

1 This is the pre-peer reviewed version of the following article: Jörgensen E, Koller D,
2 Raman S, Olatunya O, Asemota O, Ekpenyong BN, Gunnlaugsson G, Okolo A “The
3 voices of children and young people during COVID-19: A critical review of methods”.
4 Acta Paediatr. 2022;00:1–12. which has been published in final form at
5 <https://doi.org/10.1111/apa.16422>. This article may be used for non-commercial
6 purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived
7 Versions.

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

16

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21 Short title: Voices of children during COVID

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1 **Keywords:**

2 Review: Research Design; Ethics; Covid-19; Child Health; Adolescent Health

3

Abstract

1

2

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

6 **Methods:** Systematic search of peer-reviewed literature on CYP perspectives and
7 experiences of COVID-19. LEGEND (*Let Evidence Guide Every New Decision*) tools
8 were applied to assess quality of included studies. Critical review methodology
9 addressed four ethical parameters: 1) Duty of care; 2) CYP consent; 3) Communication
10 of findings; and 4) Reflexivity.

11 **Results.** Two phases of searches identified 8,131 studies; 27 studies were included for
12 final analysis, representing 43,877 CYP views. Most studies were from developed
13 countries. Three major themes emerged: a) Whose voices are heard; b) How are CYP
14 heard; and c) How do researchers engage in reflexivity and ethical practice? Online
15 surveys of CYP from middle-class backgrounds dominated the research during COVID-
16 19. Three studies actively involved CYP in the research process; two documented a
17 rights-based framework. There was limited attention paid to some ethical issues, in
18 particular, the lack of CYP inclusion in research processes.

19 **Conclusion.** There are equity gaps in accessing the experiences of CYP from
20 disadvantaged settings. Most CYP were not involved in shaping research methods
21 soliciting their voices.

22

1 **Key Notes**

- 2 • While all children have a right to be heard, most research in the early phase of
3 the pandemic was conducted in high-income countries where participants from
4 middle-class backgrounds were more easily accessed.
- 5 • There was an over-reliance on online platforms, favouring convenience sampling
6 without involving children and young people.
- 7 • Research with children and young people should constitute methods that favour
8 their voice in the research design while upholding participatory ethics.
- 9

1 The need for knowledge about the impact of COVID-19 on CYP balanced with
2 their status as right-bearing citizens warrants a review of research methods involving
3 CYP as participants in the early period of the pandemic. Critical reviews promote
4 innovative ways of interpreting data and can expose misconceptions or inconsistencies
5 in the literature. These types of reviews can serve to reframe an issue and direct
6 attention towards change, which can provide guidance for future research.⁹ Our
7 objective was to conduct a critical review on the published literature that investigated
8 the voices and experiences of CYP during the early phase of the COVID-19 pandemic,
9 using a child rights and equity lens. The focus on the early period of the pandemic is
10 aimed to capture the initial responses of researchers for rapid insights into the impact of
11 COVID-19 on CYP. The first year of the pandemic included elements of great
12 uncertainty and the ongoing need for severe lockdowns which directly affected CYP.
13 Using a child rights and ethical lens, it was important to shed light on the research
14 methods applied early in the pandemic to determine the quality of the approaches and
15 the degree to which ethical standards were applied.

16 In keeping with a critical review, we sought to identify positive facets in research
17 while also detecting possible shortcomings by evaluating the methods using a
18 standardised appraisal tool.^{10,11} We were also keen to explore the ethical landscape of
19 published research, given that CYP and their families were exposed to specific and
20 heightened risks, especially early in the pandemic. In so doing, we aimed to bridge the
21 gap between formal ethical guidelines and practices, while also promoting participatory
22 ethics.^{12,13}

23

1 **Methods**

2 This study emerged as part of a collaborative approach on the impact of COVID-19 on
3 CYP by members of the Research Group of the International Society of Social
4 Pediatrics and Child Health (ISSOP) and the International Network for Research on
5 Inequalities in Child Health (INRICH). Over several meetings, ISSOP members across
6 five continents engaged in an iterative process and deliberated on emerging themes and
7 concerns emanating from the research with CYP during the unfolding pandemic.
8 Methodologies in accessing the voices of children was identified as one of the important
9 themes to address further to scrutinise if and how children were heard and taken into
10 consideration in research in the early phase of the pandemic.

11

12 *Literature search*

13 Phase 1

14 The search took place from January 2021 to July 2021. First, ISSOP members were
15 invited to submit articles for inclusion, and a large section of literature was pulled from
16 an annotated bibliography provided by Child to Child, an organization which focuses on
17 children's rights around the world (<https://www.childtochild.org.uk/>). This search
18 yielded over 200 articles consisting of both academic and grey literature, of which only
19 10 involved research directly with CYP, and two met our inclusion criteria.

20 Second, with the assistance of a university librarian, the following search terms
21 were compiled: child*, preschool, adolescent, infant, COVID-19, coronavirus, Sars-cov-
22 2, child advocacy, mental health, mental illness, lockdown. Boolean search strings
23 included: childhood AND COVID-19 (AND pandemic, AND epidemic), children AND

1 COVID-19 (AND pandemic, AND epidemic), youth AND COVID-19 (AND pandemic,
2 AND epidemic); young people AND COVID-19 (AND pandemic, AND epidemic).
3 Databases for these searches included: CINAHL, Socio Abstracts, Cochrane Central,
4 Cochrane Database of Systematic Reviews, PsycInfo, PubMed, Google Scholar, ETSU
5 Electronic Library Database, Elsevier, MAG online library, Sage journals, and Jstor.
6 Some specific journals were accessed directly from their sites: American Psychological
7 Association (APA), British Medical Journal (BMJ), and the American Academy of
8 Pediatrics (AAP). Following a review of 5,715 studies, and removal of duplicates, a
9 total of 12 studies were included from the first search phase (Figure 1).

10 Phase 2

11 A second search was conducted from October 1 to November 15, 2021. With the
12 assistance of two librarians, search terms were aligned with MeSH terms from specific
13 databases in order to produce targeted results. Databases for this search consisted of
14 PsycNet, SCOPUS, Medline, CINAHL, Google Scholar and Social Work Abstracts.
15 Because research methods were the focus of this review, search terms included: child*,
16 youth, adolescen*, COVID-19, coronavirus, pandemic, experiences, perspectives,
17 voice*, particip*, methods, play-based, child-based, and ethics. Some of these search
18 terms produced unrelated, little or no results (e.g. experiences, perspectives, voice*,
19 particip*, methods, play-based, child-based, and ethics). Keywords, titles and abstracts
20 were scanned using the following Boolean search strings: (child* OR youth) AND
21 COVID-19 AND (research methods); (child* OR youth) AND COVID-19 AND
22 (“children’s rights OR participation); (child* OR youth OR adolesc*) AND COVID-19

1 AND “research methods”. Following a review of 2,416 studies, and removal of
2 duplicates, a total of 15 studies were included from the second search phase (Figure 2).

3

4 *Inclusion and Exclusion Criteria*

5 Inclusion criteria were: 1) Original peer-reviewed research involving CYP’s
6 perspectives regarding the impact of COVID-19; 2) Studies published from data
7 collected in 2020 during critical periods of global lockdowns between February 1, 2020,
8 and February 28, 2021; the dates chosen to capture one year when public health
9 interventions were being widely implemented; 3) Studies with participants up to the age
10 of 25 years following the definition of youth by the World Health Organization.

11 However, if studies included only young adults (e.g., 18-25 years), they were excluded
12 because research methods and ethical considerations would be different for older youth.

13 Abstracts, conference papers, books, systematic reviews, and grey literature were
14 excluded from the review. Studies that used adults (parents, educators) as proxies for
15 children’s perspectives were omitted as well as studies published in a non-English
16 language. Large surveys conducted by non-governmental agencies were excluded
17 because of insufficient details on the research methods.

18

19 *Data Extraction and Quality Assessment*

20 The data extraction process was led by two of the authors (EJ, DK). All authors
21 participated in discussion on the results and a consensus was achieved. Studies were
22 evaluated using *Let Evidence Guide Every New Decision* (LEGEND), a set of tools
23 originally developed by researchers at Cincinnati Children’s Hospital Medical Center.¹¹

1 The LEGEND tools designate studies as good quality, lesser quality, or not applicable or
2 credible.¹¹ Members of the research team were assigned specific articles for evaluation.
3 Study details were recorded on an Excel spreadsheet that contained columns for main
4 themes (e.g., participants, data collection methods, ethical practices). When questions
5 arose pertaining to the quality of a particular study, discussions ensued between
6 members and a consensus was reached. All 27 studies included in this critical review
7 were deemed to be good quality as per the LEGEND tools.

8

9 *Analysis*

10 The analysis was informed by an equity and child rights-based approach. Ethical
11 parameters for conducting research with CYP were taken from the International Charter
12 of Ethical Research Involving Children,¹² supported with Graham and Powell's¹⁵
13 recommendations for reflexive engagement for researchers, and Ethical Considerations
14 for Evidence Generation Involving Children on the COVID-19 Pandemic.¹² Four key
15 ethical parameters were considered: 1) Duty of care: weighing harms and benefits; 2)
16 Issues of privacy, confidentiality and consent; 3) Ensuring appropriate communication
17 of findings; and 4) Reflexivity.

18

19 *Ethical consideration*

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

22

23

1

Results

2 Two phases of searches identified 8,131 studies in total (Figure 1 and Figure 2) and 27
3 studies were included for final analysis. These comprised 17 quantitative studies,¹⁶⁻³² six
4 qualitative studies,³³⁻³⁸ and four mixed method studies.³⁹⁻⁴² Table 1 depicts the final list
5 of included studies along with some of their characteristics. Three major themes were
6 uncovered: 1) representation of voices; 2) methods used in accessing these voices; and
7 3) ethical standards and procedures in engaging CYPs voices.

8

9 *Whose voices were heard? Representation of children in research*

10 In total, 43,877 views from CYP were retained from all 27 articles. Information on
11 gender distribution was absent in four studies.^{33,34,37,41} These studies represented 18
12 countries across six continents with 12 studies being conducted in Europe. Three studies
13 were from North-America, three from Australia, five in Southeast Asia, two in South-
14 Asia and one in Africa. One study⁴¹ included South-America in a cross-country
15 comparison between six countries. Following the World Bank's division of economic
16 income groups depicts 82% of the countries in the included studies as belonging to high-
17 income countries (minority world) and 18% to middle- and low-income countries
18 (majority world). Additionally, the majority-world representation rested upon studies
19 from China, which is classified as an upper-middle income country.^{27,28,30-32}

20 This was further demonstrated in the bias towards participants belonging to
21 middle and upper-class backgrounds as recruitment methods necessitated access to high
22 quality internet and presence on social media.^{16-19,39-41} Marginalised populations were
23 generally not considered for participation except in six studies.^{17,20,22,33,34,37} However,

1 language proficiency was required for participation,^{16,17} and prevalent mental health
2 issues were an exclusion criteria for Janssen et al.¹⁶

3 While the age of participants ranged from 3 to 25 years, the emphasis was on
4 ages between 10 and 18. More specifically, those within ages 12 to 14 appeared in 18
5 studies. Younger voices of children under six years were only represented in three
6 studies,^{21,22,35} It was uncertain as to how many of these responses may have been
7 influenced by adults. Two^{36,37} did not specify the age of their participants.

8

9 *How are CYP heard? Methods used in accessing children's voices*

10 The most popular method for recruitment involved convenience sampling: CYP were
11 already participating in an ongoing longitudinal study,^{20,23,25,26,29,33,34,37,38,42}
12 advertisements on social media,^{16-19,39-41} or via the school system.^{24,27,28,30-32,40} Two
13 Italian studies recruited from children's health centres^{21,22} and in one case, the
14 recruitment method was unclear.³⁶

15 CYP predominantly participated in cross-sectional, web-based surveys to
16 evaluate the impact of COVID-19 on their mental health^{16-19,21-23,27-32,39} within a short
17 timespan early in the pandemic. Only two studies, already working with CYP in a
18 clinical setting in Iran³⁴ and Kenya,²⁰ delivered their surveys as a phone interview, and
19 an Indian study submitted the questionnaire as an interview in the participant's home.²⁵
20 One study in the UK conducted a focus-group interview on Zoom.³³

21 No studies reported the use of play-based methods with children. However,
22 adaptive methods were found in five studies with participants under eight years of age.
23 Some involved training parents to deliver open-ended questionnaires to their children,³⁵
24 two articles used a narrative-approach where the children were observed and their

1 stories carefully documented.^{36,37} A quantitative study in the Netherlands²⁶ incorporated
2 daily diary surveys from CYP for almost 19 days during school closure. In addition to
3 the surveys, the researchers twice engaged their participants in a Dictator Game during
4 their sampling period. In the game, the participants' empathy was measured by how they
5 chose to distribute an amount of coins between hypothetical persons. These persons
6 represented a friend, an unfamiliar peer, or someone associated with the COVID-19
7 pandemic, such as a person with a poor immune system, a person infected with COVID-
8 19 or a doctor working in a hospital. The study showed that participants were more
9 inclined to give a higher amount of empathy to friends, doctors, and people with either
10 poor immune system or infected with COVID-19, than to unfamiliar peers.

11

12 *How did researchers engage in reflexivity and adhere to ethical standards in CYP's*
13 *voices?*

14 Using criteria from Berman¹², Graham et al¹⁴, and Graham and Powell¹⁵ we list the
15 ethical processes demonstrated in the studies in table 2. A detailed delineation of the
16 ethical processes documented in each study is included in Appendix 1. We acknowledge
17 we could only assess what was included in the articles, which may not accurately
18 represent the full extent of ethical considerations that may have been addressed in the
19 study. Twenty-three studies provided good justification of why CYP were being studied,
20 21 studies documented approval from their institutional ethics boards. Seven studies did
21 not refer to ethical reviews.^{16,22–24,29,31,33} Two studies explicitly documented a child-
22 rights framework guiding their research.^{33,41} We identified that three studies documented
23 active involvement of CYP in piloting and analysis.^{31,33,41}

1 health crisis. More specifically, it informed how the pandemic affected children's well-
2 being and their ability to exercise their rights within a climate of emerging policy
3 development. In consideration of the UNCRC's position towards CYP's right to
4 participate and be heard in research, this critical review examined research methods by
5 using a rights-based, ethical lens.⁴³

6 To this end, we focussed on research conducted during the early periods of the
7 pandemic in order to highlight the degree to which CYP's rights were safeguarded
8 during a time where knowledge on the status of CYP in the pandemic was rapidly
9 required. To highlight CYP's involvement, we focused on the recruitment of CYP, data
10 collection methods, and compliance with established ethical principles. We found that
11 there were equity gaps in accessing the views and experiences of CYP from
12 disadvantaged settings, especially those with poor access to technology as most studies
13 used rapid research methods with online tools and convenient sampling techniques.
14 Moreover, children who are disadvantaged by disability or illness are also absent from
15 this research. From a child rights perspective, this inhibits the right of all children to be
16 heard.

17 The design of a study creates a trajectory for which CYP's voices are
18 represented and elevated. Empirical processes such as recruitment, how data are
19 collected, analysed, and disseminated comprise critical components of evaluation
20 particularly in the context of research with CYP. Our analysis revealed that studies from
21 China were able to expand their recruitment and dissemination because of their high-
22 speed internet coverage. Other majority world countries may lack the resources to carry

1 out such studies and therefore, some children from these parts of the world are likely to
2 be underrepresented in research involving a global pandemic.

3 In regard to research ethics, our analysis revealed that studies engaged in a range
4 of ethical practices, while some principles were either ignored or not fully described in
5 the published articles. We were guided in our analysis by ethical practices as suggested
6 by UNICEF Office of Research, including specific considerations during the
7 pandemic.^{12,14} We paid special attention to how researchers adopted a reflexive
8 approach by creating a synergy between methods, ethics, and decision-making while
9 including discussions related to issues and challenges during the research process.¹⁵
10 These included excellent examples of CYP's active engagement in research processes
11 where a rights-based model was incorporated into the methods,^{33,37,41} and participants
12 were recruited as co-researchers.³³ However, these valued ethical elements were
13 identified in few studies.

14 Allowing participants to review data and validate research findings is an
15 important source of rigor. In addition to ethical principles which identify the importance
16 of sharing findings with CYP involved in research, their right to participate in matters
17 affecting them should also entail a right to influence avenues for dissemination and
18 knowledge translation. As a result, researchers who follow these ethical practices are
19 also promoting children's participation rights. Conducting ethical research with children
20 and young people requires more than navigating institutional ethical procedures.^{12,14}
21 Researchers must engage in a reflexive approach where procedures, practices, and
22 assumptions are scrutinised particularly in the context of research involving CYP.
23 UNICEF's Office of Research's¹⁴ stance is further highlighted in el Seira et al's⁴⁴ recent

1 commentary on conducting ethical research with CYP during COVID-19. The authors
2 acknowledge that research in a pandemic can be complex and there exists a need to
3 balance CYP's comfort and right to participation. However, a firm ethical grounding in
4 research methods must be present if CYP's voices are to be authentically presented and
5 their rights honoured. In turn, opportunities to address inequities embedded in their lived
6 experiences can and must be offered.

7 This study delineated the quality of the methods and ethics applied in research
8 with CYPs during the early phase of the COVID-19 pandemic, and we identified
9 elements of good practice and research practice that can be strengthened with respect to
10 child rights and equity. It remains critical that we review research methods moving
11 forward using a critical lens. While a strong participatory model in research *with* or *by*
12 children is generally more aligned with a child rights-based approach, this does not
13 necessarily mean that research *on* children is less ethical.⁴⁵ By maintaining a critical
14 stance when reviewing the methods used with CYP, we are in a better position to realize
15 children's rights and elevate ethical assertions. Research *with*, *by* or *on* children can be
16 challenging and we must be open to exploring and creating new spaces for CYP to
17 engage in research.

18

19 *Strengths and Limitations*

20 To our knowledge, this is the first critical review of research methods employed with
21 CYP during the early months of the pandemic. As such, it provides an important
22 contribution to our understanding of how CYP are engaged in research as participants
23 during a time of emergency and the predominant methods that are used under pressure

1 to garner their views. This review also draws strength from the analysis of the research
2 by child rights advocates representing diverse cultures, professional backgrounds, and
3 geographical locations. Having applied a systematic and reputable tool for evaluation
4 (LEGEND), this review constitutes a high level of rigor that is often not associated with
5 critical reviews.¹⁰

6 While our focus on the first year was justified given the aims of our research, our
7 designated timeline for journal publications may have omitted or inadvertently excluded
8 some research that would have otherwise met the inclusion criteria. Furthermore, we
9 acknowledge that our review focuses on a limited time-period and good research will
10 have been published after our cut-off date. We encourage a review to be made to
11 compare, and contrast how voices of CYP have continued to be engaged in research
12 throughout the pandemic. Although we sought to include research from around the
13 world, we made a conscious decision to only review those published in English as our
14 research consortium was truly global, with English as a common language. Including
15 research in a non-English language would also have required translations of the studies.
16 As we were conducting a critical review, we did not want to risk misinterpretation of the
17 original work due to nuances and meanings being lost in the translation process. We also
18 excluded global agency and non-government reports, because research methods are
19 often inadequately described and therefore difficult to evaluate.

20 As a research team, we represent an organization that advocates for children's
21 right to be heard, and hence, our analyses contain inherent biases in that regard. In
22 particular, we chose to include an analysis of ethical issues that supported children's
23 right to participate in a variety of research processes. Finally, our analyses are reliant on

1 and informed by what is documented in the articles. We acknowledge journal word
2 limits can inhibit a fulsome account of methods and ethical practices in some cases.

3 **Conclusions**

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

- 15 • Although there are existing research methods for diverse participants,
16 researchers need to acknowledge the ongoing need to design innovative methods
17 for recruitment and data collection that can reach CYP who are disadvantaged or
18 marginalised. These include children who live in poverty, are very young or who
19 have disabilities.
- 20 • Researchers must commit to a continuous reflexive approach while engaging in
21 research with CYP.
- 22 • Ethical processes comprise follow-up with CYP involved in the research
23 whereby they can contribute to potential analyses, follow-up, and dissemination.

- 1 • Rather than a predominant reliance on quantitative online surveys, play-based
2 and arts-based methods grounded in qualitative approaches can yield a deeper
3 understanding of CYP’s experiences and perspectives within particular contexts.
4 This approach can attenuate the current lack of CYP’s voices from diverse
5 communities.
- 6 • Parents, educators, and other adults should not serve as proxies for research that
7 purports access to children’s voices.
- 8
- 9

1 **A Funding Statement**

2 The authors have not declared a specific grant for this research from any funding agency
3 in the public, commercial or not-for-profit sectors. EJ's part in this study was facilitated
4 by funds provided by The Icelandic Research Fund (RANNÍS) under grant number
5 217579-051.

6

7 **Acknowledgements**

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

14

15 **Contributors**

16 EJ took part in conception and design of the study, acquisition, analysis, interpretation,
17 planning writing up, approved the final version, and is responsible for overall content.

18 DK took part in conception and design of the study, writing of sections, acquisition,
19 analysis, provided editorial oversight and approved the final version.

20 SR took part in conception and design of the study, writing of sections, acquisition,
21 analysis, provided editorial oversight and approved the final version.

22 OO took part in conception and design of the study, provided editorial oversight, and
23 approved the final version.

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2 oversight, and approved the final version.

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4 oversight, and approved the final version.

5 GG took part in conception and design of the study, editorial oversight, and approved
6 the final version.

7 AO took part in the conception and design of the study, and approved the final version.

8

9 **Competing interests**

10 None declared

11

12 **Patient consent form**

13 Not relevant.

14

15 **Data sharing statement**

16 Not relevant.

17

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Table 1. Description of included studies

Author	Country/- ies	Study type	Size	Age Group	Methods	Outcomes	Timeframe
Akkaya- Kalayci, 2020	Austria/Tur key	Quantitative	1,240	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	Wellbeing, 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	9 th April to 1 June 2020
Duan et al., 2020	China	Quantitative	3,613	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	30 March to 13 April 2020

						association, elicited by term “coronavirus”	
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	2,408	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	T1 before pandemic, T2 during pandemic restrictions in 2020

						connectedness, adherence to stay-at-home	
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,	N/A

						school anxiety, positive coping.	
Pascal & Bertram, 2021	England, Scotland	Qualitative	58	Age not available	In-person interview, observation	Young children's exploration of COVID experiences through play narratives	N/A, data gathering ongoing
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	1,647	7-17 years	Online Survey	Quality of life measures, mental health problems.	26 May to 10 June 2020
Salzano et al., 2021	Italy	Quantitative	1,860	12-18 years	Online Survey	Lifestyle changes and feelings during	23 April to 3 May 2020

						lockdown, psychological impact of isolation and social distancing.	
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	4,391	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	30 March to 17 April 2020

						value orientation	
Waselewski et al., 2021	United States	Qualitative	1,087	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	1,784	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	1,241	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	8,079	12-18 years	Online survey	Depression, anxiety.	8 th March to 15 th March

Table 2: Identified ethical processes in 27 studies among CYP,* conducted in the early phase of the COVID-19 pandemic.

*CYP=children and young people

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 is justified along with why CYP are being included? ¹⁴	N=23
	2. Have the tools been tested to ensure a child-friendly approach? ^{12,14}	N=3
Ensuring privacy, confidentiality & consent	1. Has institutional ethics approval been sought? ¹⁴	N=21
	2. Has informed consent been sought from the participants? ¹⁴	N=16
	3. Is anonymity of the participants ensured? ^{12,14}	
	4. Is the confidentiality procedure discussed in detail? ¹⁴	N=26
Participation, communication of findings	1. Is representation discussed in terms of generalisability? ¹²	N=15
	2. Will the findings be applied to efforts at improving the lives of CYP? ^{12,15}	N=9
	3. Are CYP a part of disseminating the results? ¹⁴	N=1
Reflexivity	1. Do the authors reflect on their own biases or personal experiences that might affect their interpretations of study findings? ^{14,15}	N=3
	2. Have the authors considered the risks and benefits of the methods employed? ¹⁵	N= 6

Legends to figures

Figure 1: Literature search Phase 1, done from January to July 2021

Figure 2: Literature search Phase 2, done from 1 October to 15 November 2021