SLEEPJ, 2025, 48, 1–23
doi:10.1093/sleep/zsaf169
Advance Access publication 20 June 2025
Review

Review

# Shared sleep needs and seeking synchrony in parent–infant sleep: a meta-ethnography of parents' perspectives and experiences

Patricia Flynn [1,*], Deanna Gibbs[1,2] and Michelle Spirtos[1]

[1]Discipline of Occupational Therapy, Trinity College, Dublin, Ireland and [2]Corporate Nursing, Barts Health NHS Trust, London, United Kingdom
*Corresponding author. Patricia Flynn, Trinity College Dublin, Discipline of Occupational Therapy, Trinity Centre for Health Sciences, St. James Hospital, James's Street, Dublin 8 D08 W9RT, Ireland. Email: flynnpb@tcd.ie.

## Abstract

**Study Objectives:** This study sought to generate a comprehensive, multi-dimensional understanding of parent–infant sleep.
**Methods:** A systematic review using a meta-ethnographic approach was conducted to synthesize parents' perspectives and experiences relating to parent–infant sleep in the first two postnatal years with reference to the theoretical construct of co-occupation. Co-occupation in parent–infant sleep refers to the interactive participation of parent and infant in sleep-preparation and sleep-participation activities situated within their relational, temporal, spatial and socio-cultural context.
**Results:** A systematic search was conducted on November 11, 2022 in multiple databases: Embase.com, MEDLINE ALL via Ovid, Web of Science Core Collection, CINAHL via EBSCOhost, and Google Scholar for English-language studies reporting relevant qualitative data. An exhaustive approach to sampling resulted in the inclusion of 60 multi-disciplinary studies with over 5500 participants. Included studies were appraised for methodological rigor and application of theory. Four themes were generated: shared parent–infant sleep needs; parent–infant sleep synchrony; sleep and the parent–infant relationship; and the impact of socio-cultural context on sleep. The findings are presented as a meta-ethnographic line-of-argument synthesis with a diagrammatic representation.
**Conclusions:** Parents described parent–infant sleep as a highly interactive experience with the desired outcome of meeting the shared parent–infant sleep needs of mutual wellbeing and infant protection. The construct of parent–infant sleep synchrony, supported by the interdependent processes of infant sleep-consolidation and parent sleep-adaptation, is proposed to represent the degree to which these shared parent–infant sleep needs are met. Bidirectional influences between sleep and the parent–infant relationship are described and the impact of socio-cultural context on sleep is explored.

**Key words:** sleep; infant; parent; co-occupation; postnatal; postpartum

### Statement of Significance

This synthesis offers a comprehensive, multi-dimensional understanding of interactive parent-infant sleep based on the perspectives and experiences of parents. While there is growing recognition of bidirectional influences between the sleep of infants and their parents, there is an incomplete understanding of the phenomenon. By applying the theoretical construct of co-occupation, which focuses on interactive parent-infant sleep preparation and sleep participation activities without privileging the sleep of either the parent or the infant, common elements of the shared sleep experience were identified. A proposed definition of parent-infant sleep, the identification of shared parent-infant sleep needs, and the conceptualization of parent-infant sleep synchrony offer novel insights for future research and interventions aimed at improving sleep outcomes for both infants and new parents.

Infant and parent sleep in the first two postnatal years is a primary concern for new parents and healthcare professionals [1, 2]. However, many pediatric and primary care clinicians identify a gap in their knowledge with respect to their understanding of children's and new parents' sleep [3, 4]. A lack of academic consensus on the parameters of normal, optimal, and safe infant sleep presents a barrier to professionals' ability to access consistent and reliable information on infants' and new parents' sleep needs [5–7]. Infant sleep interventions are the subject of continued debate regarding their effectiveness [8], conflicting philosophies [9, 10], risk of unintended outcomes [11, 12], and limited consideration of parents' perspectives [13]. Moreover, interventions aimed at supporting new parents' sleep in the postnatal period often do not address infant sleep as the primary source of the sleep disruption [14].

While parent and infant sleep have historically been studied in isolation from one another [7, 15], greater recognition of the interactions between parent and infant sleep patterns [16], locations

**Submitted:** 14 February, 2025; **Revised:** 20 May, 2025; **Accepted:** 6 June, 2025
© The Author(s) 2025. Published by Oxford University Press on behalf of Sleep Research Society. All rights reserved. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site—for further information please contact journals.permissions@oup.com.

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 1.** Interactive Sleep Preparation and Sleep Participation Activities [31]

| Sleep preparation activities | Sleep participation activities |
|---|---|
| Engaging in bedtime routines | Taking care of personal sleep needs |
| Determining sleep and wake times | Sustaining sleep without disruption |
| Establishing sleep patterns for growth and health | Meeting toileting and hydration needs |
| Preparing the sleep environment | Negotiating the needs of and interacting with others |
| Setting up or turning off equipment and electronics | Monitoring the comfort and safety of others who are sleeping |

**Table 2.** SPIDER Search Strategy Tool Headings [36]

| SPIDER search tool headings | Elements of research question |
|---|---|
| S – Sample | Parents of infants aged 2 years or younger |
| P of I– Phenomenon of Interest | Interactive parent–infant sleep activities |
| D – Design | Studies with qualitative data collection and analysis methods |
| E- Evaluation | Reported experiences and perspectives of parents |
| R- Research Type | Qualitative or mixed methods |

[17], and behaviors [18] has given rise to a growing body of research exploring parent–infant sleep as one interactive phenomenon [19–21]. However, parent–infant sleep has not been categorically defined in the literature and there is a recognized need for further interdisciplinary research of the topic [15, 22]. Researchers have also emphasized the importance of context, given the recognized influence of individual and sociocultural factors on both infant and parent sleep [18, 23, 24].

The construct of co-occupation from occupational science literature offers a fitting theoretical framework to explore the subjective, interactive, and multi-dimensional aspects of parent–infant sleep [25, 26]. Co-occupation refers to the subjective experiences of two or more individuals participating in interactive, interdependent activities and is distinct from parent-infant co-regulation, a concept more commonly applied to parent–infant sleep [27]. In this context, *co-regulation* describes the reciprocal emotional, physiological, and behavioral responses between parent and infant that can support the infant's state regulation and the synchronization of parent–infant sleep–wake patterns [28, 29]; whereas *co-occupation* refers to the subjective experiences of both parent and infant as they engage in interactive sleep preparation and sleep participation activities [30, 31]. The concept of co-occupation was first generated from applying inter-disciplinary theory to research exploring the highly interdependent occupations of mothers and their children and emphasizes the active agency of both participants and the multidimensional influence of context [27]. The occupational category of sleep which includes a range of sleep preparation and sleep participation activities, listed in Table 1, provides an additional framework to explore parents' experiences of participating in parent–infant sleep [31]. For the purpose of this study, we have defined parent–infant sleep as parents' and infants' experiences of engaging in interactive sleep activities within a shared spatial, temporal, and social context.

As a method of qualitative evidence synthesis developed to produce a higher-level understanding of complex phenomena, meta-ethnography was selected as an appropriate method to meet this study's objective [32]. To our knowledge, there is no published qualitative evidence synthesis to date which sought to generate a comprehensive understanding of the co-occupational parent–infant sleep experience.

This study aims to synthesize the perspectives and experiences of parents from a diverse range of backgrounds to generate a comprehensive understanding of interactive participation in parent–infant sleep activities within the shared relational, temporal, spatial, and socio-cultural context.

## Materials and Methods

### Design

The seven-stage meta-ethnographic process is reported in line with the eMERGe meta-ethnographic guidelines and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [32–34]. The protocol for this study was registered on December 13, 2022 on the PROSPERO international prospective register of systematic reviews (CRD42022380988) [35]. Completed PRISMA and eMERGe checklists are included as Tables S1 and S2 respectively in the supplementary material file.

### Search strategy

The SPIDER search strategy tool [36] was used to guide the generation of search terms with reference to the research aim (Table 2). An exhaustive search strategy was subsequently developed by an expert subject librarian [37]. The search was developed in Embase.com, optimized for sensitivity, and then translated to other databases. No temporal limits were used. The search was carried out on November 11, 2022 in the following databases: Embase.com, MEDLINE ALL via Ovid, Web of Science Core Collection, and CINAHL via EBSCOhost. Supplementary backward-citation searching of reference lists and forward-citation searching of included studies using Google Scholar was also conducted. The full search strategy, including terms and syntax, is provided in the supplementary material file (Table S3).

### Study selection

An exhaustive approach to sampling was applied to ensure that all relevant studies were selected to produce a complete and convincing interpretation of a complex, interactive phenomenon [38]. English language qualitative or mixed-methods studies published in peer-reviewed journals were included if they reported direct quotes from mothers, fathers, or primary caregivers describing their experiences or perspectives relating to engaging in interactive sleep preparation or sleep participation activities with their infants aged 2 years or younger. Relevant studies where the age of the infant was not specified were included if it was evident that the parent was referring to an infant within the age range of 0-2 years (e.g., they referred to the risk of Sudden Infant Death Syndrome (SIDS) or described the child as an infant or baby).

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

Studies where parents' or infants' sleep was explored in isolation were excluded, as were studies that described parent and infant sleep in clinical settings where interactions with the environment, equipment, and staff would complicate the isolation of parent–infant sleep interactions. Grey literature and conference abstracts were excluded due to the anticipated large volume of search results and to ensure a level of quality and rigor.

### *Screening and data extraction*

Search results were imported to Covidence systematic review software [39], which was used to identify and delete duplicates, screen, select, and manage studies. The first author (PF) independently screened all titles and abstracts for relevance, followed by a full-text screening of all subsequently retrieved articles. The second (DG) and third author (MS) each independently double-screened 10% of the articles' titles and abstracts and 10% of the full text of the retrieved articles. Where necessary, consensus on inclusion was reached in subsequent discussions between all three authors. Data were extracted to a table of characteristics that included bibliographic information, study aim, location, population, infant age, number of participants, theoretical framework, sampling method, and data collection and analysis methods (Table 3). For the purpose of populating the table of characteristics, data extracted from five studies that generated findings from the same population of 83 mothers were merged [40–44]. To ensure trustworthiness of this synthesis' findings, contextual data and a summary of relevant findings were also extracted for ease of reference at all stages of the research process (Table S4 in the supplementary material file).

All parent quotations (first-order constructs) and original researcher interpretations (second order constructs) relating to interactive parent–infant sleep preparation and participation activities were extracted verbatim to a bespoke MS Word data extraction and coding table (extract included as Table S5 in supplementary material) [45]. Both minority and widely held perspectives were extracted in an effort to represent the full breadth and depth of the phenomenon [32]. The first author extracted data from all papers, while the second and third authors each independently extracted data from 20% of the included papers. Decisions were subsequently discussed between all three authors to enhance inter-rater reliability [46]. The PRISMA Flow Diagram outlining the study search and selection process is presented in Figure 1.

### *Quality appraisal*

Two methods of quality appraisal were used. The *Critical Appraisal Skills Program (CASP) Qualitative Checklist* [47] to appraise methodological rigor and trustworthiness and the *Hierarchy of Evidence for Assessing Qualitative Health Research* [48] to rate the application of theory in the included studies which has particular relevance when conducting a meta-ethnography [49]. The first author independently appraised all included studies and the second and third authors independently appraised two studies each. Covidence software was used to complete, collate and reach consensus on the completed *CASP Checklists* [39], while the rating of the studies on the Daly et al. [48] hierarchy of evidence was completed manually. The outcomes of both were then recorded in a table of quality appraisal outcomes (Table S6 Supplementary Materials). Appraisal outcomes were subsequently discussed by all three authors to minimize bias, enhance rigor, and reach consensus. Studies were not excluded based on the outcome of the appraisal to avoid the exclusion of parent quotations that had the potential to provide rich insights irrespective of the methodological rigor of the original study [49, 50]. In line with recommended practice in qualitative evidence synthesis, appraisal results were not quantified but sorted into four categories based on consideration of the outcomes of both rating systems [51]. The categories ranged from A to D, where A referred to a high quality paper and D to a low quality paper. In order to privilege data from higher quality studies, coding was first completed on studies that rated as being of high quality (A), followed by those of medium quality (B) in author-alphabetical order to generate the main codebook [51]. Relevant and novel data from studies of medium-low quality (C) were subsequently incorporated into the codebook. In practice, data from studies rated as low quality (D) did not generate new codes but did serve to confirm existing codes.

### *Data coding, analysis, and synthesis*

Manual line-by-line coding was completed by the first author on the entire dataset of first and second order constructs. While the construct of co-occupation guided study selection and data extraction, an emergent approach to coding was used where codes were developed inductively from the data [52]. The second and third author independently coded one study each and similarities and differences were discussed by all three authors at the start of the coding process to minimize bias and enhance consistency. Codes were then sorted into short interpretive summaries of shared meaning, subsequently grouped into sub-themes and finally arranged into overarching thematic groups using an inductive, iterative, and collaborative process of constant comparison, discussion, and repeated reading of original studies [53]. The over-arching relationships between the themes and subthemes were considered in order to form a *line of argument* synthesis. In meta-ethnography, a *line of argument* synthesis brings together the findings of the included studies to construct a higher-order interpretive framework that reflects the complexity and diversity of the participants' experiences and perspectives [32]. An extract from the Data Analysis and Synthesis Table is included as Table S7 in the supplementary material file.

### *Researcher positioning and reflexivity*

The researchers acknowledge the a-priori assumptions underlying the selected research design and guiding theoretical framework applied during study selection and data extraction. While this starting point reveals certain values and judgements, many interpretivist researchers would argue that any research that has an identified purpose reveals a series of value-based choices and assumptions to some extent [54]. At each stage of the research process, the researchers engaged in active reflection and frequent discussions in an attempt to set aside any further assumptions or biases and ensure that all interpretations were grounded in the primary data [55].

## Results

### *Characteristics of included studies*

The Table of Primary Study Characteristics (Table 3) details the wide range of geographical, ethnic, cultural and socio-economic backgrounds of participants; however, almost half of the studies (48%) were conducted in the United States of America. Mixed methods were applied in 5 of the included studies [56–60] and the remaining 55 used qualitative methods only.

Approximately 5500 parents/primary caregivers participated in the included studies. A number of studies did not specify

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Table of Primary Study Characteristics

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-5 | Ajao et al. [40]<br>Joyner et al. [41]<br>Oden et al. [42]<br>Joyner et al. [43]<br>Moon et al. [44] | To examine SIDS related beliefs, knowledge, decisions, and perceptions of black mothers around sleep environments, positions, location, and use of pacifiers. | USA | Mothers | 1.1–9.3 | 83 | Not specified | Convenience | Thirteen focus groups & 10 Individual Interviews | Grounded theory | B |
| 6 | Aslam et al. [98] | To explore socio-cultural influences on migrant mother decisions and beliefs regarding co-sleeping as a risk factor for SIDS. | Australia | Mothers | ≤12 | 5 | Social constructivist | Purposive | Semi-structured interviews | Principles of discourse analysis applied | B |
| 7 | Bailey [63] | To explore the lived experiences of breastfeeding mothers who share a sleep surface with their infants in a Western cultural setting. | Australia | Mothers | Not specified | 6 | Evolutionary biology / anthropology | Purposive supplemented by convenience | Semi-structured interviews | Interpretive phenomeno-logical analysis | C |
| 8 | Ball [56] | This paper examines the practice of parents sharing a sleep surface with their young infants. | UK | Mothers | 1–3 | 253 | Not specified | Convenience | Sleep diaries and interviews | Iterative process | C |
| 9 | Capper et al. [57] | To identify factors influencing decisions concerning infant sleep practices of mothers of preterm infants. | USA | Mothers | Data extracted for ≤ 24months | 98 | The health belief model | Convenience | Mixed methods study. Online survey generated qualitative data | Content analysis | C |
| 10 | Caraballo et al. [75] | To investigate practices, knowledge, attitudes, and beliefs regarding safe infant sleep among adolescent mothers. | USA | Mothers | 2–21 | 43 | None, in line with grounded theory | Convenience–self-selected | Seven focus groups | Grounded theory | C |
| 11 | Chae et al. [80] | To explore the sleep ecology of infants under two years of age and their mothers. | South Korea | Mothers | 3–19 | 20 | Ecological model | Purposive | In-depth interviews | Thematic analysis | A |
| 12 | Chianese et al. [97] | To understand parents' beliefs, and motivations for sharing a sleep surface, their safety concerns and attitudes to advice. | USA | Mothers (26)<br>Fathers (2) | 1–6 | 28 | Theory of reasoned action | Purposive | Four focus groups of 6- 10 ppnts | Grounded theory | B |

*(Continued)*

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | Cole et al. [58] | To understand which safe sleep recommendations parents find most challenging to implement, identifying barriers and challenges to adherence. | Australia | 97% Mothers (3% = other unspecified primary caregivers) | 3 | 3341 | Medical model / public health | Convenience | Cross-sectional survey with qualitative free-text items | Content analysis | B |
| 14 | Cox et al., [84] | To listen to the voices of young mothers around their experience of motherhood. | USA | Mothers | 4–24 | 179 | Emerging adulthood (Arnett) | Purposive | Thre interviews at infant age 4, 12, and 24 months | Content analysis | B |
| 15 | Crane and Ball [107] | To discover how White British and Pakistani mothers recall, understand and interpret SIDS-reduction guidance, and to explore whether and how they implement this guidance. | UK | Mothers | 2–3 | 46 | Personal-social-cultural model | Convenience | In-depth narrative interviews | Narrative thematic analysis | B |
| 16 | Doering and Durfor [90] | To generate a grounded theory of fatigue and sleep in nondepressed lower-income urban women during the 6 months following childbirth. | USA | Mothers | 1–6 | 16 | Symbolic interaction-ism | Purposeful | Semi-structured interviews at month 1,3, & 6 | Grounded theory | B |
| 17 | Doering et al. [67] | To generate a grounded theory of the process used by postpartum women with depressive symptoms to manage sleep and fatigue. | USA | Mothers | 1–6 | 19 | Not described | Convenience | Interviews at month 1,3, & 6 | Grounded theory | B |
| 18 | Fägerskiöld [87] | To explore first-time fathers' experiences during early infancy of their children. | Sweden | Fathers | 5–9 | 20 | Symbolic interaction-ism | Theoretical | Individual interviews | Grounded theory | A |
| 19 | Gaydos et al. [93] | To compare decision making regarding sleep practices of mothers to better understand how to effectively mitigate risk. | USA | Mothers | ≤6 | 60 | Not stated | Convenience | Focus groups | Content analysis | C |
| 20 | Grant et al. [100] | To identify if the Pepi-pod® was perceived as culturally safe and to explore the process of implementing the program. | Australia | Mothers | 0–3 | 4 | Cultural focus. | Purposive | Photo elicited yarning sessions, focus groups, field notes | Thematic analysis | B |

*(Continued)*



Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Gray et al. ( 2022) [108] | To discover the sleeping habits and routines of Hispanic toddlers at risk for obesity through the perspective of their mothers. | USA | Mothers | 6–18 | 14 | Socio-ecological model | Purposive | Interviews | Phenomen-ology Thematic analysis | C |
| 22 | Herman et al. (2015)[66] | To investigate beliefs among Africa American and American Indian families about infant safe sleep practices. | USA | 54 Mothers 26 (13 M, 13 F) Supporters | 0–24 | 54 | None, in line with grounded theory | Convenience | Focus groups | Grounded theory | C |
| 23 | Howard et al. [85] | To investigate barriers and facilitators of infant sleep practices. | USA | 13 mothers 2 fathers | 0–12 | 15 | None, in line with grounded theory | Purposive | 3 focus groups | Grounded theory | B |
| 24 | Hsu et al. [106] | To explore the perceptions and experiences of parental professional help-seeking for infant sleep and sleep-related concerns. | Taiwan | Parents 19 mothers 1 father | 12 | 20 | Not specified | Purposive | Data sheet followed by face-to-face interviews | Thematic content analysis | B |
| 25 | Hwang et al. [69] | To identify barriers and facilitators to adherence to safe sleep practices among mothers of preterm infants. | USA | Mothers | 2–6 months after hospital discharge | 23 | Theory of Planned Behavior | Purposeful | Interviews by phone or video conference | Grounded theory | A |
| 26 | Jacobson and Himes [65] | To examine perceptions of the AAP guidelines held by parents and health care providers as they relate to guidelines comprehension and compliance. | USA | Mothers Fathers Grandmothers Guardians Professionals | Not specified | 87 | Public health campaign Not specified | "There was a purposive element in sample selection" | Online focus groups conducted by commissioned research firms | Not specified | D |
| 27 | Jones et al. [86] | To describe what approaches Māori parents use to get their babies to sleep, and what factors they identify as influencing their decision-making. | Aotearoa New Zealand | 8 Mothers 2 fathers | 2–24 | 10 | Cultural perspective | Purposeful supplemented by convenience | Interviews | Kaupapa Māori methodology Thematic analysis | B |
| 28 | Kennedy et al. [73] | To learn from mothers about their experience of sleep during pregnancy and the immediate months of becoming a new mother. | USA | Mothers | ~3 | 20 | Mercer's framework of becoming a mother | Convenience sample | Semi-structured interviews | Interpretive hermeneutical approach | C |

*(Continued)*

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | Kihlström et al. [62] | To understand caregivers' perspectives on safe sleep practices. | USA | 5 caregivers from 3 families | 0–6 | 5 | socio-ecological model | Convenience | Photovoice methodology including interviews | participatory research Thematic analysis | C |
| 30 | Lau and Hall [76] | To explore Canadian mothers' experiences with infant sleep safety. | Canada | Mothers | 0–6 | 14 | Not specified | Purposeful sampling | Interviews | Grounded theory | B |
| 31 | Liamputtong [99] | To explore the childrearing beliefs and practices related to child health amongst the immigrant Hmong culture. | Australia | Mothers | Not specified | 27 | Ethnography | Snowball | Interviews and observations | Thematic analysis | D |
| 32 | MacFarlane et al. [82] | To explore infant sleep practices and key motivators among selected Māori and non-Māori mothers in relation to the risk of SUDI. | Aotearoa New Zealand | Mothers | 1–6 | 30 | Motivation theory (Ryan & Deci) | Purposeful | Interviews | Kaupapa Māori cultural framework Thematic analysis | A |
| 33 | Marshall and Thompson [79] | To provide an account of the subclinical spectrum of postnatal psychological difficulties from the perspective of mothers. | Australia | Mothers | 1.5–11 | 7 | Not specified | Purposive | Face-to-face interviews | Interpretive Phenomenological Analysis | C |
| 34 | Mathews and Moon [91] | To compare infant care practices among African American and Hispanic families. | USA | Mothers | ≤6 | 89 | Not specified | Purposeful | Interviews and focus groups | Grounded Theory | D |
| 35 | McKenna and Volpe [61] | An exploration of parents' accounts of sharing a sleep surface. | Canada USA Australia UK | Mothers | Not specified | >200 | Not specified | Self-selected via websites | Online questionnaire | Not specified | D |
| 36 | Morelli et al. [96] | To come to a broader understanding of cultural practices in two different cultures. | USA Guatemala | Mothers | 2–28 (USA) 12–22 (Mayan) | 32 | None specified | Convenience | Interviews and participant drawings | Not described | D |
| 37 | Mosley et al. [95] | To determine decision-making factors for infant sleep position among low-income parents and other relatives. | USA | Mothers (79% - 107) Fathers (10% - 14) Caregivers (11% - 15) | <12 | 121 | Not specified | Convenience | 18 Focus groups | Not specified | C |
| 38 | Muller [70] | To explore the subjective well-being of parents in the context of infant sleep problems. | South Africa | 8 mothers 2 fathers | 3–12 | 10 | Subjective well-being model | Nested and Snowball sampling | Telephone or virtual interviews | Inductive and reflexive | B |

*(Continued)*



Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | Murray et al. [103] | To investigate how infant settling was perceived "through the eyes" of new mothers. | Vietnam | Mothers | 3–6 | 5 | Traditional humoral schemas | Snowball | Photo elicitation followed by interviews | Visual ethnographic approach | A |
| 40 | Murray et al. [101] | To describe caregivers' understandings of, and responses to, unsettled infant behaviors and the family caregiving contexts in which it occurs. | Vietnam | Mothers | 0–6 | 21 | Cultural perspective | Purposive | Semi structured Interviews | Thematic analysis | A |
| 41 | Noble et al. [72] | To explore parents' perceptions of using controlled comforting as a method of sleep management. | Australia | 10 mothers 1 father | 6–18 | 11 | Narrative Interpretative | Purposeful | Interviews | Emden's core story creation process | D |
| 42 | Ou et al. [68] | To explain how and why mothers develop persistent and intense anger, the steps they take to manage their anger, and outcomes associated with its management during the postnatal period. | Canada | Mothers | 7–23 | 20 | Relational autonomy theoretical framework. Anger recalibration theory | Purposeful sampling | Interviews | Grounded theory | A |
| 43 | Pease et al. [102] | To understand the views and decision-making process of mothers of babies at risk of SIDS on the infant sleep environment and safe sleep messages. | UK | Mothers | 0.75–6.5 | 20 | None specified | Purposive sampling for SIDS risk factors | Semi-structured interviews | Thematic analysis, continuous comparative method | B |
| 44 | Rolls and Hanna [64] | To understand the experiences of women and families and how they coped with and managed an infant with sleep problems. | Australia | 28 women 2 men 1 g/mother | 2.5–18 | 28 | None specified | Convenience | 4 focus groups | Thematic analysis | D |
| 45 | Rowe [81] | The study investigated ways in which new and experienced mothers of an infant constructed specific care practices. | Australia | Mothers | 1–12 | 21 | Theory of social context/*locales* (Giddens, 1991) | Purposive and convenience sampling | In-depth interviews and reflective journals | Qualitative approach based on narrative research principles | C |

*(Continued)*

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | Rudzik and Ball [105] | To investigate women's perceptions of the nature of infant sleep and of links between infant feeding method and sleep practices in the first year. | UK | Mothers | <12 | 39 | "Proximal self-care" Constructivist | Convenience | 7 Focus groups – semi-structured interview guide. | Experience-near approach to thematic analysis | C |
| 47 | Runquist [77] | To construct a substantive theory of postnatal fatigue. | USA | Mothers | 2–5 weeks | 13 | Social process of persevering over time | Theoretical sampling followed by | Semi-structured interviews | Grounded theory | A |
| 48 | Shimizu et al. [92] | To explore the relationship between values and practices and how social change is negotiated by individual mothers. | Japan | Mothers | ≤24 | 51 | Theory of social change and human development | Theoretical | Data collected from internet | Qualitative thematic analysis | B |
| 49 | Shorey et al. [88] | To explore first-time fathers' postnatal experiences and support needs in the early postnatal period. | Singapore | Fathers | 1–3.5 | 15 | Not specified | Purposive | Semi-structured interviews | Descriptive qualitative Inductive | B |
| 50 | Stiffler et al. [83] | To identify why African American mothers do not tend to follow the official safe sleep recommendations. | USA | Mothers | >6 | 15 | Not specified | Convenience | 2 focus groups | Modified ethnography | C |
| 51 | Tipene-Leach et al. [104] | To increase understanding of present day Maori infant care practices. | Aotearoa New Zealand | 17 Mothers 9 fathers | <12 | 26 | Māori cultural perspective | Purposive | 7 focus groups and one individual interview | Thematic analysis | B |
| 52 | Tomori et al. [110] | To investigate breastfeeding experiences in societies where breastfeeding is promoted but formula feeding remains common. | USA Canada | Mothers | Not Specified | 18 | Cross-cultural, evolutionary, historical, and feminist perspectives | Not Specified | Ethnographic observation and in-depth interviews | Anthropo-logical analysis | C |
| 53 | Tsai et al. [74] | To describe the aspects of infant sleep perceived as problematic by first-time mothers and to discover how mothers cope. | Taiwan | Mothers | <3 | 12 | transactional model of infant sleep–wake regulation | Convenience supplemented by purposive | Interviews | Qualitative content analysis | B |
| 54 | Tse and Hall [71] | To describe parents' perspectives about implementing a sleep intervention. | Canada | N = 25 14 mothers, 11 fathers | 9–16 | 25 | Not described | Purposive sampling | Interviews | Grounded theory | C |
| 55 | van Schaik et al. [59] | To articulate the practices relating to establishing daily rhythms in infants as described by mothers. | Netherlands USA | Mothers 33 Dutch 41 US | 2–6 | 74 | Heuristic Cultural perspective | Purposive | Questionnaires, interviews & diaries | Inductive thematic analysis | B |

(Continued)



Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 3.** Continued

| No. | Author(s) | Aim of study | Country | Population | Infant age (months) | No of ppnts | Theoretical framework | Sampling | Data collection methods | Methodology | Quality rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 56 | Veltkamp et al. [109] | To analyze family practices informed by attachment theory within their social, cultural, and material contexts. | Netherlands | Mothers (14) Fathers (4) | ≤12 | 12 | Attachment theory Critical Sociological Perspective | Purposive followed by snowball | 2-time-point interviews triangulated with observations at home | Ethnographic description | C |
| 57 | Welles-Nystrom [60] | To examine the Swedish practice of co-sleeping and relate it to the cultural discourse on the gendered family and health. | Sweden | 60 Parents in all four age cohorts (50% assumed to be ≤ 2yrs) | Data relevant to 6 and 18 month old cohorts extracted | 30 | Theory of Parents' Cultural Belief Systems | Snowball | Questionnaires, maps of home, diaries, semi-structured interviews | Ethnographic descriptions, thematic analysis, calculations from diaries | C |
| 58 | Zahra et al. [78] | The aim of this study was to explore successful breastfeeding mothers' experiences of the difficulties of breastfeeding. | Iran | Mothers | ≤12 | 16 | Not specified | Purposeful | Unstructured interviews | Qualitative Content Analysis | C |
| 59 | Zambrano et al. [89] | To understand facilitators and barriers that exist to getting a good night's sleep among these high-risk mothers. | USA | Mothers | 3–6 | 18 | Not specified | Convenience | Semi-structured interviews | Thematic coding and content analysis | C |
| 60 | Zoucha et al. [94] | Explore the cultural influences of safe sleep practices by African American caregivers of children under 2 years old. | USA | Primary Caregivers (16 Female, 3 Male) | ≤24 | 19 | Contextual cultural perspective | Convenience followed by snowball | Interviews fieldwork, observation, focus groups | Focused Ethnography | C |
| TOTAL | | | | | | ~5508 | | | | | |

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

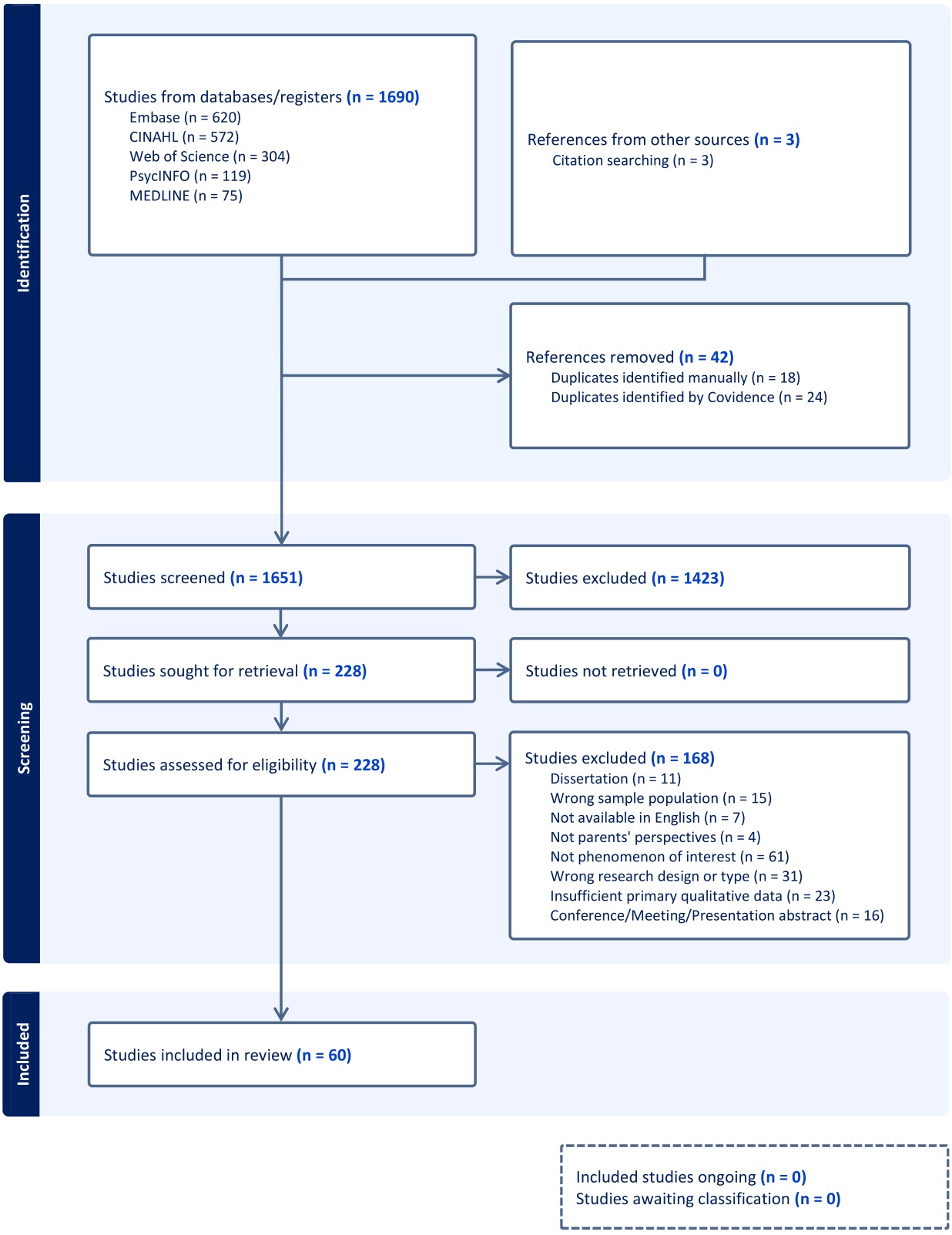


**Figure 1.** PRISMA flow diagram.

exact numbers [60, 61] or characteristics of caregivers/infants [58, 62–66]; however, it was estimated that male primary caregivers accounted for between 2% and 5% of participants. Only data related to direct caregiver involvement in sleep activities with infants aged 2 years or younger were extracted from studies with mixed participant or infant age-group cohorts. While no studies specifically included parents or infants with diagnosed conditions, parents in two studies were described as experiencing symptoms of depression [67, 68], parents in one study rated near or above the 90th percentile on an anger scale [68], the infants in

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

two studies were born preterm [57, 69], and participants in four studies had accessed a service or used an intervention specifically to address infant sleep problems [64, 70–72]. The included studies ranged across a 30-year period (1992–2022) and from a wide disciplinary base. The research aims of the included studies all differed from the specific research aim of this synthesis. Of the included studies, 32 were rated as high or medium quality (rated A or B), 21 as medium-low quality (rated C), and 7 as low quality (rated D). Unreported methods, failure to address the risk of bias, and a lack of a guiding theoretical framework were the primary factors leading to a lower quality rating. The quality appraisal rating given to individual studies is reported in Table 3 and Table S5 in the supplementary material file. Table 4 shows the contribution of each included study to the subthemes and themes.

## Research Findings

This synthesis generated four themes: shared parent–infant sleep needs; parent–infant sleep synchrony and asynchrony; connection: sleep and the parent–infant relationship; and the impact of socio-cultural context on parent–infant sleep. Each theme incorporates a set of related subthemes, which are depicted in Figure 2.

### *Theme 1: Shared parent–infant sleep needs: Mutual wellbeing and infant protection*

***Mutual wellbeing.*** Parents identified getting enough good quality sleep as important, for both their infant and for themselves, due to the perceived impact of sleep on wellbeing [57, 67, 68, 70, 73–81]: "*… a big concern and it still is, is that he's sleeping you know, not only me*" [73]. Parents believed that sleep quality and quantity could influence their infant's general health [57], behavior [70], mood [70, 75], growth [57, 81], and level of alertness and feeding [76]. However, many parents described how their efforts to meet their infant's sleep needs often came at the expense of meeting their own sleep needs, with perceived negative consequences for their physical [42, 67, 73, 77, 78, 82], emotional [67, 68, 70, 80–83], and cognitive [73, 78, 82] wellbeing. Parents frequently presented their needs as conflicting and distinct from their infant's sleep needs [67, 68, 81, 84]; for example, some parents described needing unbroken sleep [42, 73, 77, 78, 80, 85] or personal space [41, 66, 73, 81, 86] at night while infants often required frequent settling, feeding, and proximity [63, 68, 70, 74, 77, 80]. Parents nonetheless recognized that the extent to which their own and their infant's sleep needs were met was dependent on the sleep or wakefulness of the other [42, 43, 58, 64, 67, 68, 70, 72–75, 77, 78, 80, 81, 84, 87–90] affirming the interdependence of both their own and their infant's sleep-related wellbeing needs: "*My baby's sleep has … influenced my mood for sure … She did not fall asleep all night, and I am extremely worried about the negative consequences of her lack of sleep on her own health*" [74].

***Parent protection of the sleeping infant.*** Parents expressed the belief that they also held a shared need with their infant to ensure that the sleeping infant was protected from harm: "*… they feel safe, you feel safe knowing that they're all good …*" [86]. Parents described feelings of stress [73], fear [40–42, 44, 57, 82, 83, 91–94], and anxiety [41, 42, 58, 62, 69, 82, 83, 92, 94, 95] related to the potential risks to their sleeping infant of injury, suffocation, or sudden infant death. To address this concern, many parents slept close to their sleeping infant as they believed this facilitated infant protection during the night [41, 57, 63, 76, 82, 92, 94, 96–99]. Many parents believed that sharing a bed with their infant afforded the best protection, some to the extent that they viewed separate sleep to pose a risk to their infants [41, 93, 97] or to be neglectful of parental responsibility [82, 92]. Some parents perceived their infants to also hold this same need to feel secure and protected while sleeping [57, 86, 97, 98] which they often related to their infant's desire to sleep in proximity to them [92, 97, 98]. However, another group of parents described feeling reassured that their infants slept well and safely on a separate sleep space [57, 62, 69, 100], many saying that they avoided or feared bedsharing with their infant as they considered it to be unsafe [41, 65, 82, 86, 92]. Parents who perceived their infants' sleep preferences to conflict with safe sleep guidelines described experiencing shared parent–infant distress when they attempted to comply with the external advice [67, 76, 83]: "*When I put her down in her crib, she would cry and I would cry …*" [76]. Irrespective of where they slept, parents described how they themselves felt reassured and were better able to sleep when they believed that their sleeping infant was both safe and felt protected [57, 86].

***Negotiating mutual wellbeing and infant protection.*** There were numerous accounts of how parents' attempts to follow infant sleep safety guidelines negatively impacted their infant's ability [42, 58, 90, 101] or their own ability [42, 66, 82, 83, 85] to fall or stay asleep. In some cases, parents' efforts led to feelings of being in conflict with their infant [65, 66, 76]: "*… you're exhausted … not going to fight with this baby to put them in a safe place …*" [66]. While a number of parents said they would never compromise on infant sleep safety [76, 82, 91], others described knowingly placing their infant in sleep locations, positions, or with bedding that they considered to pose a risk in order to achieve better sleep for either their infant [58, 66, 93, 102, 103], themselves [58], or both [42, 58, 82, 83, 85]. Some parents expressed frustration with professional guidance that focused on promoting safe infant sleep but did not extend to offering strategies to promote optimal infant sleep in safe places or positions [58, 66, 82, 85]:

> Some advice or support on how to settle a newborn baby would've been appreciated. But all I was told was to follow the SIDS guidelines and whilst I know this is important, if your baby WILL NOT sleep on their back, what option do you have? [58]

In addition to efforts to adhere to safe sleep guidelines, parents would often stay awake or wake frequently to monitor their sleeping infant's safety [57, 62, 66, 73, 83, 95]: "*constantly getting out of my sleep trying to look at him, trying to make sure he's okay*" [66]. While some parents believed that they could remain aware of their infant's safety while bedsharing and asleep themselves [63, 90, 95, 104], others did not share this belief fearing that they might roll onto their baby if they did bedshare [41, 44, 61, 82, 97]. Parents who slept in a separate room frequently used technology to monitor their infants, offering them reassurance that their infant remained safe [57, 102]. However, this strategy did not present a solution for all, with one study finding that the use of infant sleep monitors could conversely increase some parents' anxiety, due to the frequency of false alarms [102]. While parents' beliefs, values, and practices varied greatly, descriptions of their efforts to support both their and their infant's sleep-related wellbeing needs while protecting their sleeping infant from harm were consistent across many studies.

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

**Table 4.** Contribution of Individual Studies to Themes and Subthemes

| Themes | | Shared parent–infant sleep needs: Mutual wellbeing and infant protection | | | Parent-infant sleep synchrony and asynchrony | | | Connection: Sleep and the parent-infant relationship | | The impact of socio-cultural context | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Author(s) | Subthemes | Mutual wellbeing | Parent protection ofthe sleeping infant | Negotiating mutual wellbeing and infant protection | Asynchrony in early parent-infant sleep | Increasing sleep synchrony | Intermittent disruptions and prolonged asynchrony | Shared sleep spaces and shared time | Negotiating control and dependence | The impact of the family and social circle | Socio-cultural influences on parent-infant sleep |
| Ajao et al. [40] | | | ✓ | | | | | | | ✓ | ✓ |
| Aslam et al. [98] | | | ✓ | | | | | ✓ | ✓ | | ✓ |
| Bailey [63] | | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ |
| Ball [56] | | | | | | | | ✓ | | ✓ | ✓ |
| Capper et al. [57] | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | |
| Caraballo et al. [75] | | ✓ | | | | | | ✓ | | | |
| Chae et al. [80] | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Chianese et al. [97] | | | ✓ | ✓ | | | | ✓ | | ✓ | ✓ |
| Cole et al. [58] | | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ |
| Cox et al. [84] | | ✓ | | | ✓ | | | | | | |
| Crane and Ball [107] | | | | | | | | ✓ | ✓ | | ✓ |
| Doering and Durfor [90] | | ✓ | | ✓ | | ✓ | ✓ | | | | |
| Doering et al. [67] | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Fägerskiöld [87] | | ✓ | | | | | | | ✓ | | |
| Gaydos et al. [93] | | | ✓ | ✓ | | | | | | ✓ | ✓ |
| Grant et al. [100] | | | ✓ | | | | | ✓ | | | ✓ |
| Gray et al. [108] | | | | | | | | | ✓ | | ✓ |
| Herman et al. [66] | | ✓ | | ✓ | | | | | ✓ | | ✓ |
| Howard et al. [85] | | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | |
| Hsu et al. [106] | | | | | ✓ | | | | ✓ | ✓ | |
| Hwang et al. [69] | | | ✓ | | ✓ | | | | | | ✓ |
| Jacobson and Himes [65] | | | ✓ | ✓ | | | | ✓ | | | |
| Jones et al. [86] | | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Joyner et al. [41] | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | ✓ |
| Joyner et al. [43] | | ✓ | | | | | | | | | |
| Kennedy et al. [73] | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | |
| Kihlström et al. [62] | | | ✓ | ✓ | | | | | | ✓ | ✓ |
| Lau and Hall [76] | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | ✓ |
| Liamputtong [99] | | | ✓ | | ✓ | | | | | | ✓ |
| MacFarlane et al. [82] | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ |
| Marshall and Thompson [79] | | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | |
| Mathews et al. [91] | | | ✓ | ✓ | | | | | | | ✓ |
| McKenna and Volpe [61] | | | | ✓ | | | | ✓ | ✓ | | |
| Moon et al. [44] | | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | |
| Morelli et al. [96] | | | ✓ | | | | | ✓ | ✓ | | ✓ |
| Mosley et al. [95] | | | ✓ | ✓ | | | | | | | |
| Muller [70] | | ✓ | | | | | | ✓ | | | |
| Murray et al. [103] | | | | ✓ | | | | ✓ | | | |
| Murray et al. [101] | | | | ✓ | | | | ✓ | ✓ | ✓ | ✓ |
| Noble et al. [72] | | ✓ | | | | | | | ✓ | | |
| Oden et al. [42] | | | ✓ | ✓ | | | | | | ✓ | |
| Ou et al. [68] | | ✓ | | | ✓ | | | | ✓ | | |
| Pease et al. [102] | | | | ✓ | | | | | | ✓ | |
| Rolls and Hanna [64] | | ✓ | | | | | | | | ✓ | |
| Rowe [81] | | ✓ | | | | | | | ✓ | ✓ | |
| Rudzik and Ball [105] | | | | | ✓ | ✓ | | | ✓ | | |
| Runquist [77] | | ✓ | | | ✓ | | ✓ | | | | |
| Shimizu et al. [92] | | | ✓ | | | | | ✓ | | | ✓ |
| Shorey et al. [88] | | ✓ | | | ✓ | ✓ | | | | | |
| Stiffler et al. [83] | | ✓ | ✓ | ✓ | | | | | | ✓ | ✓ |
| Tipene-Leach et al. [104] | | | | ✓ | ✓ | | | | | | ✓ |
| Tomori et al. [110] | | | | | | | | | ✓ | ✓ | ✓ |
| Tsai et al. [74] | | ✓ | | | ✓ | ✓ | ✓ | | ✓ | ✓ | |
| Tse and Hall [71] | | | | | | | ✓ | | ✓ | ✓ | ✓ |
| van Schaik et al. [59] | | | | | | ✓ | | ✓ | ✓ | | |
| Veltkamp et al. [109] | | | | | | | | | ✓ | ✓ | |
| Welles-Nystrom [60] | | | | | | | | ✓ | | | ✓ |
| Zahra et al. [78] | | ✓ | | | | | | | | | |
| Zambrano et al. [89] | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Zoucha et al. [94] | | | ✓ | | | | | | | ✓ | ✓ |

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

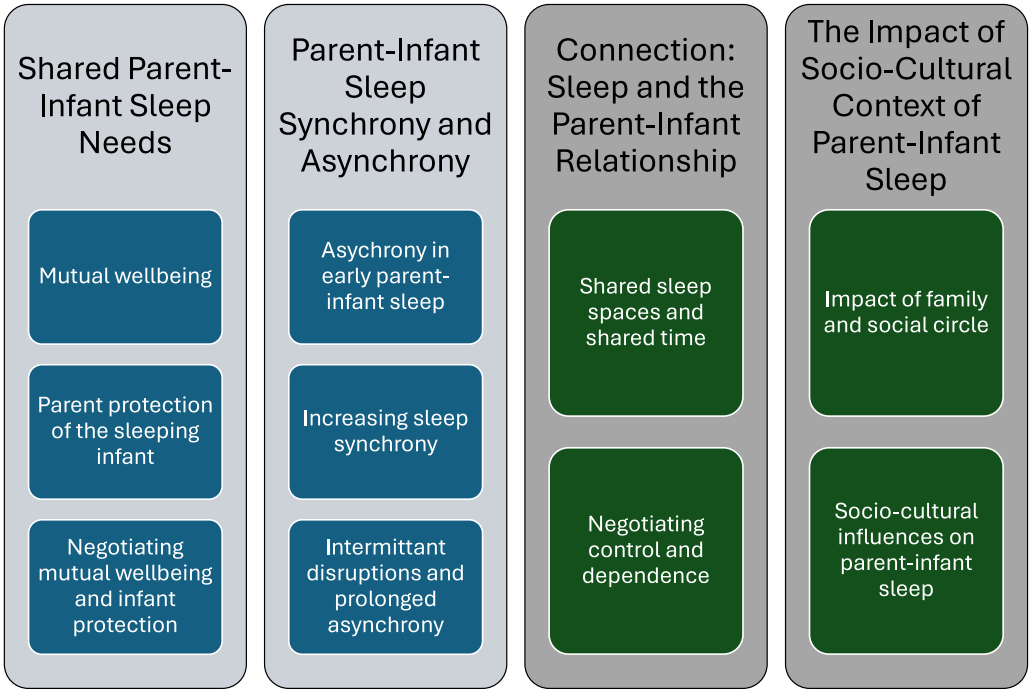


**Figure 2.** Themes and subthemes.

### *Theme 2: Parent–infant sleep synchrony and asynchrony*

***Asynchrony in early parent–infant sleep.*** Parent and infant sleep patterns were perceived to be highly interactive, described by primary study authors as "*mutually interrelated*" [80], "*reciprocal*" [80], interdependent [67, 89, 105] and sharing a similar rhythm [63]. However, this interactivity did not necessarily translate into a synchronous experience, with many parents describing their infant's sleep pattern as being challenging [84, 88], "*problematic*" [74], overwhelming [67, 85], unpredictable [80, 89], and as conflicting with their own sleep pattern [67, 74, 77, 79, 88, 105] especially in the early postnatal months [67, 74, 80, 88, 105]:

> Their nights and days is mixed up. They don't know when to go to sleep and when to stay awoke, so it's like when they tired, you're not tired. But it's when they woke, that's when you be tired and it's like you can't stay woke while they woke… [67]

While parents could experience this challenge as unexpected [68, 73, 79, 85, 105] and many felt unprepared [76, 79, 85], other parents with previous experience or who had received information from health professionals about typical infant sleep patterns described a sense of acceptance and being less concerned about their infant's sleep [74, 79, 106]. In the early months, many parents also described a heightened concern for their sleeping infant's safety related to the perceived vulnerability due to their young age [44, 99, 104], small size [69, 76, 99], or premature birth [57, 69]. In some cases, parents' protective responses to this anxiety had the potential to negatively impact their own sleep [57, 66]: "*When he was initially discharged someone (myself or my husband) would stay up with him to monitor him while he slept… Looking back, mainly it was made out of fear…*" [57]. For most parents, the early postnatal months were a period of parent-infant sleep asynchrony where meeting the shared sleep needs of mutual sleep-related wellbeing and infant protection was particularly challenging.

***Increasing sleep synchrony: Infant sleep-consolidation and parent sleep-adaptation.*** Following the early postnatal months, most parents found that their infants began to sleep for longer and for more predictable periods and the frequency of infant night wakings reduced [67, 74, 80, 86, 88, 89]. The majority of parents experienced an associated improvement in the quality and quantity of their own sleep and consequently in their own sense of wellbeing [67, 80, 89]: "*…After 2 or 3 months, my baby started to sleep for longer. Now I feel more comfortable since I can really sleep*" [80]. This increasing ability to meet both their own and their infant's sleep needs was not a sole function of the infant's sleep-consolidation process but was also supported by parents' own parallel process of sleep-adaptation [59, 73, 79, 105]. Some parents described physiological changes in their sleep requirements [105]; behavioral adaptation of their own sleep timing (taking daytime naps for example) [59, 73, 90, 105]; or cognitive reframing of their conceptualization of good sleep [79, 90] which involved relinquishing beliefs such as "*… the only kind of good sleep was unbroken sleep and quite a lot of it*" [79]. These dual processes of infant sleep-consolidation and parent sleep-adaptation contributed to most parents being increasingly able to meet their own and their infant's sleep needs with time [67, 73, 80, 90]:

> … Sleeping hours increased a little, and my baby finally started to sleep for 4 hours at a time, so I could also take a nap for about 2 hours… Before that, I nearly had a mental breakdown… Now I feel more comfortable since I can really sleep [80].

In addition to increasingly meeting mutual sleep needs, parents also described a growing confidence in their ability to ensure their sleeping infant's safety as they perceived their infant to grow stronger and less vulnerable with age [44, 76]: "*You know the more time passes, the more confidence you'll feel. The anxiety gets less and the confidence gets more. Plus with her getting bigger and sturdier, that helps a lot.*" [76]. As the interactive processes of infant sleep-consolidation and parent sleep-adaptation progressed, many

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

parents described a more synchronous parent-infant sleep experience where they were better able to meet their own and their infant's sleep-related wellbeing and infant protection needs.

***Intermittent disruptions and prolonged asynchrony in parent–infant sleep.*** While the majority of parents experienced increasing parent–infant sleep synchrony with time [67, 73, 80] intermittent disruptions to both infants' and parents' sleep were common due to episodic infant health or maturation events such as teething, developmental leaps, or brief illnesses [71, 80]. In addition, a minority of parents experienced difficulties in meeting their own and their infant's sleep needs beyond the early months [67, 80, 90]: "*. . . you think that…you would get more sleep now that he getting older, I'm getting less, less sleep . . .*" [67]. Some of these parents identified how enduring infant health issues such as reflux, colic, eczema, digestive discomfort, or breathing issues could lead to a more prolonged interruption to the infant sleep-consolidation process [58, 74, 77, 79, 85]. Factors individual to parents were also described as having the potential to act as a barrier to the parent sleep-adaptation process [67, 89]. Low mood [67], anxiety [89], on-going daily stressors [67], negative feelings towards their infant or lives in general [67, 80, 89], difficulties establishing a routine with their infant [67] and a lack of support [67, 90] were all identified as having the potential to interrupt parents' ability to meet both their own and their infant's sleep needs beyond the early months.

### *Theme 3: Connection: Sleep and the parent–infant relationship*

***Shared sleep spaces and shared time.*** Lying close to, holding, or watching their sleeping infant was frequently described as deeply pleasurable and comforting to parents [65, 92, 97], with some feeling lonely or incomplete if sleeping separately [41, 60, 97] or that it was wrong or unnatural for their infant to sleep alone [65, 76, 85, 86, 107]. Infants were also considered by parents to have a reciprocal enjoyment of sleeping close to them [82, 101, 103]. While many parents expressed a belief that sleeping close to each other strengthened the parent-infant bond [65, 75, 81, 85, 96, 98] and could compensate for time spent apart during the day [56, 61], others did not believe that proximity during sleep impacted on the parent-infant relationship: "*. . . , I think it is acceptable to have a baby sleep in a separate room alone. Mother's love never fades away . . .*" [92]. For many parents and infants, a need for proximity could span across twenty-four hours, creating an interdependence between infant sleep and parent use of space and time during the day [80, 86]. While infants were frequently dependent on their parents to support their sleep with their proximity [56, 76, 80], parents were reciprocally dependent on their infant's sleep to allow them to perform tasks such as sleeping themselves, resting, eating, working, interacting with others, and caring for their other children [59, 67, 81, 82, 89, 92]. Daytime infant sleep locations were often chosen by parents to maximize closeness which could lead to the use of a range of general furniture and portable infant equipment in their efforts to balance their own and their infant's need for proximity with their need to use the time to complete other tasks [44, 76, 80, 82, 86, 89, 100, 101]. Some parents, however, described being unable to do anything even when their infant was asleep because they would only sleep if their parent lay down beside or held them and would wake once the parent moved or put them down [56, 76, 80]: "*When I put him down, he woke up… I couldn't do anything in the meantime.*" [80]. Irrespective of whether parents were asleep or awake, their use of time and space was shaped by their infant's sleep and aspects of their infant's sleep was often reciprocally shaped by where and how their parents wished to use their time.

***Negotiating control and dependence within the parent–infant relationship.*** In addition to sharing space and time, meeting both their infant's sleep needs and their own needs frequently involved negotiations of dependence and control between parents and their infants [68, 72, 73, 81]. While some parents described how they did not wish to, or believed they could not, control their baby's sleep or wake times [59, 67, 105]: "*She calls the shots and we work around it basically*" [59]; others held an expectation that they should be able to control their infant's sleep with the aim of making them fall asleep quicker, according to the parent's preferred schedule, or with less support [59, 68, 71, 72, 74, 89, 105]:"*. . . he basically just has to join our schedule—too bad for him!*" [59]. Parents' efforts at controlling their infant's sleep had varying outcomes for infants and parents, with some describing success [71, 72], distress [71, 86], or both: "*It was a bit harrowing having to persevere with not going to him immediately, but in the long run it was fine . . .*" [72]. The parents who perceived their infants to be in control of their own sleep had a range of experiences, with some describing frustration at their inability to control their infant's sleep [68, 72, 79, 108]; some accepting or expressing resignation that "*The baby has his own pace*" [59, 67, 80]; and others believing that it was better, easier, or normal to allow infants to dictate their own sleep schedules [57, 67, 105, 106].

Parents' beliefs and values around infant independence varied similarly. Many parents valued independence in their infant when settling to sleep [66, 71, 82, 86, 96, 109], even in cases where they found leaving their infant to fall asleep alone emotionally challenging:

> Then I'm tucking him in nicely and I'm consciously leaving the room, since I want him to fall asleep by himself… So that you're not tempted to stay with him and watch him fall asleep. While this is very cute, but … no, I really try to walk away, close the door and make myself doing that [109].

Other parents expressed acceptance that their infant depended on their proximity or active involvement to settle to sleep [86, 96, 101, 105]. While some believed that allowing dependence for infant sleep could lead to extended dependency in later childhood [41, 66, 71, 81, 86, 96, 107, 110]: "*She doesn't go to sleep by herself and that means she's never going to be an independent person*" [81], others cited concerns that separate sleep might lead to their infant becoming insecure or prematurely independent as an older child [61, 98].

Parents' perspectives on dependence in, and control of, infant sleep had the potential to impact on the parent–infant relationship. Some parents related the effort involved in supporting their infant's sleep to whether their infant was "*good*" [87, 89] or "*difficult*" [79] and, in some cases, the parents' struggles with supporting their infant's sleep placed the parent-infant relationship at risk [67, 72]: "*. . . with the child not sleeping I was at the point where I probably could have abused him*" [72]. For some parents the spatial and temporal interdependence of parent–infant sleep was experienced as enjoyable and as reinforcing the parent–infant bond, whereas for others it could be experienced as a distressing challenge to their sense of control and independence and lead to negative feelings towards their infant.

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

### *Theme 4: The impact of socio-cultural context on parent–infant sleep*

***The impact of the family and social circle.*** Prior experience of infant sleep within the family or social circle was described by many parents as positive because it equipped parents with realistic expectations of infant sleep and confidence in their own judgement [40, 42, 44, 74, 83, 102, 106]. In some cases, where there was a previous tragedy in the wider family, parents' expressed a resolve to adhere to safe infant sleep guidelines [62, 82]. For some parents, extended family support was an important aspect in facilitating them to meet both their own and their infant's sleep needs [67, 74, 82, 89, 101]. However, there were also some parents who did not seek this support as they found that their families or friends were unsupportive [64], judgmental [71, 76, 110], or not sufficiently considerate of their sleeping infant's safety [78, 82]. Many parents described how their own parents' or siblings' parenting views or family traditions influenced their own infant sleep practices [56, 82, 86, 97, 101, 109], while others' described diverging or rejecting the advice and practices of their extended family if they regarded them as unsafe, irrelevant, or contrary to their own judgement, beliefs or values [64, 82, 86, 93, 101, 105]. While the family and social context had the potential to influence the practice and experience of parent–infant sleep, the extent of its influence was ultimately dependent on parents' decisions based on their personal interpretations, beliefs, and values.

***Socio-cultural influences on parent–infant sleep.*** While many of the included studies identified culture or ethnicity as a primary influencing factor on parent–infant sleep practices [40, 42, 60, 66, 80, 83, 86, 91–94, 96–100, 107, 108]; many others highlighted how parents' values and decisions also frequently diverged from the predominant practice of their cultural or ethnic groups [63, 82, 86, 92, 104, 110]. Even in culturally homogenous groups of parents, it was stressed that "*one size does not fit all*" [86] in terms of parents' approach to infant sleep locations or infant settling strategies. Competing factors such as safety concerns [62, 82, 107], pragmatic considerations [82], or the parent's personal beliefs and values around infant sleep [86, 92, 101] were identified as factors that could influence a parent's adherence to dominant cultural or ethnic sleep practices. While parents could exercise a degree of choice around their adherence to the common practices of their ethnic or cultural group; socio-economic factors such as limited bedroom space [41, 56, 58, 62, 69, 76, 91], poor housing standards [41, 71] or living in unsafe communities [41] often limited parents' agency in their parent-infant sleep decisions. As one study highlighted, "*diversity and complexity is to be expected within a culture*" [104] in relation to parent–infant sleep practices. However, socio-economic status was described as a limiting factor that could restrict parents' ability to make choices on how to best meet their own and their infant's sleep-related wellbeing and safety needs.

***Line of argument synthesis of the findings.*** In meta-ethnography, a line of argument synthesis is an expression of the synthesis findings that "*puts the similarities and differences between studies into interpretive order*" [32]. In the case of this synthesis, the line of argument is expressed as both a written summary of the findings and a diagrammatic representation of parent-infant sleep. Figure 3 encompasses the four themes generated from this synthesis through representing the interaction between the parent and infant sleep needs of mutual wellbeing and infant protection as two overlapping circles in the centre of the diagram. The third theme of connection: sleep and the parent–infant relationship is represented by the inner rectangle that contains the two circles and serves to demonstrate that the negotiation of mutual wellbeing and infant protection is occurring within the context of the parent–infant relationship. These three themes are then embedded in an outer rectangle representing the influences of the wider familial and sociocultural context. The overlapping circles are represented as being in dynamic motion to reflect parents' described experiences of parent–infant sleep as non-linear and involving periods of sleep synchrony and asynchrony. Greater portions of circle overlap represent the experience of increasing parent–infant sleep synchrony, while a smaller portion of circle overlap represents an experience of increased parent–infant sleep asynchrony. The parent sleep-adaptation and infant sleep-consolidation processes are shown as influencing the degree of parent–infant sleep synchrony with the impact of disruption to either or both processes leading to increased asynchrony.

## Discussion

This synthesis advances the understanding of parent-infant sleep as a highly interactive, multi-dimensional experience and confirms its importance to parents. These findings demonstrate that, in the absence of an agreed definition, the construct of co-occupation offers an applicable theoretical framework to describe parent-infant sleep as a reciprocal parent–infant experience of engaging in interactive sleep preparation and sleep participation activities with the desired outcome of meeting shared parent–infant sleep needs. Further studies are required to test the validity and applicability of this proposed definition, which may also contribute to the recognized need for consensus-building within the field of parent–infant sleep [111].

The findings of this synthesis also highlight the limitations of researching parent and infant sleep in isolation by confirming interactivity as a defining aspect of parent–infant sleep irrespective of the degree to which it is experienced as positive or challenging. This understanding offers greater insight into the phenomenon of parent–infant sleep and encourages consideration of both parent and infant sleep needs in evaluation, treatment, and research of postnatal sleep problems. Although well-established in the field of occupational science and therapy [30], the applicability of the construct of co-occupation to describe parent–infant sleep across multidisciplinary settings requires further research.

Parents identified meeting both their infant's and their own sleep needs as the desired outcome of parent-infant sleep. Parent-infant sleep needs were described as twofold: maintaining mutual sleep-related wellbeing and protection of the sleeping infant. Specifying the desired outcome of parent-infant sleep has specific utility to researchers and to health and social care professionals seeking to better understand or support parent–infant sleep [112]. While mutual sleep-related wellbeing has been previously cited as a desired outcome of parent–infant sleep [23, 113], parents' and infants' mutual need to be assured of the sleeping infant's safety is afforded less emphasis [111]. Echoing the findings of this synthesis, recent research has identified the need for interventions that support both parent and infant sleep while maintaining infant sleep safety [111, 114]. A specific focus is required on the early postnatal months when the risks faced by the sleeping infant are greatest and the asynchrony between infant and parent sleep patterns is often at its peak [115, 116]. Increasingly, guidance

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

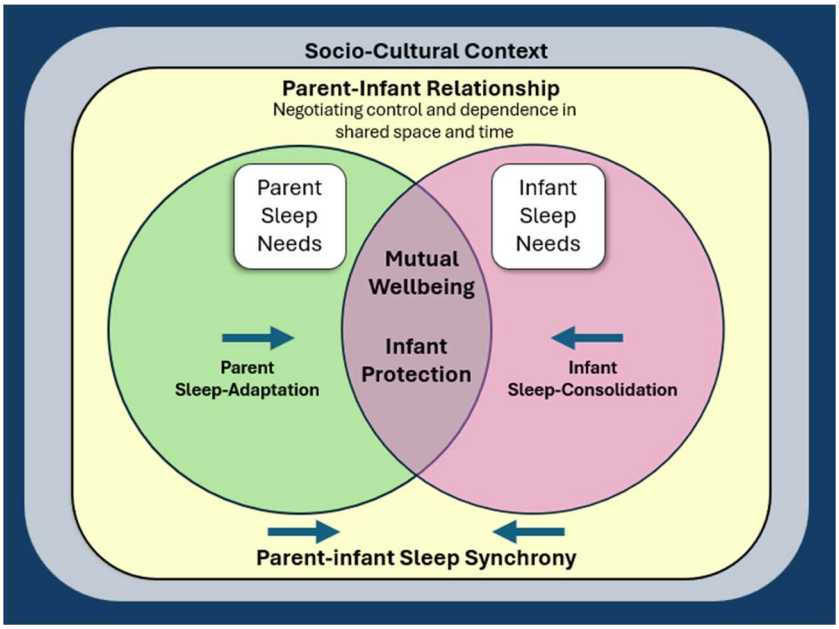


**Figure 3.** Diagrammatic synthesis.

on safer bedsharing is provided to new parents [111, 117–119]. This may help them to meet both mutual sleep-related well-being and infant protection needs. However, little advice is provided to parents who do not wish to bedshare but struggle to settle their infant to sleep in a separate sleep space. Integrating guidance on responsive infant settling strategies, such as the Newborn Behavioral Observations "*soothability*" sequence [120] or the "5S *Soothing Technique*" [121] for example, with safe sleep guidance has the potential to enhance parents' adherence by allowing them to better meet both mutual sleep-related wellbeing and infant sleep safety needs.

Parent-infant sleep synchrony is proposed as a construct to articulate the degree to which parents perceive that both their own and their infant's sleep-related wellbeing and safety needs are being met. The phenomenon of parent–infant sleep synchrony has been established previously; however, existing research focuses primarily on infant regulation and sleep-consolidation in response to maternal physiology and activity patterns [16, 19, 28, 122]. While the potential for parent sleep-adaptation to occur across physiological [123]; behavioral [124]; and psychological [125] domains is documented, its multi-dimensional nature and bidirectional relationship with infant sleep-consolidation, and its role in supporting parent-infant sleep-related wellbeing and infant protection needs, have not been previously represented in an integrated framework. This synthesis describes infant sleep-consolidation and parent sleep-adaptation as interdependent processes that support greater parent–infant sleep synchrony over time. Further research is required to test this conceptualization of parent-infant sleep synchrony as a potential measure of the extent to which parent-infant sleep needs are being met and to identify the range and interplay of individual and contextual influencing factors. Longitudinal studies exploring parent-infant sleep patterns of asynchrony and synchrony over time could provide further insights into normative parent-infant sleep progressions, expected intermittent disruptions, and key factors contributing to prolonged periods of parent–infant sleep asynchrony. The outcomes of such studies have the potential to inform sleep interventions and improve outcomes for both infants and new parents.

Co-occupational theory recognizes both the parent and the infant as active participants in shared sleep activities situated in their relational, spatial, and temporal context [27]. Application of the construct in this synthesis has highlighted the bidirectional influences between sleep and the parent-infant relationship. Parents' beliefs and values in relation to independent infant sleep and their expectations of being able to control their infant's sleep were shown to both reflect and influence the parent–infant relationship as experienced in shared space and time. The potential for parents' expectations, values, and beliefs to influence parent–infant sleep is extensively addressed in the body of research, where a relationship between parental cognitions, bedtime interactions, and infant sleep problems has been described [12, 126]. However, underlying much of this research is an assumption that infants respond relatively uniformly to parents' proximity and degree of involvement at sleep times, which does not reflect the experiences of many parents in this synthesis. Parents in this synthesis described how their infant's sleep behaviors and preferences influenced their responses and practices, yet researchers have acknowledged that the relevance of individual infant factors is under-researched in the context of infant sleep [12, 126]. Future research recognizing the individuality of parents and infants and the uniqueness of each relationship has the potential to inform a more complete understanding of the interactions between sleep and the parent–infant relationship.

Current dominant infant sleep interventions often fail to acknowledge parent and infant individuality by prescribing predetermined strategies for all parent–infant dyads [9]. There is also evidence that parents' adherence to restrictive safe infant sleep guidelines is suboptimal [114]. Alternative parent–infant sleep interventions should recognize the individuality of each parent–infant dyad and honor parents' personal beliefs and values, while offering complete and objective information about the risks and benefits related to both mutual sleep-related wellbeing and infant sleep safety. This approach would align parent and infant sleep support with international best practice principles such as the integration of each family's unique background and preferences, the provision of comprehensive and impartial information, and the delivery of services tailored to individual needs [127, 128]. One

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

parent–infant sleep intervention, *Sleep, Baby & You* (SBY), shows promise in terms of addressing this gap. The SBY approach is described as offering a flexible, non-prescriptive approach that aims to meet both parents' and infants' sleep-related wellbeing needs; to recalibrate parents' expectations of infant sleep and encourage experimentation in meeting individual infants' sleep needs [113]. However, the extent to which infant sleep safety is addressed adequately in the SBY intervention has been queried [111].

The influence of family, society, and culture on parent and infant sleep practices, as described by parents in this synthesis, is widely recognized [22]. Application of the multi-dimensional theoretical lens of co-occupation expands this understanding by emphasizing commonalities, while still revealing diversity within groups of parents that share a common culture or ethnic background. This reflects research findings that identify positive outcomes for their children as the common goal underlying most parenting practices irrespective of race, ethnicity, family structure, education, income, or gender [129]. While traditional practices influenced many parents in this synthesis, their personal beliefs and values in relation to how best to meet their own and their infant's sleep-related wellbeing and infant safety needs often took precedence over adherence to cultural or dominant societal norms. In contrast to cultural background or ethnicity, parents in this synthesis were frequently unable to exercise choice in relation to the impact of adverse socio-economic or housing circumstances on their parent-infant sleep practices. This finding is in line with recent commentaries that suggest that parents' socio-economic status is a greater determinant of risk of death or injury to the sleeping infant than culture or ethnicity [130]. Public health initiatives aimed at reducing risks to sleeping infants at population level therefore need to address the impact of socio-economic status on parents' ability to protect their sleeping infant from harm [130].

This synthesis has provided an insight into the multi-dimensional interactions between parent–infant sleep needs; the supportive role of the interdependent processes of infant sleep-consolidation and parent sleep-adaptation; the bidirectional influence of the parent-infant relationship; and the relevance of socio-cultural context. The findings have potentially wide-ranging applications. At policy level, there is a need to extend safe sleep advice beyond risk-elimination towards a risk reduction approach that recognizes the challenge involved in achieving separate infant sleep, that considers both infant and parent wellbeing needs and recognizes diverse family practices [111]. The potential impact of sleep on parents' emotional wellbeing and on the parent–infant relationship should also be considered as a core element of public health campaigns and services aimed at supporting perinatal, maternal, infant and paternal mental health. The parents in this synthesis described how having more realistic expectations of their infant's sleep influenced the degree to which they considered their infant's sleep to be problematic. This suggests a need for antenatal and perinatal services to provide education on the variability of infant sleep, including information on sleep-consolidation and normative intermittent disruptions, in addition to anticipatory guidance to support parent sleep-adaptation and demonstration of a range of infant settling strategies. Encouraging parents to identify available emotional and practical support ahead of their infant's arrival, may also support parent–infant wellbeing in the early postnatal months [113]. In addition, pediatric and primary care clinicians should routinely screen for prolonged disruptions to both the parent sleep-adaptation and infant sleep-consolidation processes and remain alert to the bidirectional influences of parental mental health and enduring infant physical health issues on parent-infant sleep. Clinicians and healthcare workers should also be aware of the potential impact of enduring infant health issues, such as colic, reflux, and respiratory or digestive discomfort, on parent-infant sleep-related wellbeing and, potentially, on infant sleep safety.

Given the potentially wide-ranging application of the synthesis findings, opportunities exist for further research that examines the effectiveness of these recommendations on parent–infant sleep outcomes.

## Conclusion

This synthesis describes the relationships between four themes to generate a novel understanding of parent-infant sleep as an interactive, dynamic, and reciprocal phenomenon where parents' sleep experiences are shaped by their infant's sleep and vice versa. Shared parent–infant sleep needs were identified as twofold: mutual sleep-related wellbeing and protection of the sleeping infant. The concept of parent–infant sleep synchrony is proposed to describe the degree to which a parent perceives these sleep needs to be adequately met. Infant sleep-consolidation and parent sleep-adaptation are presented as interdependent processes with the potential to support parent-infant sleep synchrony. The risk of prolonged parent–infant sleep asynchrony is highlighted where there is persistent disruption to one, or both, of these processes. Bidirectional influences between sleep and the parent-infant relationship are framed within the context of negotiating control and dependence in shared time and space. The parent's personal interpretation of their socio-cultural context via their personal beliefs and values determined the impact of ethnic or cultural tradition on their parent–infant sleep practices, while socio-economic factors could limit parents' ability to meet shared parent–infant sleep needs. The findings of this synthesis offer a comprehensive, multi-dimensional understanding of parent–infant sleep with the potential to inform effective parent–infant sleep interventions that lead to better outcomes for parents and infants.

## Limitations

The inclusion of only English-language papers published in peer-review journals represents a limitation of this systematic review as it potentially introduces a language and publication bias and the potential omission of relevant data. One of the strengths of this study is the range of variability of the included primary studies, achieved through exhaustive sampling which yielded data from a wide range of geographic locations, cultures, and contexts. A limitation of the data nonetheless was that mothers represented at least 95%, while fathers provided less than 5% of the participants.

In addition, it is possible that the research topics of the included studies influenced the themes and subthemes generated by this synthesis. For example, 51% of the studies included had research questions related to either safe infant sleep or infant sleep location. Inclusion of minority views, in addition to widely held perspectives, ensured that the synthesis represented the breadth of the available data relevant to the objective of this synthesis.

Finally, qualitative studies, by their nature, lack generalizability, as they focus on in-depth context-specific data; therefore, quantitative research is needed in the future to assess the broader applicability of the findings of this synthesis. As secondary research,

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

qualitative evidence synthesis involves multiple layers of interpretation [49]. A rigorous and systematic approach to data extraction and analysis, and repeated reading and consideration the context of primary studies to maintain the integrity of their findings, was undertaken at all stages of the research process to address this limitation.

## Supplementary material

Supplementary material is available at *SLEEP* online.

## Acknowledgments

We acknowledge the input of expert subject librarian David Mockler in the development and execution of the search strategy for this systematic review.

## Disclosure statement

*Financial disclosure:* The author(s) received no financial support for the research, authorship, and/or publication of this article. The authors have no other financial disclosure.

*Nonfinancial disclosure:* The authors have no non-financial competing interests to disclose.

## Data availability

Template forms and extracted, analyzed and synthesized data that support the findings of this study are available from the corresponding author (PF) upon reasonable request.

## References

1. Brockway ML, Keys E, Stuart K, *et al.* Top 10 (plus 1) research priorities for expectant families and those with children to age 24 months in Alberta, Canada: results from the family research agenda initiative setting (FRAISE) priority setting partnership project. *BMJ Open*. 2021;**11**(12):e047919. https://doi.org/10.1136/bmjopen-2020-047919
2. Hauck Y, Kelly RG, Fenwick J. Research priorities for parenting and child health: a Delphi study. *J Adv Nurs*. 2007;**59**(2):129–139. https://doi.org/10.1111/j.1365-2648.2007.04278.x
3. Honaker SM, Meltzer LJ. Sleep in pediatric primary care: a review of the literature. *Sleep Med Rev*. 2016;**25**:31–39. https://doi.org/10.1016/j.smrv.2015.01.004
4. Boerner KE, Coulombe JA, Corkum P. Barriers and facilitators of evidence-based practice in pediatric behavioral sleep care: qualitative analysis of the perspectives of health professionals. *Behav Sleep Med*. 2015;**13**(1):36–51. https://doi.org/10.1080/15402002.2013.838766
5. Barry ES. What is "normal" infant sleep? Why we still do not know. *Psychol Rep*. 2021;**124**(2):651–692. https://doi.org/10.1177/0033294120909447
6. Blunden S, Galland B. The complexities of defining optimal sleep: empirical and theoretical considerations with a special emphasis on children. *Sleep Med Rev*. 2014;**18**(5):371–378. https://doi.org/10.1016/j.smrv.2014.01.002
7. McKenna JJ, Thoman EB, Anders TF, Sadeh A, Schechtman VL, Glotzbach SF. Infant-parent co-sleeping in an evolutionary perspective: implications for understanding infant sleep development and the sudden infant death syndrome. *Sleep*. 1993;**16**(3):263–282. https://doi.org/10.1093/sleep/16.3.263
8. Hiscock H, Fisher J. Sleeping like a baby? Infant sleep: impact on caregivers and current controversies. *J Paediatr Child Health*. 2015;**51**(4):361–364. https://doi.org/10.1111/jpc.12752
9. Synnott E, Preyde M. Understanding infant sleep: a review of two distinctive settling strategies. Canadian. *Children*. 2009;**34**(1):37-44.
10. Blunden S, Dawson D. Behavioural sleep interventions in infants: plan B–combining models of responsiveness to increase parental choice. *J Paediatr Child Health*. 2020;**56**(5):675–679. https://doi.org/10.1111/jpc.14818
11. Douglas PS, Hill PS. Behavioral sleep interventions in the first six months of life do not improve outcomes for mothers or infants: a systematic review. *J Dev Behav Pediatr*. 2013;**34**(7):497–507. https://doi.org/10.1097/DBP.0b013e31829cafa6
12. Sadeh A, Tikotzky L, Scher A. Parenting and infant sleep. *Sleep Med Rev*. 2010;**14**(2):89–96. https://doi.org/10.1016/j.smrv.2009.05.003
13. Blunden S, Etherton H, Hauck Y. Resistance to cry intensive sleep intervention in young children: are we ignoring children's cries or parental concerns? *Children*. 2016;**3**(2):8. https://doi.org/10.3390/children3020008
14. Quin N, Tikotzky L, Stafford L, Fisher J, Bei B. Preventing postpartum insomnia by targeting maternal versus infant sleep: a protocol for a randomized controlled trial (the study for mother-infant sleep "SMILE"). *Sleep Adv*. 2022;**3**(1):zpab020. https://doi.org/10.1093/sleepadvances/zpab020
15. Barry ES. Sleep consolidation, sleep problems, and co-sleeping: rethinking normal infant sleep as species-typical. *J Genet Psychol*. 2021;**182**(4):183–204. https://doi.org/10.1080/00221325.2021.1905599
16. Thomas KA, Burr RL, Spieker S, Lee J, Chen J. Mother–infant circadian rhythm: development of individual patterns and dyadic synchrony. *Early Hum Dev*. 2014;**90**(12):885–890. https://doi.org/10.1016/j.earlhumdev.2014.09.005
17. Tomori C, Boyer K. Domestic geographies of parental and infant (co-) becomings: home-space, nighttime breastfeeding, and parent-infant sleep. *Ann Am Assoc Geogr*. 2019;**109**(4):1172–1187. https://doi.org/10.1080/24694452.2018.1558628
18. Teti DM, Philbrook L, Shimizu M, *et al.* The social ecology of infant sleep. In: Calkins SD, ed. *Handbook of Infant Biopsychosocial Development*. New York, USA: The Guilford Press; 2015:359–391 ISBN 9781462522125.
19. Whittingham K, Douglas P. Optimizing parent–infant sleep from birth to 6 months: a new paradigm. *Infant Ment Health J*. 2014;**35**(6):614–623. https://doi.org/10.1002/imhj.21455
20. Teti DM, Shimizu M, Crosby B, Kim B-R. Sleep arrangements, parent-infant sleep during the first year, and family functioning. *Dev Psychol*. 2016;**52**(8):1169–1181. https://doi.org/10.1037/dev0000148
21. Rudzik AE, Ball HL. Biologically normal sleep in the mother-infant dyad. *Am J Hum Biol*. 2021;**33**(5):e23589. https://doi.org/10.1002/ajhb.23589
22. Teti DM, Ball HL, Tikotzky L. "Sleep and the family system": a preface. *Sleep Health*. 2022;**8**(1):28–30. https://doi.org/10.1016/j.sleh.2021.12.004
23. D'Souza L, Cassels T. Contextual considerations in infant sleep: offering alternative interventions to families. *Sleep Health*. 2023;**9**(5):618–625. https://doi.org/10.1016/j.sleh.2022.05.006
24. Sorondo BM, Reeb-Sutherland BC. Associations between infant temperament, maternal stress, and infants' sleep across the first year of life. *Infant Behav Dev*. 2015;**39**:131–135. https://doi.org/10.1016/j.infbeh.2015.02.010

Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

25. Olson JA. Mothering co-occupations in caring for infants and young children. In: Esdaile S, Olson J, eds. *Mothering Occupations: Challenge, Agency, and Participation*. Philadelphia USA: F. A. Davis; 2004:28–51 ISBN: 0803611056.
26. Crawford EJ, Crook EC, Waldby L, Douglas P. New perspectives on responsive infant care: a qualitative study of the ways in which neuroprotective developmental care (NDC) shapes mother-infant co-occupations. *J Occup Sci*. 2023;**31**(2):337–353. https://doi.org/10.1080/14427591.2023.2236117
27. Pierce D. Co-occupation: the challenges of defining concepts original to occupational science. *J Occup Sci*. 2009;**16**(3):203–207. https://doi.org/10.1080/14427591.2009.9686663
28. McKenna JJ, Mosko SS. Sleep and arousal, synchrony and independence, among mothers and infants sleeping apart and together (same bed): an experiment in evolutionary medicine. *Acta Paediatr*. 1994;**83**(s397):94–102. https://doi.org/10.1111/j.1651-2227.1994.tb13271.x
29. Barry ES. Using complexity science to understand the role of co-sleeping (bedsharing) in mother-infant co-regulatory processes. *Infant Behav Dev*. 2022;**67**:101723. https://doi.org/10.1016/j.infbeh.2022.101723
30. Zemke R, Clark F. Co-occupations of mothers and children. In: Zemke R, Clark F, eds. *Occupational Science: The Evolving Discipline*. Philadelphia USA: F. A. Davis; 1996:213–215 ISBN: 0803601387.
31. American Occupational Therapy Association (AOTA). Occupational therapy practice framework: domain and process4th ed. *Am J Occup Ther*. 2020;**74**(Supplement_2):7412410010p1 American Occupational Therapy Association (AOTA) Press ISBN: 978-1-56900-488-3.
32. Noblit GW, Hare RD. Meta-ethnography : Synthesizing qualitative studies. Newbury Park USA: Sage Publications; 1988: ISBN: 9780803930230.
33. France EF, Cunningham M, Ring N, *et al*. Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC Med Res Methodol*. 2019;**19**(1):25–13. https://doi.org/10.1186/s12874-018-0600-0
34. Page MJ, McKenzie JE, Bossuyt PM, *et al*. The PRISMA 2020 Statement: an updated guideline for reporting systematic reviews. *BMJ*. 2020;**372**:372. https://doi.org/10.1136/bmj.n71
35. Flynn P, Gibbs D, Spirtos M. *Systematic review protocol: My sleep is your Sleep: parent-infant sleep as co-occupation – a meta-ethnography of parent perspectives and experiences. Prospero: International Prospective Register for Systematic Reviews*. University of York UK: National Institute for Health and Care Research; 2022:CRD42022380988 https://www.crd.york.ac.uk/PROSPERO/view/CRD42022380988.
36. Cooke A, Smith D, Booth A. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qual Health Res*. 2012;**22**(10):1435–1443. https://doi.org/10.1177/1049732312452938
37. Cahill M, Robinson K, Pettigrew J, Galvin R, Stanley M. Qualitative synthesis: a guide to conducting a meta-ethnography. *Br J Occup Ther*. 2018;**81**(3):129–137. https://doi.org/10.1177/0308022617745016
38. Thorne S. Metasynthetic madness: what kind of monster have we created? *Qual Health Res*. 2017;**27**(1):3–12. https://doi.org/10.1177/1049732316679370
39. Veritas Health Innovation. *Covidence Systematic Review Software*. Melbourne, Australia: Veritas Health Innovation; 2024.
40. Ajao TI, Oden RP, Joyner BL, Moon RY. Decisions of Black parents about infant bedding and sleep surfaces: a qualitative study. *Pediatrics*. 2011;**128**(3):494–502. https://doi.org/10.1542/peds.2011-0072
41. Joyner BL, Oden RP, Ajao TI, Moon RY. Where should my baby sleep: a qualitative study of African American infant sleep location decisions. *J Natl Med Assoc*. 2010;**102**(10):881–889. https://doi.org/10.1016/S0027-9684(15)30706-9
42. Oden RP, Joyner BL, Ajao TI, Moon RY. Factors influencing African American mothers' decisions about sleep position: a qualitative study. *J Natl Med Assoc*. 2010;**102**(10):870–880. https://doi.org/10.1016/S0027-9684(15)30705-7
43. Joyner BL, Oden RP, Moon RY. Reasons for pacifier use and non-use in African-Americans: does knowledge of reduced SIDS risk change parents' minds? *J Immigr Minor Health*. 2016;**18**(2):402–410. https://doi.org/10.1007/s10903-015-0206-0
44. Moon RY, Oden RP, Joyner BL, Ajao TI. Qualitative analysis of beliefs and perceptions about sudden infant death syndrome in African-American mothers: implications for safe sleep recommendations. *J Pediatr*. 2010;**157**(1):92–97.e2. https://doi.org/10.1016/j.jpeds.2010.01.027
45. Britten N, Campbell R, Pope C, Donovan J, Morgan M, Pill R. Using meta ethnography to synthesise qualitative research: a worked example. *J Health Service Res Policy*. 2002;**7**(4):209–215. https://doi.org/10.1258/135581902320432732
46. Belur J, Tompson L, Thornton A, Simon M. Interrater reliability in systematic review methodology: exploring variation in coder decision-making. *Sociologl Methods Res*. 2021;**50**(2):837–865. https://doi.org/10.1177/0049124118799372
47. Critical appraisal skills programme (CASP). *CASP Qualitative Checklist [online]*. 2018; https://casp-uk.net/casp-tools-checklists/qualitative-studies-checklist/ Accessed 13/12/2022
48. Daly J, Willis K, Small R, *et al*. A hierarchy of evidence for assessing qualitative health research. *J Clin Epidemiol*. 2007;**60**(1):43–49. https://doi.org/10.1016/j.jclinepi.2006.03.014
49. Toye F, Seers K, Allcock N, Briggs M, Carr E, Barker K. Meta-ethnography 25 years on: challenges and insights for synthesising a large number of qualitative studies. *BMC Med Res Methodol*. 2014;**14**(1):1–14. https://doi.org/10.1186/1471-2288-14-80
50. Noyes J, Booth A, Cargo M, *et al*. Chapter 21: Qualitative evidence. In: Higgins J, Thomas J, eds. *Cochrane Handbook for Systematic Reviews of Interventions*. London UK: The Cochrane Collaboration; 2022: Available from https://training.cochrane.org/handbook.
51. Long HA, French DP, Brooks JM. Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. *Res Methods Med Health Sci*. 2020;**1**(1):31–42. https://doi.org/10.1177/2632084320947559
52. Blair E. A reflexive exploration of two qualitative data coding techniques. *J Methods Measurement Social Sci*. 2015;**6**(1):14–29. https://doi.org/10.2458/azu_jmmss_v6i1_blair
53. France EF, Uny I, Ring N, *et al*. A methodological systematic review of meta-ethnography conduct to articulate the complex analytical phases. *BMC Med Res Methodol*. 2019;**19**(1):35. https://doi.org/10.1186/s12874-019-0670-7
54. Gray DE. Theoretical perspectives and research methodologies. In: Gray DE, ed. *Doing Research in the Real World*. 3rd ed. New York, USA: SAGE Publications Ltd; 2013:15–38 ISBN 9781446295311.
55. Clarke V, Braun V. Successfully getting started in qualitative research. In: Clarke V, Braun V, eds. *Successful Qualitative Research: A Practical Guide for Beginners*. California USA: SAGE Publications Ltd; 2013:1–74 ISBN: 9781847875822.


Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

56. Ball HL. Reasons to bed-share: why parents sleep with their infants. *J Reproduct Infant Psychol*. 2002;**20**(4):207–221. https://doi.org/10.1080/0264683021000033147
57. Capper B, Damato EG, Gutin-Barsman S, Dowling D. Mothers' decision making concerning safe sleep for preterm infants: what are the influencing factors? *Adv Neonatal Care*. 2022;**22**(5):444–455. https://doi.org/10.1097/ANC.0000000000000952
58. Cole R, Young J, Kearney L, Thompson JM. Challenges parents encounter when implementing infant safe sleep advice. *Acta Paediatr*. 2021;**110**(11):3083–3093. https://doi.org/10.1111/apa.16040
59. van Schaik SDM, Mavridis C, Harkness S, De Looze M, Blom MJ, Super CM. Getting the baby on a schedule: Dutch and American mothers' ethnotheories and the establishment of diurnal rhythms in early infancy. *New Dir Child Adolesc Dev*. 2020;**2020**(170):13–41. https://doi.org/10.1002/cad.20336
60. Welles-Nystrom B. Co-sleeping as a window into Swedish culture: considerations of gender and health care. *Scand J Caring Sci*. 2005;**19**(4):354–360. https://doi.org/10.1111/j.1471-6712.2005.00358.x
61. McKenna JJ, Volpe LE. Sleeping with baby: an internet-based sampling of parental experiences, choices, perceptions, and interpretations in a western industrialized context. *Infant Child Dev*. 2007;**16**(4):359–385. https://doi.org/10.1002/icd.525
62. Kihlström L, Agu N, Dorjulus B, *et al.* Using photovoice to understand perspectives on safe infant sleep practices among caregivers enrolled in perinatal home visiting. *J Soc Serv Res*. 2020;**47**(3):357–368. https://doi.org/10.1080/01488376.2020.1816594
63. Bailey C. Breastfeeding mothers' experiences of bedsharing: a qualitative study. *Breastfeed Rev*. 2016;**24**(2):33–40.
64. Rolls C, Hanna B. What about the mother and family when an infant doesn't sleep? *Aust J Prim Health*. 2001;**7**(3):49–53. https://doi.org/10.1071/PY01046
65. Jacobson A, Himes B. Understanding the obstacles and influences in adopting infant safe sleep practices. *Neonatol Today*. 2021;**16**(10):63–67. https://doi.org/10.51362/neonatology.today/20211016106367
66. Herman S, Adkins M, Moon R. Knowledge and beliefs of African-American and American Indian parents and supporters about infant safe sleep. *J Community Health*. 2015;**40**(1):12–19. https://doi.org/10.1007/s10900-014-9886-y
67. Doering JJ, Sims DA, Miller DD. How postpartum women with depressive symptoms manage sleep disruption and fatigue. *Res Nurs Health*. 2017;**40**(2):132–142. https://doi.org/10.1002/nur.21782
68. Ou CHK, Hall WA, Rodney P, Stremler R. Seeing red: a grounded theory study of women's anger after childbirth. *Qual Health Res*. 2022;**32**(12):1780–1794. https://doi.org/10.1177/10497323221120173
69. Hwang SS, Parker MG, Colvin BN, Forbes ES, Borwn K, Colson ER. Understanding the barriers and facilitators to safe infant sleep for mothers of preterm infants. *J Perinatol*. 2021;**41**(8):1992–1999. https://doi.org/10.1038/s41372-020-00896-5
70. Muller J, Guse T, Ntozini A. Parental experiences of subjective well-being in the context of infant sleep problems. *J Reprod Infant Psychol*. 2022;**42**(3):540–549. https://doi.org/10.1080/02646838.2022.2115471
71. Tse L, Hall W. A qualitative study of parents' perceptions of a behavioural sleep intervention. *Child Care Health Dev*. 2008;**34**(2):162–172. https://doi.org/10.1111/j.1365-2214.2007.00769.x
72. Noble HJ, Austen J, Parkinson C. Restoring the balance: a choice for change - the stories of parents using controlled comforting. *Neonat Paediatr Child Health Nurs*. 2002;**5**(1):5–9.
73. Kennedy HP, Gardiner A, Gay C, Lee KA. Negotiating sleep: a qualitative study of new mothers. *J Perinat Neonatal Nurs*. 2007;**21**(2):114–122. https://doi.org/10.1097/01.JPN.0000270628.51122.1d
74. Tsai S-Y, Hu W-Y, Lee Y-L, Wu C-Y. Infant sleep problems: a qualitative analysis of first-time mothers' coping experience. *Midwifery*. 2014;**30**(6):750–755. https://doi.org/10.1016/j.midw.2013.08.005
75. Caraballo M, Shimasaki S, Johnston K, Tung G, Albright K, Halbower AC. Knowledge, attitudes, and risk for sudden unexpected infant death in children of adolescent mothers: a qualitative study. *J Pediatr*. 2016;**174**:78–83.e2. https://doi.org/10.1016/j.jpeds.2016.03.031
76. Lau A, Hall W. Safe sleep, day and night: mothers' experiences regarding infant sleep safety. *J Clin Nurs*. 2016;**25**(19-20):2816–2826. https://doi.org/10.1111/jocn.13322
77. Runquist J. Persevering through postpartum fatigue. *J Obstet Gynecol Neonatal Nurs*. 2007;**36**(1):28–37. https://doi.org/10.1111/j.1552-6909.2006.00116.x
78. Zahra S, Monireh A, Easa M, Susan P. Successful breastfeeding mothers' experiences of the difficulties of exclusive breastfeeding. *Acta Medica Mediterranea*. 2015;**31**(7):1479–1487.
79. Marshall EJ, Thompson AP. Shedding light on the difficulties and challenges experienced by mothers of infants. *Austral Psychologist*. 2014;**49**(1):44–53. https://doi.org/10.1111/j.1742-9544.2012.00093.x
80. Chae S-M, Yeo J-Y, Chung N-R. A qualitative study of the sleep ecology of infants under 2 years old and their mothers in South Korea. *Sleep Health*. 2022;**8**(1):101–106. https://doi.org/10.1016/j.sleh.2021.10.013
81. Rowe J. A room of their own: the social landscape of infant sleep. *Nurs Inq*. 2003;**10**(3):184–192. https://doi.org/10.1046/j.1440-1800.2003.00167.x
82. MacFarlane M, Thompson JM, Mitchell EA, *et al.* Pēpē-infant sleep practices and sudden unexpected death in infancy in Aotearoa New Zealand. *Int J Gynecol Obstet*. 2021;**155**(2):305–317. https://doi.org/10.1002/ijgo.13910
83. Stiffler D, Matemachani SM, Crane l. Considerations in safe to sleep® messaging: learning from African-American mothers. *J Spec Pediatr Nurs*. 2020;**25**(1):e12277. https://doi.org/10.1111/jspn.12277
84. Cox SM, Lashley CO, Henson LG, Medina NY, Hans SL. Making meaning of motherhood: self and life transitions among African American adolescent mothers. *Am J Orthopsychiatry*. 2021;**91**(1):120–131. https://doi.org/10.1037/ort0000521
85. Howard MB, Parrish BT, Singletary J, Jarvis L. Infant safe sleep in the District of Columbia: better for both. *Health Promot Pract*. 2022;**25**(2):196–203. https://doi.org/10.1177/15248399221131834
86. Jones HM, Barber CC, Nīkora LW, Middlemiss W. Māori child rearing and infant sleep practices. *New Zealand J Psychol*. 2017;**46**(3):30–37.
87. Fägerskiöld A. A change in life as experienced by first-time fathers. *Scand J Caring Sci*. 2008;**22**(1):64–71. https://doi.org/10.1111/j.1471-6712.2007.00585.x
88. Shorey S, Dennis CL, Bridge S, Chong YS, Holroyd E, He HG. First-time fathers' postnatal experiences and support needs: a descriptive qualitative study. *J Adv Nurs*. 2017;**73**(12):2987–2996. https://doi.org/10.1111/jan.13349


Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

89. Zambrano DN, Mindell JA, Reyes NR, Hart CN, Herring SJ. "It's not all about my baby's sleep": a qualitative study of factors influencing low-income African American mothers' sleep quality. *Behav Sleep Med*. 2016;**14**(5):489–500. https://doi.org/10.1080/15402002.2015.1028063
90. Doering J, Durfor SL. The process of "persevering toward normalcy" after childbirth. *MCN: Am J Matern Child Nurs*. 2011;**36**(4):258–265. https://doi.org/10.1097/NMC.0b013e31821826e7
91. Mathews AA, Joyner BL, Oden RP, Alamo I, Moon RY. Comparison of infant sleep practices in African-American and US Hispanic families: implications for sleep-related infant death. *J Immigr Minority Health*. 2015;**17**(3):834–842. https://doi.org/10.1007/s10903-014-0016-9
92. Shimizu M, Park H, Greenfield PM. Infant sleeping arrangements and cultural values among contemporary Japanese mothers. *Front Psychol*. 2014;**5**:718. https://doi.org/10.3389/fpsyg.2014.00718
93. Gaydos LM, Blake SC, Gazmararian JA, Woodruff W, Thompson WW, Dalmida SG. Revisiting safe sleep recommendations for African-American infants: why current counseling is insufficient. *Matern Child Health J*. 2015;**19**(3):496–503. https://doi.org/10.1007/s10995-014-1530-z
94. Zoucha R, Walters CA, Colbert AM, Carlins E, Smith E. Exploring safe sleep and SIDS risk perception in an African-American community: focused ethnography. *Public Health Nurs*. 2016;**33**(3):206–213. https://doi.org/10.1111/phn.12235
95. Mosley JM, Stokes SD, Ulmer A. Infant sleep position: discerning knowledge from practice. *Am J Health Behav*. 2007;**31**(6):573–582. https://doi.org/10.5993/AJHB.31.6.2
96. Morelli GA, Rogoff B, Oppenheim D, Goldsmith D. Cultural variation in infants' sleeping arrangements: questions of independence. *Dev Psychol*. 1992;**28**(4):604–613. https://doi.org/10.1037/0012-1649.28.4.604
97. Chianese J, Ploof D, Trovato C, Chang JC. Inner-city caregivers' perspectives on bed sharing with their infants. *Acad Pediatr*. 2009;**9**(1):26–32. https://doi.org/10.1016/j.acap.2008.11.005
98. Aslam H, Kemp L, Harris E, Gilbert E. Socio-cultural perceptions of sudden infant death syndrome among migrant Indian mothers. *J Paediatr Child Health*. 2009;**45**(11):670–675. https://doi.org/10.1111/j.1440-1754.2009.01593.x
99. Liamputtong P. Childrearing practices and child health among the Hmong in Australia: implications for health services. *Int J Health Serv*. 2002;**32**(4):817–836. https://doi.org/10.2190/TTLQ-YC48-GTVQ-3DJH
100. Grant J, Sivertsen N, Deverix J, Steeb A. 'It looks like a breadbox': a pilot study investigating implementation of the Pepipod® program with aboriginal families in metropolitan South Australia. *Prim Health Care Res Dev*. 2021;**22**(e29):1–8. https://doi.org/10.1017/S1463423621000293
101. Murray L, Tran T, Thang VV, Cass L, Fisher J. How do caregivers understand and respond to unsettled infant behaviour in Vietnam? A qualitative study. *Child Care Health Dev*. 2018;**44**(1):62–70. https://doi.org/10.1111/cch.12474
102. Pease A, Ingram J, Blair PS, Fleming PJ. Factors influencing maternal decision-making for the infant sleep environment in families at higher risk of SIDS: a qualitative study. *BMJ Paediatrics Open*. 2017;**1**(1):e000133. https://doi.org/10.1136/bmjpo-2017-000133
103. Murray L, McDonald N, Thang VV. Mothers' experiences of settling infants in Central Vietnam "through their eyes": a photo-elicitation study. *Health Care Women Int*. 2019;**40**(5):495–514. https://doi.org/10.1080/07399332.2019.1569014
104. Tipene-Leach D, Abel S, Finau SA, Park J, Lenna M. Maori infant care practices: implications for health messages, infant care services and SIDS prevention in Maori communities. *Pac Health Dialog*. 2000;**7**(1):29–37.
105. Rudzik AE, Ball HL. Exploring maternal perceptions of infant sleep and feeding method among mothers in the United Kingdom: a qualitative focus group study. *Matern Child Health J*. 2016;**20**(1):33–40. https://doi.org/10.1007/s10995-015-1798-7
106. Hsu PW, Wu WW, Tung YC, Thomas KA, Tsai SY. Parental professional help-seeking for infant sleep. *J Clin Nurs*. 2017;**26**(23-24):5143–5150. https://doi.org/10.1111/jocn.14061
107. Crane D, Ball HL. A qualitative study in parental perceptions and understanding of SIDS-reduction guidance in a UK bicultural urban community. *BMC Pediatr*. 2016;**16**(1):23. https://doi.org/10.1186/s12887-016-0560-7
108. Gray MJ, Vazquez CE, Agnihotri O. "Struggle at night – He doesn't let me sleep sometimes": a qualitative analysis of sleeping habits and routines of Hispanic toddlers at risk for obesity. *BMC Pediatr*. 2022;**22**(1):413. https://doi.org/10.1186/s12887-022-03434-8
109. Veltkamp G, Karasaki M, Bröer C. Family health competence: attachment, detachment and health practices in the early years of parenthood. *Soc Sci Med*. 2020;**266**:113351. https://doi.org/10.1016/j.socscimed.2020.113351
110. Tomori C, Palmquist AEL, Dowling S. Contested moral landscapes: negotiating breastfeeding stigma in breastmilk sharing, nighttime breastfeeding, and long-term breastfeeding in the US and the UK. *Soc Sci Med*. 2016;**168**:178–185. https://doi.org/10.1016/j.socscimed.2016.09.014
111. Landsem IP, Cheetham NB. Infant sleep as a topic in healthcare guidance of parents, prenatally and the first 6 months after birth: a scoping review. *BMC Health Serv Res*. 2022;**22**(1):1135. https://doi.org/10.1186/s12913-022-08484-3
112. Golledge J. Distinguishing between occupation, purposeful activity and activity, part 1: review and explanation. *Br J Occup Ther*. 1998;**61**(3):100–105. https://doi.org/10.1177/030802269806100301
113. Ball HL, Taylor CE, Thomas V, Douglas PS, the SBY working group. Development and evaluation of 'sleep, baby & you'—an approach to supporting parental well-being and responsive infant caregiving. *PloS One*. 2020;**15**(8):e0237240. https://doi.org/10.1371/journal.pone.0237240
114. Moon RY, Mindell JA, Honaker S, *et al*. The tension between AAP safe sleep guidelines and infant sleep. *Pediatrics*. 2024;**153**(4):e2023064675. https://doi.org/10.1542/peds.2023-064675
115. Moon RY, Carlin RF, Hand I, AAP Task Force on Sudden Infant Death Syndrome; AAP Committee on Fetus and Newborn. Sleep-related infant deaths: updated 2022 recommendations for reducing infant deaths in the sleep environment. *Pediatrics*. 2022;**150**(1):e2022057990.
116. Richter D, Krämer MD, Tang NK, Montgomery-Downs HE, Lemola S. Long-term effects of pregnancy and childbirth on sleep satisfaction and duration of first-time and experienced mothers and fathers. *Sleep*. 2019;**42**(4):zsz015. https://doi.org/10.1093/sleep/zsz015
117. McKenna JJ. *Safe Infant Sleep*. Washington: Platypus Media; 2020: ISBN-10:1930775768.
118. National Health Service (NHS) UK. *Reduce the Risk of Sudden Infant Death Syndrome (SIDS)*. United Kingdom: NHS; 2024: https://www.nhs.uk/conditions/baby/caring-for-a-newborn/reduce-the-risk-of-sudden-infant-death-syndrome/. Accessed 16/02/25.


Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

119. Wiessinger D, West D, Smith LJ, Pitman T. *The Safe Sleep Seven. Sweet Sleep: Nighttime and Naptime Strategies for the Breastfeeding Family*. Raleigh USA: La Leche League International; 2018: https://llli.org/news/the-safe-sleep-seven/ Accessed 04/28/2025.
120. Nugent JK, Keefer CH, Minear S, Johnson LC, Blanchard Y. *Understanding Newborn Behavior and Early Relationships: The Newborn Behavioral Observations (NBO) System Handbook*. Baltimore USA: Paul H Brookes Publishing; 2007: ISBN 15576 68833.
121. Öztürk Dönmez R, Bayik TA. Effect of soothing techniques on infants' self-regulation behaviors (sleeping, crying, feeding): a randomized controlled study. *Jpn J Nurs Sci*. 2019;**16**(4):407–419. https://doi.org/10.1111/jjns.12250
122. Tsai SY, Barnard KE, Lentz MJ, Thomas KA. Mother-infant activity synchrony as a correlate of the emergence of circadian rhythm. *Biol Res Nurs*. 2011;**13**(1):80–88. https://doi.org/10.1177/1099800410378889
123. Parsons L, Howes A, Jones CA, Surtees AD. Changes in parental sleep from pregnancy to postpartum: a meta-analytic review of actigraphy studies. *Sleep Med Rev*. 2022;**68**:101719. https://doi.org/10.1016/j.smrv.2022.101719
124. Matsumoto K, Shinkoda H, Kang MJ, Seo YJ. Longitudinal study of mothers' sleep-wake behaviors and circadian time patterns from late pregnancy to postpartum–monitoring[of wrist actigraphy and sleep logs. *Biol Rhythm Res*. 2003;**34**(3):265–278. https://doi.org/10.1076/brhm.34.3.265.18812
125. Hunter LP, Rychnovsky JD, Yount SM. A selective review of maternal sleep characteristics in the postpartum period. *J Obstet Gynecol Neonatal Nurs*. 2009;**38**(1):60–68. https://doi.org/10.1111/j.1552-6909.2008.00309.x
126. Knappe S, Pfarr AL, Petzoldt J, Härtling S, Martini J. Parental cognitions about sleep problems in infants: a systematic review. *Front Psych*. 2020;**11**:554221. https://doi.org/10.3389/fpsyt.2020.554221
127. World Health Organization (WHO). *Framework on Integrated, People-Centred Health Services*. Geneva: World Health Organization; 2016: https://apps.who.int/gb/ebwha/pdf_files/wha69/a69_39-en.pdf Accessed 02/16/25.
128. Committee on Hospital Care Institute for Patient-and Family-Centered Care. Policy statement: patient-and family-centered care and the pediatrician's role. *Pediatrics*. 2012;**129**(2):394–404. https://doi.org/10.1542/peds.2011-3084
129. Amato PR, Fowler F. Parenting practices, child adjustment, and family diversity. *J Marriage Fam*. 2002;**64**(3):703–716. https://doi.org/10.1111/j.1741-3737.2002.00703.x
130. Harrison L. *Losing Sleep: Risk, Responsibility, and Infant Sleep Safety*. New York USA: NYU Press; 2022: ISBN 1479801143.


Downloaded from academic.oup.com/sleep/article/48/10/zsaf169/8169843 by Universite du Quebec a Hull user on 27 October 2026

© The Author(s) 2025. Published by Oxford University Press on behalf of Sleep Research Society. All rights reserved. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site—for further information please contact journals.permissions@oup.com.
*SLEEP*, 2025, **48**, 1–23
https://doi.org/10.1093/sleep/zsaf169
Review