The voices of children and young people during COVID-19: A critical review of methods

Eva Jörgensen | Donna Koller | Shanti Raman | Oladele Olatunya | Osamagbe Asemota | Bernadine N. Ekpenyong | Geir Gunnlaugsson | Angela Okolo

Abstract

Aim: Critically review research methods used to elicit children and young people's views and experiences in the first year of COVID-19, using an ethical and child rights lens.

Methods: A systematic search of peer-reviewed literature on children and young people's perspectives and experiences of COVID-19. LEGEND (Let Evidence Guide Every New Decision) tools were applied to assess the quality of included studies. The critical review methodology addressed four ethical parameters: (1) Duty of care; (2) Children and young people's consent; (3) Communication of findings; and (4) Reflexivity.

Results: Two phases of searches identified 8131 studies; 27 studies were included for final analysis, representing 43,877 children and young people's views. Most studies were from high-income countries. Three major themes emerged: (a) Whose voices are heard; (b) How are children and young people heard; and (c) How do researchers engage in reflexivity and ethical practice? Online surveys of children and young people from middle-class backgrounds dominated the research during COVID-19. Three studies actively involved children and young people in the research process; two documented a rights-based framework. There was limited attention paid to some ethical issues, particularly the lack of inclusion of children and young people in research processes.

Conclusion: There are equity gaps in accessing the experiences of children and young people from disadvantaged settings. Most children and young people were not involved in shaping research methods by soliciting their voices.

KEYWORDS
adolescent health, child health, Covid-19, ethics, review: research design

Abbreviations: LEGEND, Let Evidence Guide Every New Decision; ISSOP, the International Society for Social Paediatrics and Child Health; INRICH, International Network for Research on Inequalities in Child Health; MeSH, Medical Subject Headings.
1 | INTRODUCTION

Although the direct physical effects of COVID-19 have been mild on most children and young people worldwide, the indirect effects of the associated public health responses have caused considerable emotional and social upheaval.1 The pandemic has affected their overall well-being and prevented them from exercising their human rights. This is especially so for those children and young people on the margins who have been exposed to considerable morbidity, mortality and suffering.2-4

The unfolding COVID-19 pandemic in early 2020 affected children and young people across countries and continents in a myriad of ways.5-7 This early period was critical for many of them as they were experiencing school closures and living in lockdown. The restrictive measures applied by governments made it even more difficult for researchers to reach out to children and young people with rights-based methods designed to engage them as participants to solicit their non-proxied voices to address the impact of COVID-19 on them. At the same time, child health researchers and global agencies demand that youth be both seen and heard as they must be protected from harm, have their health promoted, and be given opportunities to actively participate.1,8

The COVID-19 pandemic has galvanised global research and advocacy responses from academics, clinicians and child health advocates identifying the need for research on the specific experiences of children and young people to inform policy and practice. The Life Course Intervention Research Network (United States) identified the mental health impacts of the pandemic on children and young people and effective strategies for building resilience at individual and community levels as research priorities for COVID-19. It further highlighted the need to see youth as equal partners in research co-design processes to improve health equity.9

The need for knowledge about the impact of COVID-19 on children and young people balanced with their status as right-bearing citizens warrants a review of research methods involving them as participants in the early period of the pandemic. Critical reviews promote innovative ways of interpreting data and can expose misconceptions or inconsistencies in the literature. These types of reviews can serve to reframe an issue and direct attention towards change, which can guide future research.10 Our objective was to conduct a critical review of the published literature that investigated the voices and experiences of children and young people during the early phase of the COVID-19 pandemic, using a child rights and equity lens. With the focus on the early period of the pandemic, we aimed to capture the initial responses of researchers for rapid insights into the impact of COVID-19 on this group. The first year of the pandemic included elements of great uncertainty and the ongoing need for severe lockdowns, which directly affected children and young people. It was important to shed light on the research methods applied early in the pandemic by using child rights and an ethical lens to determine the quality of the approaches and the degree to which ethical standards were applied.

Key Notes
- While all children have a right to be heard, most research in the early phase of the pandemic was conducted in high-income countries where participants from middle-class backgrounds were more easily accessed.
- There was an over-reliance on online platforms during the initial phase of the pandemic, favouring convenience sampling without involving children and young people.
- Research with children and young people should constitute methods that favour their voice in the research design while upholding participatory ethics.

Keeping with a critical review, we sought to identify positive facets of research while also detecting possible shortcomings by evaluating the methods using a standardised appraisal tool.11,12 We were also keen to explore the ethical landscape of published research, given that children and their families were exposed to specific and heightened risks, especially early in the pandemic. In so doing, we aimed to bridge the gap between formal ethical guidelines and practices while also promoting participatory ethics; with such an approach, the researchers create a space for children to express themselves while seeking to navigate complex ethical challenges that may arise during the research process.13,14

2 | METHODS

This study emerged as part of a collaborative approach to the impact of COVID-19 on children and young people by members of the Research Group of the International Society of Social Paediatrics and Child Health (ISSOP) and the International Network for Research on Inequalities in Child Health (INRICH). Over several meetings, ISSOP members across five continents engaged in an iterative process. We deliberated on emerging themes and concerns emanating from the research with children and young people during the early stages of the pandemic. The participants identified methodologies in accessing children’s voices as one of the essential themes to address further in order to scrutinise if and how children were heard and taken into consideration in research in the early phase of the pandemic.

2.1 | Literature search

2.1.1 | Phase 1

The search took place from January 2021 to July 2021. First, ISSOP members were invited to submit articles for inclusion, and a large section of literature was pulled from an annotated bibliography provided by Child to Child, an organisation which focuses on children’s rights around the world (https://www.childtochild.org.uk/).
This search yielded over 200 articles consisting of both academic and grey literature, of which only 10 involved research directly with children and young people, and two met our inclusion criteria.

Second, with the assistance of a university librarian, the following search terms were compiled: child*, preschool, adolescent, infant, COVID-19, coronavirus, Sars-cov-2, child advocacy, mental health, mental illness, lockdown. Boolean search strings included: childhood AND COVID-19 (AND pandemic, AND epidemic), children AND COVID-19 (AND pandemic, AND epidemic), youth AND COVID-19 (AND pandemic, AND epidemic); young people AND COVID-19 (AND pandemic, AND epidemic). Databases for these searches included: CINAHL, Socio Abstracts, Cochrane Central, Cochrane Database of Systematic Reviews, PsycINFO, PubMed, Google Scholar, ETSU Electronic Library Database, Elsevier, MAG online library, Sage journals and Jstor. We also assessed specific journals accessed directly from their sites: American Psychological Association (APA), British Medical Journal (BMJ) and the American Academy of Pediatrics (AAP).

Following a review of 5715 studies and the removal of duplicates, a total of 12 studies were included in the first search phase (Figure 1).

2.1.2 | Phase 2

A second search was conducted from October 1 to November 15, 2021. With the assistance of two librarians, search terms were aligned with MeSH terms from specific databases to produce targeted results. Databases for this search consisted of PsycNet, SCOPUS, Medline, CINAHL, Google Scholar and Social Work Abstracts.

Because research methods were the focus of this review, search terms included: child*, youth, adolescent*, COVID-19, coronavirus, pandemic, experiences, perspectives, voice*, particip*, methods, play-based, child-based and ethics. Some of these search terms produced irrelevant, little or no results (e.g. experiences, perspectives, voice*, particip*, methods, play-based, child-based and ethics). Keywords, titles and abstracts were scanned using the following Boolean search strings: (child* OR youth) AND COVID-19 AND (research methods); (child* OR youth) AND COVID-19 AND (children’s rights OR participation); (child* OR youth OR adolesc*) AND COVID-19 AND "research methods". Following a review of 2416 studies and the removal of duplicates, a total of 15 studies were included in the second search phase (Figure 2).

2.2 | Inclusion and exclusion criteria

Inclusion criteria were as follows: (1) Original peer-reviewed research involving children and young people’s perspectives regarding the impact of COVID-19; (2) Studies published from data collected in 2020 during critical periods of global lockdowns between February

![Figure 1](https://via.placeholder.com/150)
1, 2020, and February 28, 2021; the dates chosen to capture 1 year when public health interventions were being widely implemented; (3) Studies with participants up to the age of 25 years following the definition of youth by the World Health Organization. However, if studies included only young adults (e.g. 18–25 years), they were excluded because research methods and ethical considerations would differ for older youth. Abstracts, conference papers, books, systematic reviews and grey literature were excluded from the review. Studies that used adults (parents, educators) as proxies for children's perspectives were omitted, as well as studies published in a non-English language. Large surveys conducted by non-governmental agencies were excluded because of insufficient details on the research methods.

2.3 | Data extraction and quality assessment

Two authors (EJ, DK) led the data extraction process. All authors participated in discussions on the results until they achieved a consensus. Studies were evaluated using Let Evidence Guide Every New Decision (LEGEND), a set of tools originally developed by researchers at Cincinnati Children’s Hospital Medical Center. The LEGEND tools designate studies as good quality, lesser quality or not applicable or credible. The members of the research team were assigned specific articles for evaluation. Study details were recorded on an Excel spreadsheet that contained columns for main themes (e.g. participants, data collection methods, ethical practices). When questions arose pertaining to the quality of a particular study, discussions ensued between members and a consensus was reached. All 27 studies included in this critical review were deemed good quality as per the LEGEND tools.

2.4 | Analysis

The analysis was informed by an equity and child rights-based approach. Ethical parameters for conducting research with children and young people were taken from the International Charter of Ethical Research Involving Children, supported by Graham and Powell’s recommendations for reflexive engagement for researchers, and Ethical Considerations for Evidence Generation Involving Children on the COVID-19 Pandemic. Four key ethical parameters were considered: (1) Duty of care: weighing harms and benefits; (2) Issues of privacy, confidentiality and consent; (3) Ensuring appropriate communication of findings and (4) Reflexivity.
2.5 | Ethical consideration

As a review of published studies, there was no ethical approval process needed for the study.

3 | RESULTS

Two phases of searches identified 8131 studies in total (Figure 1 and Figure 2), and 27 studies were included for final analysis. The study comprised 17 quantitative studies,17-33 six qualitative studies,34-39 and four mixed-method studies.40-43 Table 1 depicts the final list of included studies along with some of their characteristics. Three major themes were uncovered: (1) representation of voices; (2) methods used in accessing these voices and (3) ethical standards and procedures in engaging children and young people’s voices.

3.1 | Whose voices were heard? Representation of children in research

In total, 43,877 views from children and young people were retained from all 27 articles. Information on gender distribution was absent in four studies.34,35,38,42 The studies represented 18 countries across six continents, with 12 studies conducted in Europe. Three studies were from North America, three from Australia, five in Southeast Asia, two in South Asia and one in Africa. One study included South America in a cross-country comparison between six countries. Following the World Bank’s division of economic income groups depicts 82% of the countries in the included studies belonged to high-income countries (minority world) and 18% to middle- and low-income countries (majority world). Additionally, the majority-world representation rested upon studies from China, which is classified as an upper-middle-income country.28,29,31,32,33

The uneven distribution of countries was further demonstrated in the bias towards participants belonging to middle and upper-class backgrounds as recruitment methods necessitated access to high-quality internet and presence on social media.17,18,19,20,40,41,42 Marginalised populations were generally not considered for participation except in six studies.18,21,23,34,35,38 However, language proficiency was required for participation.17,18 and prevalent mental health issues were an exclusion criteria for a study in the Netherlands.17

While the age of participants ranged from 3 to 25 years, the emphasis was on those aged between 10 and 18 years. More specifically, those aged 12-14 years appeared in 18 studies. Voices of children under 6 years of age were only represented in three studies.22,23,36 It was uncertain how many of these responses may have been influenced by adults. Two37,38 did not specify the age of their participants.

3.2 | How are children and young people heard? Methods used in accessing children’s voices

The most popular method for recruitment involved convenience sampling: children and young people who were already participating in an ongoing longitudinal study,21,24,26,27,30,34,35,38,39,43 advertisements on social media,17,18,19,20,40,41,42 or via the school system.25,28,29,31,32,33,41 Two Italian studies recruited from children’s health centres22,23 and in one case, the recruitment method was unclear.37

Children and young people predominantly participated in cross-sectional, web-based surveys to evaluate the impact of COVID-19 on their mental health17,18,19,20,22,23,24,28,29,30,31,32,33,40 within a short timespan early in the pandemic. Only two studies, already working with children and young people in a clinical setting in Iran35 and Kenya,21 delivered their surveys as a phone interview, and an Indian research submitted the questionnaire as an interview in the participant’s home.26 One study in the United Kingdom conducted a focus-group interview via Zoom.34

No studies reported the use of play-based methods with children. However, five studies found adaptive ways with participants under 8 years of age. Some involved training parents to deliver open-ended questionnaires to their children,36 two articles used a narrative approach where the children were observed and their stories carefully documented.37,38 A quantitative study in the Netherlands by de Groep et al.27 incorporated daily diary surveys from children and young people for almost 19 days during school closure. In addition to the surveys, the researchers twice engaged their participants in a Dictator Game during their sampling period. In the game, the participants’ empathy was measured by how they chose to distribute an amount of coins between hypothetical persons. These persons represented a friend, an unfamiliar peer, or someone associated with the COVID-19 pandemic, such as a person with a poor immune system, a person infected with COVID-19 or a doctor working in a hospital. The study showed that participants were more inclined to give a higher amount of empathy to friends, doctors and people with either poor immune system or infected with COVID-19 than to unfamiliar peers.

3.3 | How did researchers engage in reflexivity and adhere to ethical standards in children and young people’s voices?

Using criteria from Berman,13 Graham et al.,15 and Graham and Powell,16 we list the ethical processes demonstrated in the studies in Table 2. A detailed delineation of the ethical processes documented in each study is included in Appendix S1. We paid close attention to reflexive engagement among researchers as recommended by Graham et al.,15 and Graham and Powell,16 where a reflexive approach requires researchers to seek beyond what is required by institutional ethics, in order to navigate the complex ethical nuances and power structures that may arise during the
**TABLE 1** Description of included studies

| Author                  | Country/-ies                                      | Study type     | Size     | Age Group                  | Methods                                      | Outcomes                                                                 | Timeframe                                      |
|-------------------------|---------------------------------------------------|----------------|----------|----------------------------|----------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------|
| Akkaya-Kalayci, 2020    | Austria/Turkey                                    | Quantitative   | 1240     | 15–25 years                | Online Survey                                | Levels of mental health: increased, decreased or unaltered.             | 22 May to 19 June 2020                       |
| Branquinho et al., 2020 | Portugal                                           | Mixed Methods  | 617      | 16–24 years                | Online Survey                                | Well-being, health and coping strategies.                                | 14 April to 18 May 2020                      |
| Bray et al., 2021       | UK, Australia, Sweden, Brazil, Spain, Canada     | Mixed Methods  | 390      | 7–12 years                 | Online Survey                                | Health literacy                                                           | 9th April to 1 June 2020                    |
| Duan et al., 2020       | China                                             | Quantitative   | 3613     | 7–18 years;                | Online Survey                                | Anxiety and coping style                                                  | N/A                                           |
| Dyer et al., 2020       | Kenya                                             | Quantitative   | 486      | 10–24 years                | Phone Survey                                 | Depressive symptoms, psychological resilience                            | March 2020, ongoing                         |
| Idoiaga et al., 2020    | Spain                                             | Qualitative    | 250      | 3–12 years                 | Interview in person                          | Lexical content analysis of children's free association, elicited by term 'coronavirus' | 30 March to 13 April 2020                   |
| Janssen et al., 2020    | The Netherlands                                   | Quantitative   | 34       | 11-17 years                | Online questionnaire via app                 | Depressive symptoms; intolerance of uncertainty, parental warmth.        | 14 to 28 April 2020, during lockdown         |
| Korzycka et al., 2021   | Poland                                            | Mixed Methods  | 2408     | 15–18 years                | Online Survey                                | Ranking of problems with remote learning.                                 | 25–26 March 2020                             |
| Larcher et al., 2020    | United Kingdom                                    | Qualitative    | 15       | 11-18 years                | Focus Group Interview via Zoom               | Perspectives on impact of COVID-19, school closures and role they wished to play. | 23 May 2020                                   |
| Magson et al., 2020     | Australia                                         | Quantitative   | 248      | 13 to 16 years             | Online Survey                                | Depression, anxiety, life satisfaction, school disruption, media exposure, interpersonal conflict, social connectedness, adherence to stay-at-home | T1 before pandemic, T2 during pandemic restrictions in 2020 |
| McGuine et al., 2021    | United States                                     | Quantitative   | 13,002   | 13–19 years                | Online Survey                                | Mental health, physical activity, health-related quality of life         | May 2020                                      |
| Mirlashari et al., 2020 | Iran                                              | Qualitative    | 5        | Age not clear              | Phone Interview                              | Perspectives of children with cancer and their family during COVID-19    | N/A                                           |
| Nicholas et al., 2021   | Australia                                         | Quantitative   | 308      | 12–25 years                | Online Survey                                | Service use and service quality.                                         | 23 March to 11 June 2020                    |
| Oosterhoff et al, 2020  | United States of America                          | Quantitative   | 683      | 13–18 years                | Online Survey                                | Social distancing and motivation, anxiety and depressive symptoms        | 29–30 March 2020                             |
| Papetti et al., 2020    | Italy                                             | Quantitative   | 707      | 5–18 years                 | Online Survey                                | Intensity and frequency of headaches, anxiety about COVID-19, depression, school anxiety, positive coping. | N/A                                           |
| Pascal & Bertram, 2021  | England, Scotland                                 | Qualitative    | 58       | Age not available          | In-person interview, observation             | Young children's exploration of COVID experiences throughplay narratives | N/A, data gathering ongoing                 |

(Continues)
| Author                  | Country/ies   | Study type       | Size   | Age Group   | Methods                      | Outcomes                                                                                           | Timeframe                                      |
|------------------------|---------------|------------------|--------|-------------|------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Passanisi et al., 2020 | Italy         | Quantitative     | 204    | 5–18 years  | Online Survey                | Quarantine influence on T1 diabetes management: no influence.                                       | 15 April to 1 May 2020                        |
| Quinones & Adams, 2021 | Australia     | Qualitative      | 2      | 7 years     | Online observation via Narrative Approach | Engagement with technology, sustaining friendships, content of interactions.                      | March–June 2020, July–September 2020, lockdown |
| Ravens-Sieberer et al., 2021 | Germany    | Quantitative     | 1647   | 7–17 years  | Online Survey                | Quality of life measures, mental health problems.                                                   | 26 May to 10 June 2020                        |
| Salzano et al., 2021   | Italy         | Quantitative     | 1860   | 12–18 years | Online Survey                | Lifestyle changes and feelings during lockdown, psychological impact of isolation and social distancing. | 23 April to 3 May 2020                        |
| Saurabh et al., 2020   | India         | Quantitative     | 121    | 9–18 years  | Interview in person          | Understanding of quarantine rationale, quarantine behaviours, psychological impact.               | N/A                                           |
| Tang et al., 2020      | China         | Quantitative     | 4391   | 6–18 years  | Online Survey                | Psychological distress, life satisfaction, perceived impact of quarantine, parent-child discussion on COVID-19. | 13 to 23 March 2020                          |
| Van der Groep et al., 2021 | The Netherlands | Quantitative     | 53     | 10–20 years | Online Survey, Dictator game | Prosocial, risk-taking behaviours, opportunities for prosocial actions, social value orientation    | 30 March to 17 April 2020                    |
| Waselewski et al., 2021 | United States | Qualitative      | 1087   | 14–24 years | Online Survey                | Knowledge and experiences of COVID-19.                                                              | Two surveys, 6 March and 20 March 2020         |
| Xie et al., 2020       | China         | Quantitative     | 1784   | 7–13 years  | Online Survey                | Symptoms of depression, anxiety, worry about COVID-19, optimism about the pandemic.                | 28 February to 5 March 2020                  |
| Zhang et al., 2020     | China         | Quantitative     | 1241   | 9–14 years  | Longitudinal cohort study, questionnaires likely online | Depression, anxiety, non-suicidal self-injury, suicide ideation, plan, attempt.                     | November 2019 (wave 1), May 2020 (wave 2)     |
| Zhou et al., 2020      | China         | Quantitative     | 8079   | 12–18 years | Online survey                | Depression, anxiety.                                                                               | 8th March to 15th March                      |
research process in order to safeguard the rights of their participants. Applying a reflexive approach requires researchers to critically examine their own positionality, biases and suitability of their methods to promote the rights of children and young people as participants. We acknowledge we could only assess what was included in the articles, which may not accurately represent the full extent of ethical considerations that may have been addressed in the study. Twenty-three studies provided good justification of why children and young people were studied; 21 studies documented approval from their institutional ethics boards. Seven studies did not refer to ethical reviews.\(^{17,23,24,25,30,32,34}\) Two studies explicitly documented a child-rights framework guiding their research.\(^{34,42}\) We identified that three studies documented the active involvement of children and young people in piloting and analysis.\(^{32,34,42}\)

In our review, we paid particular attention to the inclusion of children and young people in the research design and the benefits of their participation. Twenty-six studies discussed their participants anonymously, and two studies discussed their confidentiality procedures in detail.\(^{21,38}\) In one study, procedures of anonymity and confidentiality would have benefitted from bringing more clarity to the reader.\(^{37}\) Seventeen studies sought informed consent from their participants directly.\(^{17-19,21,22,25-30,32,34,35,37,38,42}\) Two studies piloted their methods with an age-appropriate group, and one study included two of their participants in the writing-up process as co-authors. Nine studies made recommendations to improve the situations of children and young people.\(^{18,21,27,30,35,36,40,42}\)

We found that three studies included researchers’ positionality and impact as adults among minors and six studies discussed the balancing of risk and rewards of their methods. Although reflexivity tends to be a tool used within qualitative methods, a quantitative study from China\(^{32}\) did reflect on their survey method as not having been able to capture subjective views of children and young people.

### 4 | DISCUSSION

In the first year of the pandemic, the research conducted with children and young people provided some early and valuable contributions to our understanding of how they responded to the public health crisis. More specifically, it informed how the pandemic affected children’s well-being and their ability to exercise their rights within a climate of crisis and emerging policy development. In consideration of the UNCRC’s position towards children and young people’s right to participate and be heard in research, this critical review examined research methods using a rights-based, ethical lens.\(^{44}\)

To this end, we focused on research conducted during the early periods of the pandemic to highlight the degree to which children and young people’s rights were safeguarded during a time when knowledge of the status of youth in the pandemic was rapidly required. To highlight their involvement, we focused on the recruitment of children and young people, data collection methods and compliance with established ethical principles. We found that there were equity gaps in accessing the views and experiences of children and young people from disadvantaged settings, especially those with poor access to technology, as most studies used rapid research methods with online tools and convenient sampling techniques. Moreover, children who are disadvantaged by disability or illness are also absent from this research. From a child rights perspective, this inhibits the right of all children to be heard.\(^{45}\)

Engaging children and young people in research is challenging during a rapidly evolving global pandemic. Nonetheless, researchers need to pay close attention to how they intend to apply their

| Ethical categories | Description of best practices | Number of studies documenting ethical category |
|--------------------|-------------------------------|---------------------------------------------|
| Duty of care: balancing benefits & harm | 1. Is the reason behind the study justified along with why children and young people are being included?\(^{35}\) 2. Have the tools been tested to ensure a child-friendly approach?\(^{13,15}\) | \(N = 23\) |
| Ensuring privacy, confidentiality & consent | 1. Has institutional ethics approval been sought?\(^{15}\) 2. Has informed consent been sought from the participants?\(^{15}\) 3. Is anonymity of the participants ensured?\(^{13,15}\) 4. Is the confidentiality procedure discussed in detail?\(^{15}\) | \(N = 3\), \(N = 21\), \(N = 16\), \(N = 26\), \(N = 2\) |
| Participation, communication of findings | 1. Is representation discussed in terms of generalisability?\(^{13}\) 2. Will the findings be applied to efforts at improving the lives of children and young people?\(^{15,16}\) 3. Are participants a part of disseminating the results?\(^{15}\) | \(N = 15\), \(N = 9\), \(N = 1\) |
| Reflexivity | 1. Do the authors reflect on their own biases or personal experiences that might affect their interpretations of study findings?\(^{15,16}\) 2. Have the authors considered the risks and benefits of the methods employed?\(^{16}\) | \(N = 3\), \(N = 6\) |
methods in all research with children. The study’s design creates a trajectory for which children and young people’s voices are represented and elevated. Relevant questions to raise may include, for example, whether the methods are age-appropriate and for which groups they are intended. Empirical processes such as recruitment and how data are collected, analysed and disseminated comprise critical evaluation components, particularly in the context of research with children and young people. Our analysis revealed that studies from China were able to expand their recruitment and dissemination because of their high-speed internet coverage. Other majority-world countries may lack the resources to carry out such investigations. Therefore, some children from these parts of the world are likely to be underrepresented in research involving a global pandemic.

With respect to research ethics, our analysis revealed that studies engaged in a range of ethical practices, while some principles were either ignored or not fully described in the published articles. We were guided in our analysis by ethical practices as suggested by the UNICEF Office of Research, including specific considerations during the pandemic. We paid particular attention to how researchers adopted a reflexive approach by creating a synergy between methods, ethics and decision-making while including discussions related to issues and challenges during the research process. These included excellent examples of children and young people’s active engagement in research processes where a rights-based model was incorporated into the methods, and participants were recruited as co-researchers. However, these valued ethical elements were identified in a few studies.

Allowing participants to review data and validate research findings is an important source of rigour. In addition to ethical principles which identify the importance of sharing findings with children and young people involved in research, their right to participate in matters affecting them should also entail a right to influence avenues for dissemination and knowledge translation. As a result, researchers who follow these ethical practices are also promoting children’s participation rights. Conducting ethical research with children and young people requires more than navigating institutional ethical procedures. Researchers must engage in a reflexive approach where procedures, practices and assumptions are scrutinised, particularly in research involving children and young people. UNICEF’s Office of Research’s stance is further highlighted in El Seira et al.’s recent commentary on conducting ethical research with children and young people during COVID-19. We acknowledge that research in a pandemic can be complex, and there exists a need to balance children and young people’s comfort and right to participation. However, a firm ethical grounding in research methods must be present if their voices are authentically presented and their rights honoured. In turn, opportunities to address inequities embedded in their lived experiences can and must be offered.

This study delineated the quality of the methods and ethics applied in research with children and young people during the early phase of the COVID-19 pandemic. We identified elements of good practice and research practice that can be strengthened concerning child rights and equity. It remains critical that we review research methods moving forward using a critical lens. While a robust participatory model in research with or by children is generally more aligned with a child rights-based approach, this does not necessarily mean that research on children is less ethical. By maintaining a critical stance when reviewing the methods used with children and young people, we are in a better position to realise children’s rights and elevate ethical assertions. Research with, by or on children can be challenging, and we must be open to exploring and creating new spaces for children and young people to engage in research.

### 4.1 Strengths and limitations

To our knowledge, this is the first critical review of research methods employed with children and young people during the early months of the pandemic. As such, it provides an important contribution to our understanding of how young voices are engaged in research as participants during a time of emergency and the predominant methods that are used under pressure to garner their views. This review also draws strength from the research analysis by child rights advocates representing diverse cultures, professional backgrounds and geographical locations. We have in this review applied a high level of rigour by systematically using a reputable tool for evaluation (LEGEND), often not associated with critical reviews.

While our focus on the first year was justified, given the aims of our research, our designated timeline for journal publications may have omitted or inadvertently excluded some research that would have otherwise met the inclusion criteria. Furthermore, we acknowledge that our review focuses on a limited period, and sound studies may have been published after our cut-off date. Although we sought to include research from around the world, we made a conscious decision to only review those published in English as our research consortium was truly global, with English as a common language. Including research in a non-English language would also have required translations of the studies. As we were conducting a critical review, we did not want to risk misinterpretation of the original work due to lost nuances and meanings in the translation process. We also excluded global agency and non-government reports because research methods are often inadequately described and therefore difficult to evaluate.

As a research team, we represent an organisation that advocates for children’s right to be heard, and hence, our analyses contain inherent biases in that regard. In particular, we chose to include an analysis of ethical issues that supported children’s right to participate in various research processes. Finally, our analyses are reliant on and informed by what is documented in the articles. We acknowledge journal word limits can inhibit a fulsome account of methods and ethical practices in some cases.
5 | CONCLUSIONS

Our critical review appraised the methods from 27 selected studies of good quality that explored children and young people’s voices during the initial months of the COVID-19 pandemic. While all children and young people have the right to be heard, many were not. Our review highlights the implications of a child rights stance that emerges through ethically sound research practices. However, the need for rapid research in a global pandemic meant that they were seldom actively engaged in the research design, follow-up, or dissemination. To ensure that our research is ethically sound and child-rights based, we must safeguard and maintain a reflexive approach as scientists. A reflexive approach should endure through the course of a research project, regardless of a pandemic, always balancing scholarship needs with participants’ rights to an ethically sound process. We make the following recommendations for future research:

- Although there are existing research methods for diverse participants, researchers need to acknowledge the ongoing need to design innovative recruitment and data collection strategies that can reach children and young people who are disadvantaged or marginalised. These include children who live in poverty, are young, or have disabilities.
- Institutional ethical committees and funding bodies should pay special attention to how children and young people are engaged in the research proposals they review.
- Researchers must make deliberate efforts to commit to a continuous reflexive approach while engaging in research with children and young people.
- Ethical processes include follow-up with participants involved in the research, whereby they can contribute to potential analyses, follow-up and dissemination.
- Rather than a predominant reliance on quantitative online surveys, play-based and arts-based methods grounded in qualitative approaches can yield a deeper understanding of children’s and young people’s experiences and perspectives within particular contexts. This approach can attenuate the current lack of voices from diverse communities.
- Parents, educators and other adults should not serve as proxies for research that purports access to children’s voices.

AUTHOR CONTRIBUTIONS

EJ took part in the conception and design of the study, training on LEGEND documents, acquisition, analysis, interpretation, planning, writing up, approved the final version, and is responsible for overall content. DK took part in the conception and design of the study, training on LEGEND documents, writing of sections, acquisition, analysis, provided editorial oversight and approved the final version. SR took part in the conception and design of the study, writing of sections, acquisition, analysis, provided editorial oversight and approved the final version. AO took part in the conception and design of the study, provided editorial oversight and approved the final version. GG took part in the conception and design of the study, editorial oversight and approved the final version. AO took part in the conception and design of the study and approved the final version.

ACKNOWLEDGEMENTS

The authors thank the many engaged and motivated professionals in the COVID-19 research group of the International Society for Social Pediatrics and Child Health (ISSOP) and the International Network for Research on Inequalities in Child Health (INRICH). The authors especially thank Ann Bailey, Lovisa Fung and Ladan Hersi, for their assistance and other members of ISSOPs Voices of Children group, who inspired and laid the foundations for this study.

CONFLICT OF INTEREST

None declared.

DATA AVAILABILITY STATEMENT

Not relevant.

PATIENT CONSENT FORM

Not relevant.

ORCID

Eva Jörgensen  https://orcid.org/0000-0002-2950-4814
Donna Koller  https://orcid.org/0000-0001-8561-5618
Shanti Raman  https://orcid.org/0000-0002-4546-3231
Oladele Olatunya  https://orcid.org/0000-0003-2564-3064
Osamagbe Asemota  https://orcid.org/0000-0003-4405-2227
Bernadine N. Ekpenyong  https://orcid.org/0000-0002-3531-5577
Geir Gunnaugsson  https://orcid.org/0000-0002-6674-2862
Angela Okolo  https://orcid.org/0000-0003-1527-1164

REFERENCES

1. Raman S, Harries M, Nathawad R, Kyeremateng R, Seth R, Lonne B. Where do we go from here? A child rights-based response to COVID-19. BMJ Paediatr Open. 2020;4:e000714.
2. Royal College of Paediatrics & Child Health. Impact of the COVID-19 pandemic on global child health: joint statement of the international child health group and the Royal College of Paediatrics and Child Health. Arch Dis Child. 2020;106:115-116.
3. Robertson T, Carter ED, Chou VB. Early Estimates of the Indirect Effects of the COVID-19 Pandemic on Maternal and Child Mortality in Low-Income and Middle-Income Countries: A Modelling Study. Lancet Glob Health. 2020;e901–e908.
4. Kyeremateng R, Oguda L, Asemota O. International society for social pediatrics and child health (ISSOP) Covid-19 working group. Covid-19 pandemic: health inequities in children and youth. Arch Dis Child. Published online 2021, 107:297-299.
5. Boiro EJ, Gunnaugsson G. Impact of the COVID-19 pandemic on the life of Bissau-Guinean religious (Quranic) schoolboys during a state of emergency: a qualitative study. BMJ Paediatr Open. 2021;5:e001303.
6. Takeuchi H, Napier-Raman S, Asemota O, Raman S. Identifying vulnerable children’s stress levels and coping measures during COVID-19 pandemic in Japan: a mixed method study. BMJ Paediatr. Open. 2022;6:e001310.

7. N’dure Baboudottir F, Jandl Z, Injai B, Einarsdottir J, Gunnlaugsson G. Adolescents amid emerging COVID-19 pandemic in Bissau, Guinea-Bissau: a qualitative study. BMJ Paediatr. Open. 2022;6:e001417.

8. Cuevas-Parpa P, Stephano M. Children’s Voices in the Times of COVID-19: Continued Child Activism in the Face of Personal Challenges. World Vision; 2020.

9. Dudovitz RN, Russ S, Berghaus M, et al. COVID-19 and Children’s well-being: a rapid research agenda. Matern Child Health J. 2021;25:1655-1669.

10. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info Libr J. 2009;26(2):91-108.

11. Goldstein A, Venker E, Weng C. Evidence appraisal: a scoping review, conceptual framework, and research agenda. J Am Med Inform Assoc. 2017;24(6):1192-1203.

12. Clark E, Burkett K, Stanko-Lopp D. Let evidence guide every new decision (LEGEND): an evidence evaluation system for point-of-care clinicians and guideline development teams. J Eval Clin Pract. 2009;15(6):1054-1060.

13. Berman G. Ethical considerations for evidence generation involving children on the COVID-19 pandemic. Innocenti Publications; 2020.

14. Abebe T, Bessell S. Advancing ethical research with children: critical reflections on ethical guidelines. Child Geogr. 2014;12(1):126-133.

15. Graham A, Powell MA, Taylor N, Anderson D, Fitzgerald R. Ethical research involving children. Innocenti Publications. 2013;1:220. https://www.unicef-irc.org/publications/706-ethical-research-involving-children.html

16. Graham A, Powell MA. Ethical research involving children: encouraging reflexive engagement in research with children and young people. Child Soc. 2014;29:331-343.

17. Janssen LHC, Kullberg MLJ, Verkuil B, et al. Does the COVID-19 pandemic impact Parents’ and Adolescents’ well-being? An EMA-study on daily affect and parenting. PLoS One. 2020;15(10):e0240962.

18. Akkaya-Kalayci T, Kothgassner OD, Wenzel T, et al. The impact of the COVID-19 pandemic on mental health and psychological well-being of young people living in Austria and Turkey: a multicenter study. Int J Environ Res Public Health. 2020;17(23):9111.

19. Oosterhoff B, Palmer CA, Wilson J, Shook N. Adolescents’ motivations to engage in social distancing during the COVID-19 pandemic: associations with mental and social health. J Adolesc Health. 2020;67(2):179-185.

20. McGuine TA, Biese KM, Petrovksa L, et al. Mental health, physical activity, and quality of life of US adolescent athletes during COVID-19-related school closures and sport cancellations: a study of 13000 athletes. J Athl Train. 2021;56(1):11-19.

21. Dyer J, Wilson K, Badia J, et al. The psychosocial effects of the COVID-19 pandemic on youth living with HIV in Western Kenya. AIDS Behav. 2021;25(1):68-72.

22. Papetti L, Di Loro PA, Tarantino S, et al. I stay at home with my family. A daily diary study on Adolescents’ mood, empathy, and pro-social behavior during the COVID-19 pandemic. PLoS One. 2020;15(10):e0240349.

23. Zhang L, Zhang D, Fang J, Wan Y, Tao F, Sun Y. Assessment of mental health of Chinese primary school students before and after school closing and opening during the COVID-19 pandemic. JAMA Netw Open. 2020;3(9):e2021482.

24. Zhou SJ, Zhang LG, Wang LL, et al. Prevalence and sociodemographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. Eur Child Adolesc Psychiatry. 2020;29(6):749-758.

25. Salzano G, Passanisi S, Pira F, et al. Quarantine due to the COVID-19 pandemic from the perspective of adolescents: the crucial role of technology. Ital J Pediatr. 2021;47(1):40.

26. Saurabh K, Ranjan S. Compliance and psychological impact of quarantine in children and adolescents due to Covid-19 pandemic. Indian J Pediatr. 2020;87(7):532-536.

27. van de Groep S, Zanole K, Green KH, Sweijen SW, Crane EA. A daily diary study on Adolescents’ mood, empathy, and pro-social behavior during the COVID-19 pandemic. PLoS One. 2020;15(10):e0240349.

28. Zhang L, Zhang D, Fang J, Wan Y, Tao F, Sun Y. Assessment of mental health of Chinese primary school students before and after school closing and opening during the COVID-19 pandemic. JAMA Netw Open. 2020;3(9):e2021482.

29. Zhou SJ, Zhang LG, Wang LL, et al. Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. Eur Child Adolesc Psychiatry. 2020;29(6):749-758.

30. Ravens-Sieberer U, Kaman A, Erhart M, Devine J, Schlack R, Otto C. Impact of the COVID-19 Pandemic on Quality of Life and Mental Health in Children and Adolescents in Germany. Eur Child Adolesc Psychiatry. 2021;11:11.

31. Tang S, Xiang M, Cheung T, Xiang YT. Mental health and its correlates among children and adolescents during COVID-19 school closure: the importance of parent-child discussion. J Affect Disord. 2020;279:353-360.

32. Duan L, Shao X, Wang Y, et al. An investigation of mental health status of children and adolescents in China during the outbreak of COVID-19. J Affect Disord. 2020;275:112-118.

33. Xie X, Xue Q, Zhou Y, Liu Q, Zhang J, Song R. Mental health status among children in home confinement during the coronavirus disease 2019 outbreak in Hubei Province China. JAMA Pediatr. 2020;174(9):898-900.

34. Larcher V, Dittborn M, Linthicum J, et al. Young People’s views on their role in the COVID-19 pandemic and Society’s recovery from it. Arch Dis Child. 2020;105:1192-1196.

35. Mirlashari J, Ebrahimpour F, Salisu WJ. War on two fronts: experience of children with cancer and their family during COVID-19 pandemic in Iran. J Pediatr Nurs. 2021;57:25-31.

36. Idioaga N, Berasategi N, Eiguren A, Picaza M. Exploring Children’s social and emotional representations of the COVID-19 pandemic. Front Psychol. 2020;11:1952.

37. Quinones G, Adams M. Children’s virtual worlds and friendships during the covid-19 pandemic. Video J Educ Pedagogy. 2021;5(1):1-18.

38. Pascal C, Bertram T. What do young children have to say? Recognising their voices, wisdom, agency and need for companionship during the COVID-19 pandemic. Eur Early Child Educ Res J. 2021;29(1):21-34.

39. Waselewski E, Waselewski M, Harper C, Dickey S, Bell SA, Chang T. Perspectives of US youth during initial month of the COVID-19 pandemic. Ann Fam Med. 2021;19(2):141-147.

40. Branquinho C, Kelly C, Arevalo LC, Santos A, de Matos MG. “Hey, I don’t like this‘: children’s health literacy relating to a global pandemic. J Affect Disord. 2021;29(1):44-57.
(COVID-19); an international cross sectional study. PLoS ONE 2021;16(2):e0246405.

43. Nicholas J, Bell IH, Thompson A, et al. Implementation Lessons from the Transition of Telehealth during COVID-19: A Survey of Clinicians and Young People from Youth Mental Health Services. Psychiatry Res. Published online 2021.

44. UN General Assembly. Convention on the Rights of the Child, 20 November 1989, United Nations, Treaty Series, vol. 1577. 1989. doi.org/10.1016/S2214-109X(20)30229-1. Accessed December 1, 2021.

45. Koller D. Right of children to be heard. BMJ Paediatr Open. 2021;5(1):e001161.

46. El Seira RM, Adriany V, Kurniati E. Doing research with young children in Covid-19 outbreak. Adv Soc Sci Educ Humanit Res. 2021;538:274-277.

47. Bodén L. On, to, with, For, by: Ethics and Children in Research. Child Geographies. Published online 2021.

SUPPORTING INFORMATION
Additional supporting information may be found in the online version of the article at the publisher’s website.

How to cite this article: Jörgensen E, Koller D, Raman S, Olatunya O, Asemota O, Ekpenyong BN, Gunnlaugsson G, Okolo A. The voices of children and young people during COVID-19: A critical review of methods. Acta Paediatr. 2022;111:1670–1681. doi.org/10.1111/apa.16422