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Review

A Review of Qualitative Studies of Parents' Perspectives on Climate Change

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Abstract: Climate change is opening up new fields of qualitative research, including one focused on parents' perspectives on climate change. Our scoping review identifies and describes studies in OECD countries in this emerging field. We used recommended search strategies and methods for reviews of qualitative studies. We located 19 unique studies (22 papers) published between January 2000 and June 2024 which were characterised by distinct foci, study populations and participant profiles. The two major foci were reproductive decision-making and the emotional impacts of climate change on parents and children. Study populations were predominantly those already actively engaged in climate change issues. In studies providing socio-demographic information, most participants were socially advantaged. In developing this important field, we argue for a broader research agenda with respect to foci and for study populations and participant profiles that are more representative of the societies in which the studies are located.

Keywords: mother; personal narrative; childfree; ecological anxiety; family practices

1. Introduction

Climate change is an 'involuntary exposure' disproportionately affecting those contributing least to it [1]. Key among these groups are children, with their physical health [2,3] and emotional wellbeing [4,5] at increasing risk.

Multiple interventions, including youth-led climate change litigation claims, are highlighting these generational inequities [6–11]. However, while important, these interventions leave the dominant systems of governance largely intact. Children are not directly represented in electoral systems or in the structures of local, national and global government. They rely instead on adults to represent them [12–14]. In particular, parents act on their behalf, with parental duties enshrined in the Convention on the Rights of the Child (Article 5) [15].

This positions parents as a critical—and large—constituency in the politics of climate change. Most adults become parents; across OECD countries, over 80% of women have children by the age of 50 [10,16–18]. Non-parents are typically younger adults, the majority of whom will become parents as they move through adulthood [10]. The social profile (gender, ethnic identity, education, housing tenure) of parents is in line with the wider adult population [19].

The centrality of parents in mediating children's experiences of climate change is opening up a new field of research exploring parental perspectives on climate change. This includes studies of how adults' perceptions of climate change may affect their reproductive choices—for example, decisions to not have (more) children—and their parenting practices.

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It includes, too, studies of parents' emotional wellbeing and their perceptions of their children's wellbeing.

We contribute to this emerging field by undertaking a scoping review of qualitative studies of parental perspectives on climate change. Qualitative studies are concerned with how individuals perceive, experience and make sense of the world around them. Such studies are therefore particularly well suited to capturing parental perspectives, a concept we interpret broadly to include parental concerns, experiences, beliefs, attitudes, and anxieties about climate change. We focus on OECD countries, a group of high-income countries with high per capita carbon emissions but a diversity of family structures [20,21].

2. Methods

Scoping reviews are used to identify and describe studies in emerging fields of enquiry. Their purpose is to provide a descriptive overview of 'the types of studies carried out to date, and where they are located' [22]. By mapping emergent fields of research, scoping reviews can help to identify current lines of enquiry and point to gaps for future studies to fill. Like a systematic review, scoping reviews are based on transparent and reproducible search strategies, but they are typically broader in scope and without a quality assessment of methods and evidence [23].

Our scoping review focuses on qualitative studies relating to parental perspectives on climate change. The review was registered on the Research Registry, an online register of reviews [24]. We used the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type), explicitly developed for the retrieval of qualitative evidence [25], to help formulate the research question and inform the search strategy. The eligibility criteria for inclusion and exclusion are given in Table 1.

Table 1. Scoping review: eligibility criteria (using SPIDER).

	Inclusion	**Exclusion**
Sample	Any sample of parents (mothers/fathers/both) or grandparents or expectant parents in OECD country.	Any sample not composed, in whole or part, of parents, grandparents, and/or expectant parents. Samples recruited in non-OECD countries.
Phenomenon of **I**nterest	Attitudes, experiences, or opinions to climate change and global warming.	Attitudes, experiences, or opinions on specific actions (e.g., recycling, transport, energy use) and/or other environmental issues.
Design	Any qualitative data collection methods (e.g., interviews, observations, or focus groups).	Quantitative research (e.g., fixed-response surveys).
Evaluation	Any information on attitudes, experiences, or opinions of parents; may be the primary or secondary focus of the study.	Information on health impact or behaviour.
Research type	Qualitative or mixed methods (e.g., combining fixed and open-ended responses).	Quantitative research and non-empirical research (e.g., commentaries, editorials, letters).

The search strategy included terms related to parents (including pregnancy, having child/ren, parent–child relations, mother, father, step-parent, grandparent) and climate change (including global warming, climate crisis, mitigation, carbon footprint) and was combined with a qualitative search filter. The full search strategy is provided in the Supplementary Materials, Table S1. Five databases were searched: MEDLINE, Embase, PsycINFO, CINAHL, and Social Science Citation Index (SSCI). A date restriction of 1 January 2000 to 26 June 2024 was applied (further details of the database searches are provided in the Supplementary Materials, Table S2). No language or publication type restrictions were applied; however, all records identified through the searches were in English. Forward and backward citation searching was undertaken using the included studies.

We used Covidence [26], an online screening and data extraction tool recommended by the Cochrane Collaboration, to undertake the review. This included uploading search results, screening titles, abstracts and full texts, resolving disagreements, undertaking data extraction and exporting data into Excel. Screening at title and abstract stage and at full-text stage was independently undertaken by two reviewers (SG, PL). Conflicts were resolved by discussion, with remaining conflicts (13% of total screens at title and abstract stage) referred to a third reviewer (HG) for resolution. The PRISMA reporting checklist (Supplementary Materials Table S3) was adhered to [27]. To aid clarity in the presentation of results, 'papers' refer to the items identified through the searches, e.g., journal articles and student theses. Some of the papers were based on the same study; the term 'study' therefore refers to these primary studies.

Data extraction was undertaken by two reviewers (PL or SG plus HG) using the JBI scoping review templates [28]. Data extraction included the author, country of study, study aims, study methods, study population, recruitment methods, sample size and information on the participant profile.

3. Results

The PRISMA flowchart is presented in Figure 1 and summarises the results of the searches (further details are provided in the Supplementary Materials, Tables S1–S5). In total, 786 unique records were screened for relevance, with 90 checked at full-text stage and 22 meeting the study's inclusion criteria. Of these 22 papers, 19 were based on unique data sets.

Details of excluded studies are given in the Supplementary Materials, Table S4. The list includes studies of experiences of extreme weather events (e.g., bushfires, floods) where climate change was not discussed by authors or participants, e.g., [29]. The search also identified a scoping review of quantitative and qualitative studies exploring the impact of climate change on parents' mental health [30]; the qualitative studies in the review had been independently identified by our search strategy.

Table 2 provides an overview of the included papers. It confirms the premise of our review: that parental perspectives on climate change represent an emerging field of qualitative research. From 2000 to 2014, no relevant papers were identified by our search. Two included papers (two unique studies) were published between 2015 and 2019. Between 2020 and 2024, 20 included papers (17 unique studies) were published.

As Table 2 indicates, the USA has the largest volume of research exploring parental perspectives (seven papers), followed by Australia (four), and the UK (three). A wide variety of qualitative methods was used, including interviews (n = 12), focus groups (n = 3), free-text responses within a quantitative survey (n = 7), and personal accounts (diaries, testimonials; n = 5). Sample sizes for studies based on interviews and focus groups ranged from 4 to 98 and on personal accounts from 40 to 67. Sample sizes for studies based on free-text responses to questions in quantitative surveys ranged from 12 to 607.

Table 2. Study characteristics (22 outputs from 19 unique studies).

Year of Publication (*n* = 22)	**Count (%)**
2000–2004	0 (0%)
2005–2009	0 (0%)
2010–2014	0 (0%)
2015–2019	2 (9%)
2020–2024	20 (91%)
Countries (*n* = 19 *)	**Count (%)**
United States	7 (37%)
Australia	4 (21%)
United Kingdom	3 (16%)
Canada	2 (11%)
Nordic countries (Finland, Norway, Sweden)	1 each (5%)
Switzerland, Belgium, Hungary, Netherlands, Turkiye, France	1 each (5%)
Qualitative Data Collection Method/s (*n* = 19)	**Count (%)**
Interviews	10 (53%)
Focus groups	3 (16%)
Open-ended questions/free-text responses in quantitative survey	6 (32%)
Diary entries	1 (5%)
Testimonials	2 (11%)

* One study also included a non-OECD country (India).

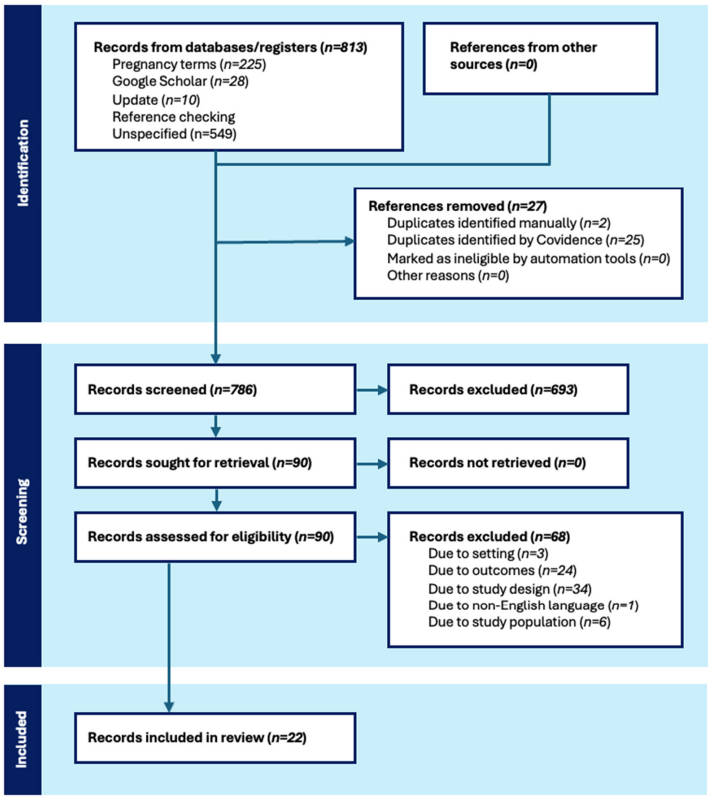


Figure 1. PRISMA flowchart showing number of records identified, screened and included, sourced from Covidence [26].

Table 3 provides a summary of the 22 papers. The summary draws directly on the authors' descriptions (further details of methods and study populations are provided in the Supplementary Materials, Table S5). Table 3 points to three distinctive features of existing qualitative research in the field of parental perspectives on climate change. These relate to 1. the focus of the studies, 2. their study populations and 3. their participant profiles.

Table 3. Included outputs (22 papers from 19 studies). * based on same study; ** based on same study.

#	Author, Year, Form of Output	Country	Aims	Study Methods	Population	Recruitment Methods	Sample Size (*n*)	Participant Profile
1	Baker, et al. [31] (journal article)	Australia	To explore 'caretaker perceptions of children's climate change emotions, and the needs and challenges of supporting children' (p687)	Quantitative survey with open-ended questions	Those with caring responsibilities for school-aged children (parents and teachers)	Online survey posted to Australian Facebook groups	141	Majority were parents. Parents had children aged 1–17 years and all lived in Australia.
2	Boddy, et al. [32] (journal article)	UK, India	To provide a 'narrative analysis of family practices' relating to environmentalism and climate change (p359)	Visits and interviews	Affluent parents in England and India	Recruited via schools	Parents in 10 families	Four of the ten families had children attending private/fee-paying schools.
3	Bodin and Björklund [33] (journal article)	Sweden	To explore 'how people of different ages discuss and justify their stance concerning reproduction in relation to their knowledge about climate change and overpopulation' (p2)	Age-specific focus groups	People living in Skåne County, Sweden.	Recruited through social media, university website, and author networks	98	Aged 17–90; the majority identified as women. 'An overrepresentation of white, heterosexual, middle class women' (p2).
4	Gaziulusoy [34] (journal article)	Finland, Australia, Turkiye, USA, Nether-lands	To capture 'the lived experiences of parents raising children during climate change' (p1)	Interviews with open-ended questions	Parents aware of climate change and implications for their children	Invitation through online and offline social networks	12	Gender: 8 women, 4 men. Parents aged 36–46; 8 women, 4 men. No information on socio-economic background or ethnic identity.
5	Hirschberg [35] (undergraduate dissertation)	USA	To fill the gap in knowledge on the perspectives of parents of children aged 12–17 on climate grief	Interviews with open-ended questions	Parents aged 30 and over with an adolescent child experiencing emotional distress about climate change	Recruitment via organisational contacts, and author networks	8 parents and 8 children	7 female, 1 male parent participants; majority white. All had at least a Bachelor degree and professional backgrounds relating to environmental sciences.
6	Holmes, et al. [36] (journal article)	USA	'To explore the emotionally reflexive processes by which some women build maternal futures in the unsettling context of climate change' (p357)	Online testimonies	Women providing personal testimonies on a woman-led network focusing on reproductive justice and climate change	Testimonies provided in response to researcher's invitation and house parties hosted by network members	67	Largest group were women aged 20–29 without children. No information on socio-economic background or ethnic identity.
7 *	Howard, et al. [37] (journal article)	UK	'To explore the emotional spaces of parenting and campaigning for inter-generational climate justice' (p1429)	Semi-structured qualitative diary + semi-structured interview	UK-based activist mothers and fathers	Recruitment via social media and snowballing	20	12 mothers; 8 fathers. No further information provided.
8 *	Howard [38] (journal article)	UK	'To investigate the overlapping emotional spaces of climate activism and parenting' (p1)	Qualitative diary entries and interviews	Parents/guardians worried about climate change and impact on their children and involved in climate change campaigning	Recruitment via social media and snowballing	20	12 mothers; 8 fathers. 'Participants were mainly middle class, possessing a tertiary level education and a medium to high household income. All but one participant were White'.
9 *	Howard [39] (doctoral thesis)	UK	To address 'knowledge gaps in the ways action on the climate "crisis" is mobilised in the context of family and personal relationships' (p3)	Interviews; diary entries	Parents engaged in any type of organised, shared campaigning to address climate change	Recruitment via social media and climate parent groups	20	12 mothers; 8 fathers.
10	Jurcik [40] (Masters dissertation)	Canada	To explore 'the impact of climate change on individuals considering parenthood and the complexities of becoming a parent during the current climate crisis' (piii)	Semi-structured interviews	Participants who identified as being of childbearing age, years/the gestational parent and considering climate change deciding about parenthood	Recruitment via social media to climate change groups and influencers known to the researcher	20	Majority did not have children/stepchildren; had a Bachelor degree or higher, identified as white, did not identify as First Nation.

Table 3. *Cont.*

#	Author, Year, Form of Output	Country	Aims	Study Methods	Population	Recruitment Methods	Sample Size (*n*)	Participant Profile
11	Léger-Goodes, et al. [41] (journal article)	Canada	To 'gain insight into the ways in which children experience eco-anxiety' (p2) and how parents understand their child's lived experiences and help them cope with their concerns	Survey with free text response	Parents of children aged 8–12 years	Recruitment via organisations working with families and via pro-environmental organisations	12	The majority identified as women and as White Canadian. No information provided on educational status/ family socio-economic circumstances.
12	Lykins, et al. [42] journal article)	Australia	'To assess the contribution of climate change anxiety to antenatal worry and depression' (p3)	Survey with open-ended questions	Women who identified as female and were currently pregnant	Recruitment via expectant parent social media networking sites	49 participants responded to open-ended questions	No socio-demographic information on participants.
13	Madden, et al. [43] (journal article)	USA	To understand parental perspectives on climate change education standards introduced into schools in New Jersey, USA	Quantitative survey with open-ended questions and free text option at the end of survey	Parents of children attending public (state) schools	Recruitment via social media and emails using professional listservs	83	No parental socio-demographic data on participants.
14	Munro [44] (journal article)	USA, Belgium, Switzerland	To critically analyse testimonials by parents and grandparents engaged in environmental advocacy organisations	Mission statements and testimonials	Web-based testimonials from environmental advocacy organisations	Recruitment via environmental advocacy organisations	40 testimonials	Testimonial writers were 'primarily white, middle-class women exclusively living in the Global North', the majority from US-based organisations.
15	Nakkerud [45] (journal article)	Norway	To explore 'the psychological and social processes surrounding choices to be environmentally childfree' (p200)	Semi-structured interviews	People wanting to have no children or only have child because of environmental concerns	Recruitment social media or direct invite	20	Majority identified as women with no children. No information on socio-economic background or ethnic identity.
16	Pardon, et al. [46] (journal article)	Australia	'To explore the negative mental health consequences of climate change and/or extreme weather events as reported by new Australian mothers' (p3)	Focus groups	Mothers aged $\geq$ 18 years and with baby $\leq$ 12 months	Recruitment via social media and university networks	31	14 participants had two or more children. No other socio-demographic information.
17	Schelhas and Gast [47] (journal article)	Germany	To focus on 'parents who are actively engaged in climate protection [. . .] to find out how they deal with the climate crisis against the backdrop of their own parenting and concern for the future of their children' (p402)	Interviews	Parents engaged in 'climate protection'	Recruitment via parents engaged in climate activism groups	4	3 mothers; 1 father. No further information provided.
18 **	Schneider-Mayerson and Leong [48] (journal article)	USA	To fill the gap in scholarship 'on the relationship between climate change and individual reproduction intentions and practices' (p1009)	Survey with open-ended questions	Young people factoring climate change into reproductive decision-making	Link to survey posted via climate thinkers, activists, and organisations	607	Majority identified as female, non-parents white, very liberal with a Bachelor degree or higher.
19 **	Schneider-Mayerson [49] (journal article)	USA	'To explore the nexus between reproductive choices and environmental politics in relation to climate change' (p153)	Survey (with free text response)	Climate 'leftists' factoring climate change into reproductive decision-making	Link to survey posted via climate thinkers, activists, and organisations	607	Majority identified as female, non-parents white, very liberal with a Bachelor's degree or higher.
20	Severo [50] (Masters dissertation)	Portugal	To explore parents' perceptions of their roles and worries with respect to parenting and climate change	Interviews	Parents of children aged 10–14 years	Recruitment face-to-face and online dissemination in a school close to the university	29	Majority had completed higher education; 40% of families eligible for free/reduced prices school lunches for their children.

Table 3. *Cont.*

#	Author, Year, Form of Output	Country	Aims	Study Methods	Population	Recruitment Methods	Sample Size (*n*)	Participant Profile
21	Szalma and Szczuka [51] (journal article)	Hungary	To better understand 'how individuals make decisions about childbearing according to their views on climate change and how they rationalise their choices in a pronatalist country' (p1)	Semi-structured interviews	Childless and single-child women between 18 and 45 years	Initial recruitment via social networks and snowball sampling	44	21 had no children; 21 had one child; 2 were pregnant; 25 had a higher degree.
22	Thomas, et al. [52] (journal article)	USA, France	A small number of parents included in a study of 'young people's views about climate change' (p1)	Focus groups	Parents of children aged under 10	Recruitment via social media platforms	12	Parents had children under 10 years; no other data provided.

3.1. Focus of the Studies

The majority of studies were concerned with (i) reproductive decision-making in the context of climate change and (ii) parents' perceptions of the emotional impacts of climate change on them and their children. A smaller set of studies (iii) interrogated narratives and practices relating to the experience of parenting in the context of a changing climate. Figure 2 summarises the spread of papers across these foci. As it indicates, two studies did not fit within the three clusters: Thomas et al. [52] explored the alignment of parental and child perspectives as part of a study of children's views of climate change, and Boddy et al. [32] investigated the role of environmental concerns within moral narratives of responsibility in families in England and India.

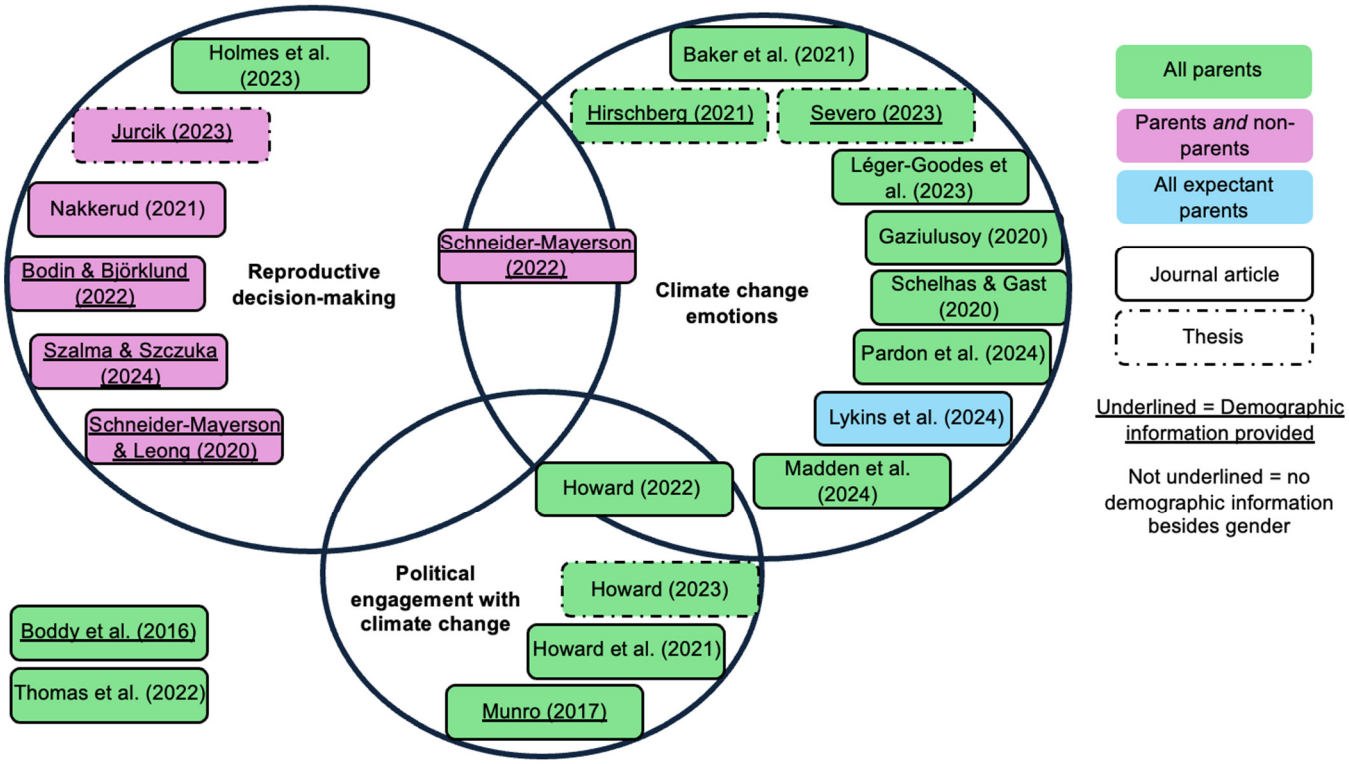


Figure 2. A visual summary of papers in the review ([31–47,49,51,52]).

Six studies focused on reproductive decision-making in the context of climate change. The studies by Holmes, Natalier and Pascoe Leahy [36] (USA), Jurcik [40] (Canada), Nakkerud [45] (Norway), Schneider-Mayerson and Leong [48] and Schneider-Mayerson [49] (USA; two papers), Bodin and Björklund [33] (Sweden) and Szalma and Szczuka [51] (Hungary) all explored how awareness of climate change affected reproductive decisions. In the first four of these studies, the majority of participants were not parents; in the Bodin and Björklund [33] and Szalma and Szczuka [51] studies, 50% were parents.

Seven studies had parents' emotional responses to climate change as their primary focus. The studies by Lykins, Bonich, Sundaraja and Cosh [42] (Australia) and Pardon, Dimmock, Chande, Kondracki, Reddick, Davis, Athan, Buoli and Barkin [46] (Australia) explored the negative mental health impacts of climate change on pregnant women and new mothers, respectively, while Severo's [50] study (Portugal) focused on parental perceptions and worries with respect to caring for adolescent children in the context of climate change. The studies by Hirschberg [35] (USA) and Léger-Goodes, Malboeuf-Hurtubise, Hurtubise, Simons, Boucher, Paradis, Herba, Camden and Généreux [41] (Canada) examined parental perspectives on their children's experiences of climate grief and how parents helped them cope with eco-anxiety. Studies by Gaziulusoy [34] (Australia, Finland,

Netherlands, Turkiye, and USA), and Schelhas and Gast [47] (Germany) had a related focus on parents' experiences of parenting and their concerns for their children growing up in a world confronting climate change. Baker et al.'s [31] study (Australia) considered parents' perceptions of their children's climate change emotions and needs. A further study (ref. [43] USA), where the primary focus was on the introduction of climate change education in schools, also discussed parents' concerns about their children's eco-anxieties.

Beyond studies on reproductive decision-making and parental perceptions of the emotional impacts of climate change, there were three studies that interrogated the narratives and discursive practices of parents politically engaged in climate action. Howard's UK-based study (three papers: [37–39]) explored how activist parents constructed a moral identity as 'responsible' parents while maintaining a high carbon lifestyle. Boddy et al.'s study [32] explored the 'moral tales' around climate change articulated by parents in their narratives about their everyday lives. Munro's [44] study (Belgium, Switzerland, USA) analysed parental and grandparental testimonies posted on environmental advocacy organisations to reveal the writers' pro-natalist stance and their valorisation of motherhood.

These different themes—around reproductive decision-making, emotional wellbeing and discursive practices—were brought together in some studies. For example, a paper from Schneider-Mayerson's study of how an awareness of climate change influenced decisions about parenthood also explored participants' 'concerns about the well-being of their existing, expected, or hypothetical children in a climate-changed future' [49]. In one of Howard's papers on activist parents' discursive practices, climate-related emotions and anxieties were also noted [38].

3.2. Study Populations

In a large proportion of studies, participants were drawn from populations of adults and parents known to be taking climate change into account in their decision-making and everyday lives.

Four studies (six papers) recruited parents active in climate change politics. Participants were invited to join the studies because they were engaged in 'campaigning to address climate change' [37–39] and 'environmental advocacy organizations' [44], were 'aware of climate change and actively concerned about the implications of climate change on their children' [34] and were 'actively engaged in climate protection' [47].

A further four studies (five papers) focused on adults who were taking account of climate change in their decisions about parenthood. In these studies, the majority of participants were not parents. Jurcik's [40] study explored 'the impact of climate change on individuals considering parenthood and the complexities of becoming a parent during the current climate crisis', using climate change groups on Facebook among other recruitment methods. Schneider-Mayerson's US study addressed the 'nexus between reproductive choices and environmental politics in relation to climate change' by asking 'how are young people who are factoring climate change into their reproductive choices making these decisions?' [48,49]. In this study, potential participants were additionally screened to ensure all were 'Alarmed' about climate change, using the Global Warming's Six America's instrument that segments adults according to their climate change perspectives. The 'Alarmed' category, representing 28% of US adults, 'are convinced global warming is happening, human-caused, an urgent threat, and strongly support climate policies' [53]. Holmes' US study explored how women negotiate decisions about motherhood through personal testimonies written by members of a 'women-led network focusing on reproductive justice and the impact of climate change on reproductive lives' [36]. Nakkerud's study was concerned with people living in Norway making decisions about not having children or having only one child 'partly or fully out environmental concerns' [45]. In a fifth study, of

parents in the UK and India, participants were purposively selected 'because they discussed environmental concerns' in the context of family practices [32].

In addition to studies where participants were drawn from populations known to be actively engaged with climate change issues and politics, there were studies whose recruitment methods may have resulted in samples skewed towards these groups. Hirschberg's [35] study recruited parents via 'organizational contacts', giving the example of an organisation with the mission to 'collectively create a world where children can thrive while facing the realities of climate change', as well as via personal contacts. The study population for Baker's study was users of Facebook groups, including 'Environmental Groups' [31]. Leger-Goodes' Canadian study recruited participants via emails shared by organisations supporting families in Quebec including 'pro-environmental organizations' [41].

As further examples, advertisements on social media and snowballing through the authors' personal networks were used in Bodin and Björklund's [33] study of 'how people of different ages discuss and justify their stance concerning reproduction in relation to their knowledge about climate change and overpopulation' while Pardon et al.'s [46] study used online media networks and the author's university networks to explore the negative mental health consequences of climate change among Australian mothers. It is not clear if the invitations to participate in these two studies resulted in samples composed of those with heightened concerns about climate change. However, the papers from the studies note that 'climate change in relation to reproduction is a burning topic across age groups' [33] with a 'a sense of "overwhelm" about bringing up children in a climate-change world' [46].

A number of studies recruited from populations with the potential to be representative of the wider national population. For example, the study population for Madden et al.'s [43] US-based study was the parents of children attending public (state) schools while Lykins, Bonich, Sundaraja and Cosh [42] (Australia) recruited 'via various pregnancy and expectant parent social media networking sites'. However, little information is provided about these study populations, or about the resulting profile of participants.

3.3. Participant Profiles

All 22 papers provided some information on their samples' socio-demographic profile (e.g., gender of participants, age range of children). However, a large proportion of the studies reported few further details.

Only four papers provided information on participants' ethnicity [35,38,40,41]. A larger proportion (7 of 22) provided data on the socio-economic profile of the sample, e.g., education, employment status and/or income [35,40,48–51]. These data indicate that the majority of the studies' participants were advantaged with respect to ethnicity (white, First Nation) and socio-economic position (e.g., university degree or higher).

A further five provided a textual summary of sample composition. These textual summaries again pointed to participants' relatively privileged circumstances. For example, 'participants were mainly middle class, possessing a tertiary level education and a medium to high income' [38], 'four of the 10 families attended private/fee-paying schools' [32], testimonial writers 'were primarily middle-class women' [44], and the sample had 'an overrepresentation of white, heterosexual, middle class women' [33].

Piecing together this information, it appears that the studies and their associated papers are grounded in the perspectives and lifestyles of women from advantaged backgrounds. In some instances, this sample bias is a consequence of the study focus and study population. For example, Boddy et al.'s [32] study explored the narratives of parenting and climate change among parents in 'affluent families'; the parents in their study were purposively selected 'because they discussed environmental concerns within narratives of

the responsibilities of relative privilege'. As another example, Howard noted that 'the social class and ethnicity of the sample' of UK parents engaged in climate activism 'reflected the wider UK climate change movement' [38].

In many of the studies, the bias towards a socially privileged sample may have been accentuated by the recruitment methods. Recruitment via online climate change and environmental networks, university networks and the researchers' personal networks were frequently used methods, supplemented by snowball sampling. Examples of these methods include Howard, Howell and Jamieson [37], Howard [38], Howard [39], Munro [44], Baker, Clayton and Bragg [31], Hirschberg [35], Pardon, Dimmock, Chande, Kondracki, Reddick, Davis, Athan, Buoli and Barkin [46], Schelhas and Gast [47], Jurcik [40], Schneider-Mayerson and Leong [48], Schneider-Mayerson [49] and Holmes, Natalier and Pascoe Leahy [36].

4. Discussion

While contributing least to climate change, children are at greatest risk of its adverse effects [54,55]. With no direct voice in dominant systems of governance, they rely on their parents to represent them [15]. Our scoping review identified and described qualitative research relating to parents' perspectives on climate change. We used recommended methods for searching and for data extraction and recording. Nonetheless, some limitations should be noted.

We used the SPIDER framework to screen for eligibility (Table 1) and included studies using qualitative data collection methods. In this category, we included studies collecting only qualitative data and ones that combined fixed and open-ended responses (i.e., mixed methods designs). As others have noted, there is an important distinction between the collection of 'qualitative data' and the execution of 'qualitative research' [56–58]. Our inclusion criteria relate to the collection of qualitive data: inclusion in our review does not therefore imply that every study employs an iterative process of interpretation grounded in the everyday routines and meanings of people's lives [59].

The timeframe for our review means we will have missed papers published after the end point of our searches (June 2024). However, the inclusion of more recent papers is unlikely to change the overall focus of qualitative research to date: on reproductive decision-making and parents' perceptions of the emotional impacts of climate change on them and their children.

We used inclusive search terms for the key components of our scoping review (climate change, parents, perspectives, qualitative research). Parents and expectant parents were included in all papers and studies in the review, and, in most of these, the participants were all parents. However, a number of papers and studies included participants who were not (expectant) parents. In five of the twenty-two papers (four studies), the majority were adults without children; all these studies explored reproductive decision-making in the context of climate change. Reproduction was not included in our search terms, suggesting there is a potentially large evidence base of qualitative research on the relationship between perceptions of climate change and reproductive intentions and practices, including voluntary childlessness. A scoping review focused explicitly on reproductive choices would enable this seam of work to be mapped and integrated into the wider evidence base on the impact of climate change on intimate relationships and family life.

5. Conclusions

The majority of adults across OECD countries are concerned about climate change [60,61]. A large proportion of these adults are parents [10,16–18], with responsibilities and duties

relating to the welfare of their children. Against this backdrop, our scoping review identified and described qualitative research focused on parents' perspectives on climate change.

Our review indicates that this is a small field of research with limited geographical spread: a large proportion of participants (over 70%) were resident in the US, Australia and the UK. Our review also indicates that parental perspectives on climate change are both a recent and a growing field of research: no papers were published before 2015 and 90% were published between 2020 and 2024. The papers in our review illuminate how parental concerns about climate change are evident at all stages of children's lifetime, from prior to conception, through pregnancy and early motherhood and onto children's school years.

While potentially a rich resource through which to understand parental perspectives on climate change, the papers, and the studies on which they are based, draw on the perceptions and experiences of particular sub-groups. The study populations are disproportionately composed of parents who are actively engaged in climate change politics and action. The samples are skewed to privileged groups, for example, with respect to ethnic identity (white) and social class (higher education/middle class). What is missing are qualitative studies exploring climate change perspectives among the general population of parents, particularly those who are neither engaged in climate change forums nor from socially advantaged groups. A key gap relates to the perspectives of parents whose lives are lived at the intersections of multiple dimensions of social inequality.

With policies to address climate change dependent on public support, this is an important gap to fill. Those developing and implementing climate policies need evidence on how parents understand and experience climate change and its impact on their children's wellbeing and future lives from studies that reflect the diversity of the population. This evidence is urgently needed, and qualitative research is uniquely placed to provide it.

Supplementary Materials: The following supporting information can be downloaded at https://www.mdpi.com/article/10.3390/soc15040104/s1. Table S1: Inclusion and exclusion criteria; Table S2: Databases; Table S4: Search terms; Table S5: Excluded studies.

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