health research during COVID-19: adapting observational assessments. *Journal of Pediatric Psychology*, 46(3). <https://doi.org/10.1093/jpepsy/jsab020>
- *Teti, M., Latrice, P., & Myroniuk, T.W. (2021) Community-engaged qualitative scholarship during a pandemic: Problems, perils and lessons learned. *International Journal of Qualitative Methods*, 20. <http://dx.doi.org/10.1177/16094069211025455>
- *Tremblay, S., Castiglione, S., Audet, L., Desmarais, M., Horace, M & Pelaez, S. (2021) Conducting qualitative research to respond to COVID-19 challenges: Reflections for the present and beyond. *International Journal of Qualitative Methods*, 20.
<https://doi.org/10.1177/16094069211009679>
- *Turke, S., Nehrling, S., Adebayo, S.O. et al. (2021) Remote interviewer training for COVID-19 data collection: challenges and lessons learned from 3 countries in SubSaharan Africa. *Global Health: Science and Practice*, 9(1). <https://doi.org/10.9745/GHSP-D-20-00468>
- *Varma, D.S., Young, M.E., Kreider, C.M. et al. (2021) Practical considerations in qualitative health research during the COVID-19 pandemic. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211043755>
- *Villarosa, A.R., Ramjan, L.M., Maneze, D. & George, A. (2021) Conducting Population Health Research during the COVID-19 Pandemic: Impacts and Recommendations. *Sustainability*, 13(6). <https://doi.org/10.3390/su13063320>
- *Vokes, R., Atukunda, G. (2021) Fieldwork through the zoomiverse sensing uganda in a time of immobility. *Anthropology in Action* 28(1), 73-78

*Walker, L., Bailey, D., Churchill, R. & Peckham, E. (2021) Remote data collection during COVID-19 restrictions: an example from a refugee and asylum-seeker participant group in the UK. *Trials*, 22 (117). <https://doi.org/10.1186/s13063-021-05058-2>

*Wall, E., Jansson, A.B. & Svensson, S. (2021) Capturing stories of how young adults experience entry into the workforce: a qualitative research protocol on data collection during the ongoing coronavirus pandemic. *International Journal of Qualitative Methods*.
<https://doi.org/10.1177/16094069211004330>

*Webber-Ritche, 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>

*Young, H.M. & Bell, J.F. (2021) Navigating research in a pandemic: implications for publication. *Research in Gerontological Nursing*, 14(6). <https://doi.org/10.3928/19404921-20211103-01>

Appendix

The following table presents a summary of Map 1 and Map 2 criteria for all Recommendation 1a papers (Database D). The authors names provide links to the papers.

Author(s)	Country	Discipline / Field	Type of Paper	Study	Participants	Research Methods	Quality
Agarwal (2021)	India	global development	review / reflective	gender bias in telephone surveys	various	review of 23 telephone surveys in India during Covid-19	medium
Ahluwalia-Cameron (2021)	Canada	social work	empirical	supporting people with borderline personality disorder (BPD)	social workers in mental health services	telephone interviews conducted from home, recruitment via e-mail & targeted social media	medium
Alanazi et al. (2021)	Saudi Arabia	health sciences	empirical / methods	pilot evaluation of online Q methodology	physiotherapists involved in tele-rehabilitation	online Q methodology semi-structured interviews	medium
Allen (2021)	New Zealand	education and social work	methods / autoethnographic text	exploring embodied and material knowledge about lockdown experience	author (professor in education and social work)	sensory methods – ‘smellwalks’ and digital ‘smellnotes’ (audio recordings, author’s commentary and photographs)	high
Andrejuk (2021)	UK	sociology	methods	draws on study of migrant entrepreneurship in the UK	self-employed and entrepreneurs in the Polish community in the UK	digital/internet-based research – recruitment, data collection and analysis, and archiving, focus on video interviews	medium
Arya & Henn (2021)	UK	social & political sciences	reflective methods	young environmental activists in the pandemic	young people, ‘hard to reach populations’	online ethnography/interviews	high

Asante et al. (2021)	Zambia	sociocultural anthropology	empirical	family caregiving in a paediatric hospital	family caregivers	ethnography through virtual technologies	medium
Averett (2021)	USA	sociology	empirical	school closures and remote schooling during Covid-19	112 parents (primarily mothers) of children undertaking remote schooling	virtual interviews	high
Benson et al. (2021)	UK, Ireland & Denmark	food sciences	empirical	applied market research to co-create a sustainability food label	food sustainability consumers	online co-creation workshops – various collaborative tasks, activities and discussions	medium
Bratan et al. (2021)	Germany	medicine and health	survey	online survey of German health researchers during Covid-19	not applicable	health research methods	medium
Bueddefeld et al. (2021)	Canada	hospitality and tourism and environmental studies	empirical methods	visitor experience of Canadian national park	public visitors to a national park	mixed methods bricolage incl. survey, observation, meaning maps, interviews, comprehension assessments	high
Call-Cummings & Hauber-Özer (2021)	USA	social sciences	empirical / methods	draws on 2 case studies 'Courageous Conversations' & 'Big Dreams'	(1) US high school students (2) Syrian refugees in Turkey	virtual photovoice	medium
Campbell (2021)	UK	social work	empirical / methods	experiences of lone parent families	lone parent families	shift from in-person to virtual (WhatsApp, Facebook Messenger) & phone interviews, recruiting via Facebook	medium

Catela (2021)	Portugal	not specified	empirical	smallholder farms during Covid	smallholder farmers, food basket distributors and their clients	remote ethnography inc. interviews (telephone and Skype) and participants taking photos	medium
Cho, LoCascio & Kim (2021)	South Korea	public opinion research	empirical	Korean Academic Multimode Open Survey (KAMOS)	recruited from previous waves of survey	online/telephone panel survey	medium
Chuey et al. (2021)	USA	psychology	empirical	draws on 4 developmental research studies	children	in-person & online cognitive development activities	high
Coan & Kristian (2021)	UK	not specified	methods	evaluating national support programme	people in areas experiencing high levels of disadvantage	online peer research methods	medium
Cocco & Bertran (2021)	Italy	not specified	empirical	annual religious festival in Sardinia which moved online	festival participants	digital/online/hybrid ethnography – participatory methods, social media & phone and video interviews	medium
Combs et al. (2021)	USA	multi-disciplinary	personal narratives	collaborative project	authors (graduate students)	drawn from individual journals & responses, focus groups, emails & artefacts	high
Constantin et al. (2021)	mixed	computer science	hybrid empirical & opinion paper	distributed participatory design (DPD) with children	school teachers & children	online workshops	high
Cooper & Jones (2022)	UK	interdisciplinary	empirical	student loneliness at universities	university students	co-production, online workshops & journaling	low
Crivello & Favara (2021)	Ethiopia, India, Peru & Vietnam	international development	empirical	<i>Young Lives</i> longitudinal study of childhood poverty	2 cohorts across 100 sites in the 4 countries, 19- & 26-year-olds	phone survey	medium

Dai & Amberg (2021)	USA	Asian American studies	methods/ autoethnographic texts	Chinese student experience in US during Covid-19	authors (US-based Chinese graduate students)	speculative and digital (auto)ethnography	medium
Dales & Kottmann (2021)	Australia & Japan	not specified	methods	their intimate practices & relationships during Covid-19	Japanese single people	quantitative online survey	medium
De Falco & Romeo (2021)	Italy	not specified	systematic review	Italian social research topics & adopted methods related to Covid-19	not applicable	includes analysis of methods ('techniques and tools')	medium
DeMan et al (2021)	Belgium	health	hybrid empirical & opinion paper	depression in higher education students	higher education students	survey	medium
Dos Santos Marques et al. (2021)	USA	surgery	methods	after-surgery focus groups	23 patients from minority groups	transition to virtual focus groups	low
Douedari, et al. (2021)	Syria	conflict studies	methods	researching from a distance in Syria for last 5 years & relevance for Covid-19	people in war zones	remote methods	high
Dutton (2021)	Australia	languages & linguistics	empirical/ narrative	experiences of online teaching	author (lecturer)	critical autoethnography	high
Faleolo (2021)	Pacific Islands	not specified	reflective/ empirical	knowledge-sharing in Pacific Islands communities	multi-sited Pacific Islands groups	transferring Pacific Islands methodological concepts online	medium
Fetters & Molina-Azorin (2021)	authors based in USA and Spain	not specified	special issue editorial	mixed methods adaptations to Covid-19	not applicable	mixed methods	low
Fitzgerald et al. (2021)	UK	hospitality & leisure	empirical	business practices & behaviours in licensed premises during Covid-19	hospitality trade associations, licensed premises, & related roles	telephone interviews, observations in licensed premises following reopening	medium

Frاندell et al. (2021)	USA	not specified	empirical	testing response rates to web surveys	university scientists	survey recruitment methods, email alert pre-notifications	low
Gruber et al. (2021)	Austria	migration studies	methods	media use by migrants	migrants	virtual interviews	medium
Halberg, Jensen & Larsen (2021)	Denmark	nursing	empirical	working practices of nursing staff in a Covid ward	22 nurses	participant observations, follow-up focus group interviews	medium
Hall, Gaved & Sargent (2021)	authors based in UK	educational technology	literature review	narrative literature review	(38 papers on participatory research methods)	participatory research methods	medium
Halliday et al. (2021)	Australia	health & medical sciences	methods/empirical	Covid-19-specific subset on pharmacy professional practices	pharmacists	online focus groups (Zoom)	medium
Hart (2021)	Australia	sociology	empirical/methods	post-abortion narratives	women who have undergone a legal abortion	qualitative interviews (face-to-face and video)	medium
Hermans et al. (2021)	authors based in Germany	ecology	methods/empirical	various studies in place-based social-ecological research	various	shift to remote & digital methods	medium
Hersh et al. (2021)	India	health	empirical	effects of Covid-19 on livelihoods, nutrition & gender-related topics	various populations in rural India	7 household surveys – shift to mobile phone use	medium
Howlett (2021)	Ukraine	international relations	methods	identity and nationalism in Ukraine, started before Covid-19	'elite' interviews with academics, journalists, politicians & activists	pivot from on-site fieldwork to online interviews & focus groups	medium

Isaacs, Squires Gallagher & Hawkes (2021)	UK	health sciences	methods/protocol	changes in families' relationships with food during Covid-19	60–80 parents/carers of school or nursery-aged children	remote, longitudinal qualitative study – interviews, photography, mapping, & voice recordings	medium
Jairath et al. (2021)	USA	nursing	empirical/methods (protocol)	conducting 'just in time' qualitative research in times of public health crises	nursing students	online longitudinal surveys, face-to-face focus groups, online interviews	medium
Johnson & Odhner (2021)	USA	library studies	empirical	student engagement with library	students from 16 majors	recruitment survey, virtual focus groups (Zoom)	low
Karanasios (2021)	author based in Australia	information studies	literature review	use of research methods by information systems scholars in response to Covid-19	(71 journal papers)	Literature review	medium
Kaufmann et al. (2021)	Austria	geography/media & communication	empirical/methods	draws on 2 case studies	(1) young adults (2) university degree students	mobile instant messaging interviews (MIMI) (WhatsApp)	high
Khalil et al. (2021)	India	public health	methods	3 rapid research studies in response to Covid-19	includes primary health providers & women self-help groups	ethnography, longitudinal surveys, telephone interviews	medium
Kim JJ et al. (2021)	USA	disaster recovery and conflict	methods	'compounded disaster' of Covid-19 & tornados in Tennessee	tornado survivors, volunteers & response & recovery workers	ethnography	medium
Kim, NH et al. (2021)	USA	health	methods	health of people at high-risk of opioid overdose & users of naloxone	81 patients/ caregivers in rural hard-to-reach communities	recruitment strategies (referrals, community outreach, mass emails, social media)	medium

Kobakhidze et al. (2021)	Hong Kong	education	methods	kindergarten admission	kindergarten teachers, early childhood scholars, parents & staff	triangulation of interviews & secondary data	high
Krause et al. (2021)	USA & Czech Republic	political science	reflection/methods	multiple researchers' fieldwork experiences	various	fieldwork & contingency planning	medium
Kuiper (2021)	Tanzania	anthropology	narrative	experiences of a disrupted ethnography	author	autoethnography, field diaries, digital communications & online news reports	medium
Lane, Cabell & Drew (2021)	authors based in USA	education	opinion	remote & modified in-class learning & disruption of schools-based research	not applicable	social research practices & methodologies	high
Lathen & Laestadius (2021)	USA	public health	methods	African American adults from low socio-economic status (SES) in Milwaukee	including parents, caregivers, and educators	11 online focus groups conducted via Zoom	high
Lau et al. (2021)	USA	public health	methods	reports on various national, state, and city survey programmes	various	surveys (in-person & telephone), rapid research & fieldwork protocols	low
Le, Tran & Le (2021)	authors based in Canada & Australia	education	methods & personal narratives	'transnational experiences' of doctoral researchers	authors (3 Vietnamese doctoral researchers)	trioethnography – combining duoethnography with photography	medium
Lin, Chen & Wu (2021)	authors based in Taiwan	mental health	systematic review	review of 37 mental health surveys conducted during Covid-19	various general public	surveys	low

Lomax et al. (2021)	UK	childhood studies	methods	virtual participatory methods using creative visual arts	16 children (aged 9-10)	virtual methods (animation, collage, comic strip, drawing, craft, digital photography, film)	medium
Lucas et al. (2021)	New Zealand & Australia	multi-disciplinary	personal narratives	work-integrated learning	authors (academics, administrators & students)	collective autoethnography – based on weekly online meetings	high
Luciani et al. (2021)	authors based in Italy & Canada	public health	methods	multi-national rapid qualitative research	physicians & nurses from Americas, Europe and Africa	52 in-depth semi-structured interviews by phone or Zoom	medium
Lupu (2021)	France	business and management studies	personal narrative	culture of overworking in academia & experience of pregnancy & birth during Covid	author (academic)	autoethnography	medium
Lusambili et al. (2020)	Kenya	health	opinion	population health study	refugee women attending ante-natal & post-natal services	face-to-face interviews	medium
Mabasa & Themane (2021)	South Africa	education	methods	use of teacher support materials for inclusive education	educational researchers	case study design, semi-structured interviews	medium
Martel et al. (2021)	UK, Denmark, Finland, Germany, France & Netherlands	global studies	reflective account	facilitated through weekly online meetings	authors (doctoral/early career researchers)	group autoethnography virtual, dialogical self-interrogations and group reflections	medium
Marzi (2021)	Colombia	not specified	methods	co-produced research with participants & filmmakers	women in poorer neighbourhoods in Medellín	remote participatory video using smartphones & digital platforms	high

Maycock (2021)	UK	prison studies	methods	experiences of lockdown in Scottish prisons	8 male prisoners serving long-term sentences	participatory action correspondence methodology	medium
Melis, Sala, & Zaccaria (2021)	Italy	social sciences	methods	impact of first lockdown on impact on well-being & everyday life	40 older people in rural area	online interviews in Covid-specific qualitative longitudinal study	medium
Menon, Sonderegger & Totapally (2021)	India	public health	methods	draws on 4 large-scale Covid-19-specific household surveys	various	quantitative & qualitative phone surveys	low
Meskell et al. (2021)	Ireland	nursing & midwifery	editorial	various	various	rapid qualitative evidence synthesis	low
Mwambari et al. (2021)	UK & Democratic Republic of Congo	international development	position/literature review	ethical challenges of conducting sensitive research online in Covid-19 & conflict-affected contexts	various	online methods	high
Nagpal et al. (2021)	India	public health	methods	draws from 5 studies in 9 regions in India	various	mobile phone surveys (MPS), computer-assisted telephone interviews (CATI)	medium
Nambiar, Benny & Usaidali (2021)	India	health studies	methods	health system access barriers among tribal Kattunayakan communities	front-line health workers and tribal community members	shift from ethnographic fieldwork & focus groups to individual & smaller group telephone interviews	medium
Newman, Gut & Black (2021)	Canada	social work	methods	conducting research with marginalised & vulnerable communities	various	wide range of virtual/digital methods in participatory & community-based research	high

Nobrega et al. (2021)	USA	not specified	methods	university diversity programme	faculty members in STEM disciplines	virtual focus groups through video conferencing (Zoom)	high
Oliffe et al. (2021)	Canada & Australia	public health	methods	intimate partner relationship breakdowns	partners and service providers	virtual interviews (Zoom), recruitment via Twitter, Facebook and email	high
Paganini et al. (2021)	South Africa	rural development	empirical/methods	food security in marginalized communities in the Western Cape	urban farmers, fisherwomen, food activists & community kitchen chefs	household survey & place-based research, photovoice & food environment maps	medium
Panter-Brick et al. (2021)	Syria	global studies	methods	humanitarian programme evaluations	low-income Syrian refugee youth	online pivot of child & youth resilience measure (CYRM) survey tool	medium
Parkin et al. (2021)	UK	public health	methods	initiative to temporarily accommodate rough sleepers during Covid-19	people experiencing rough sleeping	rapid qualitative research, telephone participant recruitment & interviewing	high
Pascal & Bertram (2021)	UK & New Zealand	education	empirical	Ongoing trans-national study of experiences & perspectives of young children in the pandemic	children (2-4 years) & early years practitioners	observation of children's play narratives	medium
Perumal et al. (2021)	South Africa	social work	personal narratives	roll-out of emergency remote online learning and teaching	authors (educators)	collective autoethnography	medium
Pocock, Smith & Wiles (2021)	New Zealand	health	methods / review	review of virtual methods in qualitative health research	not applicable	online interviews focus groups, email interviews	medium

Podjed (2021)	Slovenia	applied anthropology	opinion	driving behaviours/energy consumption/ decarbonisation	various	digital/remote & augmented ethnography	medium
Ponting (2021)	USA	hospitality & tourism	empirical	organisational change in 6 hotel subsidiaries	hotel subsidiary leaders	multi-site ethnography	medium
Prandner & Hasengruber (2021)	Austria	education	survey	digitalisation of social science research methods education	not applicable	survey	low
Purewal et al. (2021)	Canada	health sciences	methods	health literacy levels & online information-seeking	post-secondary students across 10 provinces	Survey promotion & recruitment – use of Facebook, Twitter & Instagram	low
Racionero-Plaza et al. (2021)	Spain	not specified	methods	rapid research on homelessness during Covid-19	Jesuit priests supporting homeless people	communicative methodology, online interviews	low
Ragavan (2021)	India	urban studies	essay/narrative	natures, cultures & politics of milch cattle in urban India	author	autoethnography, observations from author's apartment in North Delhi	medium
Rahman, HZ et al. (2021)	Bangladesh	development studies	viewpoint	rapid, policy urgent survey	12,000 households	rapid response survey using telephone interviews & pre-existing databases / sampling frames	medium
Rahman, SA et al. (2021)	UK	business studies	viewpoint / methods	3 studies transferring methods online & 1 created in response to the pandemic conducted virtually	various	online/virtual methods	high

Ramlagan et al. (2021)	South Africa	human sciences	methods	2 surveys	general population	rapid response survey using telephone interviews and online data input by volunteer interviewers	medium
Rania, Coppola & Pinna (2021)	Italy	social psychology	methods	Covid19-specific project specifically devised to test online photovoice methods	130 degree students	participatory action research, photovoice through online workshops	medium
Rankl, Johnson & Vindrola-Padros (2021)	UK	health	methods	draws on various projects from the RREAL rapid research team	various	rapid research methods inc. interviews, media analysis, policy reviews, and social media analysis	high
Rashid, Khuan Lee & Jamil (2021)	Malaysia	public health	methods/ reflective	draws on 2 research projects	(1) patients with traumatic brain injury; (2) mothers in a breastfeeding support group	remote interviews: (1) phone or WhatsApp; (2) WhatsApp, Zoom or Google Meet	medium
Renosa et al. (2021)	Philippines, Zambia, India and Uganda	health	methods	draws from 4 case study research projects	patients, parents, policy makers, healthcare workers, medical practitioners & community leaders	various remote data collection methods by online platforms and telephone	medium
Roberts, Pavlakis, & Richards (2021)	USA	education	methods	ongoing research into homelessness following Hurricane Harvey	homeless students	virtual interviews & remote collection of documents	high
Rocker (2021)	USA	not specified	autoethnographic text	author's experience of mother's death during the pandemic	author	autoethnography 'fiction' written in diary-style format	low

Rolf et al. (2021)	Australia	multi-disciplinary	methods	rural health rapid research project	people who reported living with a chronic illness	online survey telephone-based semi-structured interviews	high
Rutter et al. (2021)	UK	sociology, education and history	methods	project developed from an online workspace	authors (3 researchers from a doctoral training partnership)	collaborative autoethnography	high
Salam, Nouvet & Schwartz (2021)	Canada	health sciences	methods	resettled refugee youth in Canada	9 Syrian migrant youth (aged 16-18)	shift from in-person to Zoom interviews	medium
Saleh (2021)	Malawi	public health	reflective account	smoke & air pollution in rural Malawi	residents of a single village	ethnographic fieldwork, participant observation methods	medium
Saltzman et al. (2021)	USA	social work education	protocol	students classed as essential workers continuing their field training facing mental & behavioural health impacts	masters degree students in social work	virtual mixed methods	high
Santana et al. (2021)	USA	sustainability science	methods note & comment	methodological challenges & recommendations for researchers	N/A	qualitative research methods	medium
Santhosh, Rojas & Lyons (2021)	USA	health/medicine	methods	ongoing study of clinician experiences	medicine residents	online focus groups	low
Schlegel et al. (2021)	USA	nursing	discussion	grounded theory study on sexual & reproductive health	women (18–25 years)	transferring from in-person to virtual methods of data collection	medium
Scott, McGowan & Visram (2021)	UK	public health	empirical	young people's experience of pandemic & restrictions	31 mid-adolescents (aged 13-17)	digital qualitative diaries, semi-structured interviews (telephone or Zoom)	medium

Sedysheva (2021)	author based in Poland	not specified	personal narrative	feminist movements in Russia	feminist groups	switch from fieldwork and face-to-face interviews to online ethnography & interviews	low
Self (2021)	UK	health	methods/review	transitioning to telephone & virtual interviews	N/A	telephone & in person interviews	low
Seligson et al. (2021)	USA	public health	methods	draws on various surveys conducted by the New York City health department	various	modifying of existing surveys & development of new surveys in response to Covid-19	medium
Serekoane et al. (2021)	South Africa	anthropology	methods/reflective	lived experiences of early childhood health & wellbeing	mothers of infants	virtual ethnography, 'telephonic virtual conversations'	medium
Shamsuddin, Sheikh & Keers (2021)	UK	medicine & health	methods/review	moving research workshops online in response to Covid-19	N/A	online research workshops, video conferencing & online whiteboard tools	medium
Shareck, Alexander & Glenn (2021)	France & Canada	health/geography	reflective/methods	reviewing and reflecting on 'in-situ' methods	young people	go-along interviews, place-based photo-elicited interviews, mobile focus groups, physical distancing measures & face coverings	medium
Shepperd et al. (2021)	USA	medical research	protocol	caregiving experiences with children with asthma	8 caregivers	shift to virtual interviews and 'think aloud' methods – providing participants with iPads	medium
Smith (2021)	Australia	architecture	reflective essay	working from home & conducting research online	author (interdisciplinary researcher)	feminist practice-led methodologies	medium

Solis-Cordero et al. (2021)	Brazil	child development	empirical methods	RCT of innovative play-focused online responsive parenting program	disadvantaged child-caregiver dyads	interviews, online home visits, video in the home, developmental tests, quantitative data analysis	high
Sollis et al. (2021)	Australia	not specified	methods	wellbeing impacts of research participation	3,155 survey participants	'subjective wellbeing experiment' as part of a longitudinal survey	medium
Spreadborough et al. (2021)	Australia	education and data analytics	methods	homeworking & online teaching & creating a collective	authors (academics)	collaborative autoethnography	medium
Stavig (2021)	Peru	anthropology	reflective narrative	healing and the ethical concept of 'ayni' (reciprocal care)	a small community in the Andes	anthropological fieldwork	medium
Stelson (2021)	USA	social work	reflective	researcher-participant collective experience during Covid-19	author	autoethnography	medium
Stewart et al. (2021)	USA	education communication studies	personal narratives	enforced transition to emergency remote teaching	authors (4 university instructors)	collaborative critical autoethnography	medium
Stone & Baker (2021)	USA	disabilities studies	methods	adapting face-to-face balance assessments remotely	30 participants self-identifying as having down syndrome or ASD	remote survey on participant's habitual physical activity patterns, participant ankle monitors	medium
Sumesh & Gogoi (2021)	India	sociology	empirical	stigma & social discrimination in relation to Covid-19	Covid-19 patients	'pandemic ethnography' interviews (telephone & in-person), observations, field notes	low

Tanner (2021)		migration studies	methods	World Bank/ UNHCR joint data center on forced displacement	various	'high-frequency' phone surveys (HFPS)	low
Tarrant et al. (2021)	UK	sociology	methods	parenting trajectories & support needs of young fathers	young fathers & professionals	qualitative longitudinal, synchronous remote methods using telephone & video	high
Terry (2021)	Peru	anthropology	narrative/ conceptual	social distancing through a non- anthropocentric view	author (anthropologist)	autoethnography based on field notes & media reports	low
Tesson, Swinsburg & Kasparian (2021)	Australia and USA	health	empirical	adapting naturalistic play- based assessment of parent-infant interaction online	caregivers and their infants with heart disease (aged 6-12 months)	development of virtual observational assessment	high
Teti & Myroniuk (2021)	USA	public health	editorial	draws on 2 case studies	key stakeholders, providers, & people living with HIV	community-based participatory research (CBPR) – virtual surveys, interviews and training sessions using phone and Zoom	medium
Tremblay et al. (2021)	Canada	nursing	methods	qualitative research in the healthcare sector	5 nursing doctoral students in qualitative methods education & tutor	practice and literature informed reflections	medium
Turke et al. (2021)	Democratic Republic of the Congo, Kenya & Nigeria	health	methods	family planning & other reproductive health indicators across Africa & Asia	various	surveys using a short phone-based questionnaire, development of a remote training system	medium

Van Zeeland et al. (2021)	Belgium	not specified	methods	testing the methodology of duo interviews	university researchers & research students	online video interviews, specifically duo interviews (interviews between 2 peers) & student survey	high
Varma et al. (2021)	USA	medicine and health	methods/discussion	draws on several studies and literature on qualitative health research (QHR) methods	various	transitioning from face-to-face to synchronous online platforms	low
Villarosa et al. (2021)	Australia	health studies	methods	health guideline implementation strategy	public dental practitioners & parents of children in the community	pivot to online focus groups & survey	medium
Vokes & Atukunda (2021)	Uganda	anthropology	reflective	ongoing ethnographic research projects	various	assemblage of methods for ethnography, digital methods & use of Zoom	medium
Walker, Williams & Bowdre (2021)	USA	health	methods	barriers to antiretroviral therapy adherence in HIV care	community health workers	ethnography, shift from in-person to online (Zoom) focus groups	low
Walker et al. (2021)	UK	health studies	letter	health of Arabic-speaking refugees and asylum seekers living in the UK	Arabic-speaking refugees and asylum seekers living in the UK	transition to remote questionnaires in telephone/video calls including cultural mediators	medium
Wall, Jansson & Svensson (2021)	Sweden	occupational health science	methods protocol	leadership, learning and development in retail employment	young adults (age 18-28) employed in a retail setting	focus groups (in-person) interviews via telephone or video conference recruitment through social media	medium

Webber-Ritchey et al. (2021)	USA	nursing	methods	nursing practice	vulnerable populations	remote ethnographic observation & interview	medium
Young & Bell (2021)	authors based in USA	health & nursing	review	ethical, methodological and quality issues in relation to Covid-19 research adaptations	N/A	social research methods	low
Zeza et al. (2021)	authors based in Italy & USA	developmental studies	methods	draws on various research projects supported by the World Bank Living Standards Measurement Study	various survey populations in Burkina Faso, Ethiopia, Malawi, Nigeria & Uganda	high frequency phone surveys	high