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## Sleep as a social and cultural practice in Aotearoa: a scoping review

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### ABSTRACT

Traditionally, sleep science is grounded in biology, physiology, and medicine. But socio-cultural considerations provide a crucial lens into sleep health. Exploring the sociology of sleep in Aotearoa New Zealand (AoNZ) could broaden our understandings and better represent sleep-related practices among our diverse communities. This scoping review represents the pre-existing literature concerning sleep as a social or cultural practice in AoNZ. The initial search (via Discover and Scopus) search yielded 2,442 results. Of these results, 113 manuscripts were characterised of interest, but only 20 were directly related and included in the review. This literature was presented in relation to Meadows' (2005) modes of 'sleep embodiment' including sleep practice norms, the pragmatics of sleep and social roles, individual experiences and feelings related to sleep, and the visceral need for sleep. The findings highlight the progress of sleep literature in AoNZ. This covers diverse sleep practices, perspectives and experiences of sleep and sleeping, as well as the broader socio-cultural factors and unique AoNZ context that influence sleep. However, gaps in the field of local sleep research are also identified. Findings lay the foundation for further research in AoNZ to explore sleep-related discourses and practices that will ultimately broaden existing perspectives.

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### KEYWORDS

Bed-sharing; culture; Māori; Pacific; society

## Introduction

Sleep constitutes approximately one-third of a person's life and is increasingly recognised as fundamental due to its profound effect on health and well-being (Assefa et al. 2015; Wickham et al. 2020; Knutson 2022). Despite its established importance, research indicates that roughly one-quarter of adults in Aotearoa New Zealand (AoNZ) experience chronic sleep problems, with significant disparities related to socioeconomics and ethnicity (Paine et al. 2005).

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Sleep research has traditionally followed clinical and medical perspectives, leading to substantial advancements in sleep science; including insights that underpin understandings of sleep regulation, sleep architecture, and the differentiation between normal and abnormal sleep (Dement 2008; Assefa et al. 2015). However, the field of sleep research has rapidly evolved and now recognises the broader factors influencing dimensions of ‘sleep health’ (Hale et al. 2019). This expansion includes epidemiological studies that consider socio-demographic elements affecting sleep health, identifying risk factors for poor sleep, and the health-related consequences of insufficient or inadequate sleep. Such an approach highlights societal inequities and underlying political influences (Grandner 2019; Staton et al. 2019; Billings et al. 2020; Paine and Muller 2023). For example, in AoNZ there is an increasing recognition of the relationship between ethnicity and sleep health. Notably, Māori and Pacific populations have been identified as significantly more likely to have restricted or disordered sleep compared to non-Māori or non-Pacific populations. These ethnic disparities have been linked to mediating factors affecting sleep such as socioeconomic disparities, compromised living and sleeping conditions, and limited healthcare access (Paine et al. 2004; Paine and Gander 2013, 2016; Muller et al. 2020; McLay et al. 2023).

To address ethnic inequities in health, culturally-based models of health and well-being, such as *te ao Māori* perspectives, are being increasingly called upon to provide more appropriate models of care (Wilson et al. 2021). Such perspectives are crucial in supporting sleep health for Māori and Pacific populations as their customs and beliefs related to night and dreaming often differ from Western cultures (George et al. 2021; Crestani et al. 2024; Haami et al. 2024). Parenting style, and sleep practices (such as co-sleeping with children) may be strongly driven by family needs and community commitments (Jones et al. 2017; Muller et al. 2019a; Crestani et al. 2024). Additionally, many parents, both Māori and non-Māori, choose to bed-share (regardless of sleep space etc). This is due to the positive associations many have with co-sleeping, particularly in regards to facilitating breastfeeding with fewer sleep disturbances as well as offering the opportunity for comfort and connection for both infant and parent (Abel et al. 2001; Baddock et al. 2007; Glover et al. 2009; George et al. 2021). Furthermore (for Māori) night-time, sleep, and dreaming hold particular significance in relation to *wairua* (spirituality) and *whakapapa* (ancestral connections) (Haami et al. 2024; Lindsay et al. 2022).

As well as increasing interest in ‘sleep health’, recent years have witnessed a growing body of research adopting sociological perspectives of sleep (e.g. Hislop and Arber 2003a; Williams 2001; Williams and Bendelow 1998). Such perspectives frame sleep beyond an individual biological matter but also as a ‘practice’ that involves how, why, where, and with whom we sleep, and is embedded within our daily lives and social contexts (Williams 2005; Staton et al. 2019; Billings et al. 2020). Meadows’ (2005) ‘embodied conceptual framework of sleep’ provides a useful theoretical perspective on the sociology of sleep. Based on Watson’s (2000) ‘male body schema’, Meadows’ framework was constructed to explore how individuals engage with sleep within social contexts – moving beyond identification of sleep, through to descriptions and into explanations (Meadows 2005). It has four modes of embodiment that recognise sleep as a biological phenomenon through the visceral mode (views on the biological purpose and physiological consequences of sleep), whilst also highlighting normative (ideas about healthy sleep behaviours), pragmatic (social roles, function), and experiential, (individual experiences and feelings related to sleep) modes of embodiment. Meadows (2005) suggests that at any

given time an individual engages with sleep in a way which prioritises some modes of embodiment above the others. In turn, this is intrinsically linked to the broader social context and negotiation with others. This schema therefore incorporates explorations of individual desires, emotions, and motivations; shared perceptions and societal norms; as well as power dynamics and temporal considerations.

The expansion of local and international research underscores the potential of sociological perspectives on sleep for enhancing our comprehension of how broader social contexts (encompassing beliefs, culture, living environments, family and wider society) impact sleep practices. This insight can be invaluable in promoting sleep health, particularly among diverse populations (Meadows 2005; Williams 2005, 2011; Meadows et al. 2018). Within the context of AoNZ, various cultural and societal factors have been identified as shaping sleep practices and perspectives. However, it remains uncertain to what extent the AoNZ sleep literature currently aligns with sociological schema or where expansion is required to incorporate our unique social and cultural context. This forms a compelling rationale for the present review, which aimed to assess the nature, scope, and characteristics of existing literature pertaining to sleep as a social or cultural practice among individuals residing in AoNZ. Here, Meadows' (2005) framework was used as a heuristic device for organising the literature to illustrate the nature and extent to which AoNZ research explores sleep as a socio-cultural practice. In doing so, we also set the foundations for a sociological sleep inquiry in AoNZ.

## **Materials and methods**

Scoping reviews employ a systematic and rigorous methodology to search databases and extract data (Arksey and O'Malley 2005). In contrast to systematic reviews, the primary focus of a scoping review is to pinpoint areas of insufficient knowledge, set research priorities, and provide guidance for decision-making, typically without conducting a formal assessment of the methodological quality of the studies (Colquhoun et al. 2014; Peters et al. 2015). This scoping review was based on Arksey and O'Malley's (2005) methodology and five-stage scoping review framework. Insights from the evolving field of scoping review methodologies were also incorporated (Levac et al. 2010; Peters et al. 2015) and guidelines for the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR, Tricco et al. 2018) were followed to ensure methodological rigour and reporting quality. The process for conducting this review entailed: (1) identification of the research question (2) identification of relevant studies, (3) study selection, (4) charting the data, and (5) collating, summarising, and reporting results.

### ***Identifying the research question and relevant literature***

The research question was initially formulated as 'What is the nature, extent, and characteristics of pre-existing literature concerning sleep as a social or cultural practice among people living in Aotearoa New Zealand?' The search strategy was developed collaboratively with a specialist librarian to ensure a manageable and replicable search scope. The initial literature search was conducted in the Discover (MEDLINE, APA PsycINFO, CINAHL Complete) and Scopus databases. These databases were systematically searched

**Table 1.** Description of inclusion and exclusion criteria.

Inclusion criteria	Exclusion criteria
Published peer-reviewed empirical, articles, of any study type and publication date, available in English-language	Duplicate articles
Literature that focused on a AoNZ population or context	Theses/dissertations, conference, position, or viewpoint papers, unpublished or grey literature
Literature with sleep as a key focus	Literature concerning animal sleep
Literature that directly speaks to the social and cultural perspectives and practices of sleep.	Literature with a medical or clinical focus

using the Boolean string: *zealand\** OR *aotearoa\** AND *sleep\** AND *cultural\** OR *social\** OR *practice*. While the searches were confined to peer-reviewed articles, no restrictions on publication years were imposed. Duplicates, research of a clinical focus, or concerning non-humans was excluded (see [Table 1](#) for all criteria).

### **Study selection**

The study selection process is outlined in [Figure 1](#). Inclusion and exclusion criteria ([Table 1](#)) were applied to the initial search yield of 2,819 documents. This resulted in a refined selection of 283 articles that were screened and a further 170 excluded due to being irrelevant or lacking empirical research. Of the remaining 113 articles, 93 were characterised as of interest, but on the periphery of the topic. This selection considered issues relevant to socio-ecological or cultural aspects of sleep in AoNZ, but not with a direct focus on such perspectives. Instead, they tended to account or ‘control for’ socio-ecological or cultural factors within their studies rather than discuss how these factors might be related to sleep-related beliefs and practices (and thus align more with sociological perspectives). These 93 articles were further characterised into three subgroups that pertained to sociodemographic and ethnic ‘risk factors’ for atypical sleep ( $n = 32$ ); the social drivers for sleep regulation ( $n = 21$ ); or sleep as a familial and social arrangement ( $n = 40$ ) (see [Figure 2](#)). Subsequently, 20 manuscripts remained that were deemed of direct relevance to the aims of the scoping review.

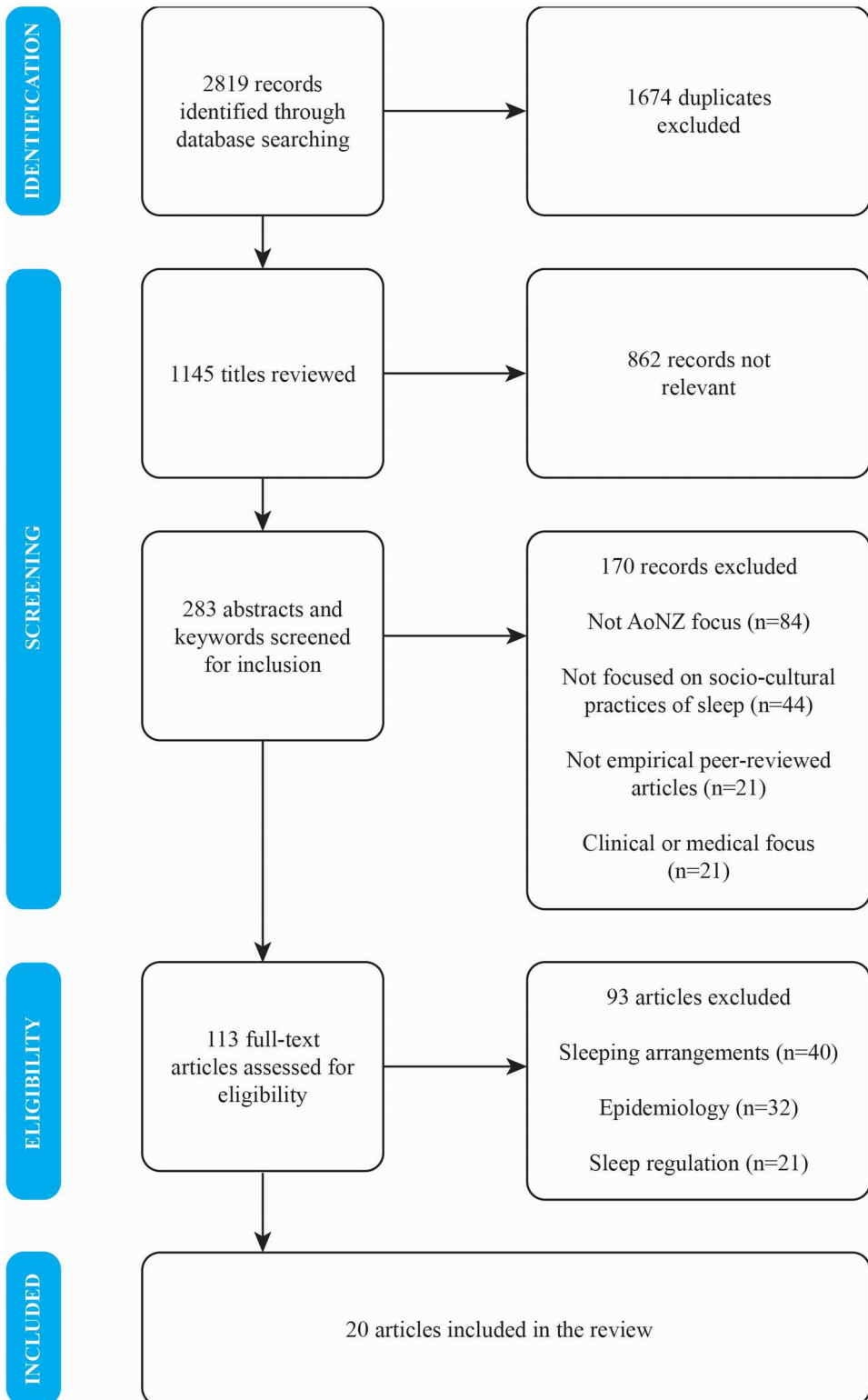
### **Charting, collating, summarising, and reporting**

The full text of each of the 20 articles were assessed and study characteristics charted in alignment with the scoping review aims (including publication information as well as notes on aims, methods and materials, participants, and social contexts, and conclusions). The content of articles was analysed and findings organised and presented in relation to Meadows’ (2005) framework (i.e. with regards to normative sleep behaviours; the pragmatics of sleep and social roles; individual experiences and feelings related to sleep; and the visceral need for sleep) as well as the broader social-cultural context.

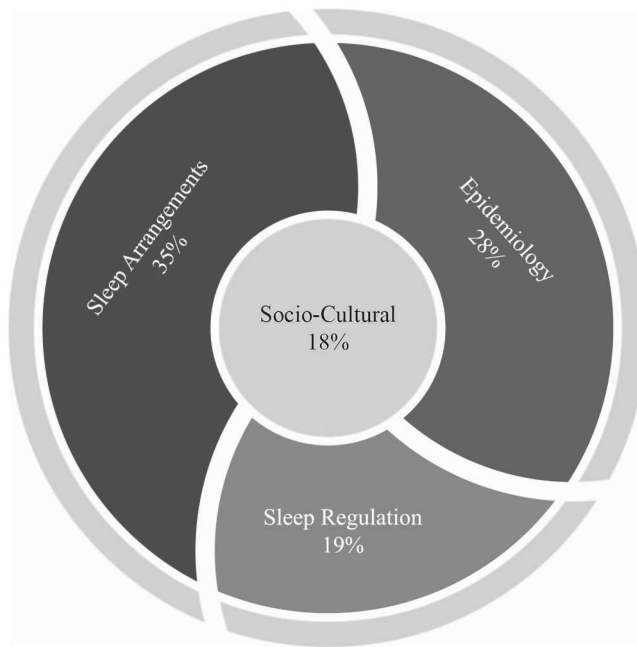
## **Results**

### **Characteristics of selected sources**

The studies included in this review are summarised in [Table 2](#). They were published between 1994 and 2023 (with half published within the last five years). The majority



**Figure 1.** Flow diagram of the study selection process.



**Figure 2.** Classification of the 93 articles into subgroups based on socio-ecological and cultural aspects, in contrast to the 20 articles included that specifically focused on socio-cultural perspectives and practices.

used a qualitative methodological approach ( $n = 13$ ), while a smaller number were quantitative ( $n = 5$ ) or mixed methods ( $n = 2$ ). Data collection methods varied, however most exclusively utilising interviews ( $n = 10$ ) or surveys ( $n = 3$ ). Sleep-related measures predominantly revolved around recording sleep quality, duration, and/or timing; as well as sleep arrangements, environments, and sleep habits, routines, and familial practices.

The research covered sleep across the lifespan. However, the majority focused on infant and children's sleep (each contributing 40% respectively). Cultural differences in sleep practices and perceptions were a prominent theme throughout the literature. While various ethnic groups were considered; most studies focused on the distinctions between Māori, Pacific, and Pākehā (white European) populations.

### ***Embodied conceptual framework of sleep***

The 20 articles were mapped onto Meadows' (2005) framework as shown in Figure 3. Meadows' four modes of sleep embodiment are interrelated. Therefore, studies did not solely relate to sleep as normative, pragmatic, visceral, or experiential. Mapping the literature in this way helps to highlight the distinct aspects of sleep research in AoNZ and the socio-cultural contexts present in the included articles.

### ***The socio-cultural context***

#### ***Cultural contexts***

From the reviewed literature, it is evident that cultural contexts have been explored in terms of their impact on how sleep practices are negotiated. For example, Jones et al. (2017)

**Table 2.** Summary of characteristics of 20 studies.

Author, Year	Journal	Methodology	Instruments Used to Study Sleep	N	Ethnicity	Life Stage	Aim or Overview	Conclusions
<b>Abel et al. (2001)</b>	Social Science and Medicine	Qualitative	Focus groups/ Interviews	150	Māori/ Pacific/ NZE	Infant	To describe and compare the infant care practices and beliefs of Māori, Tongan, Samoan, Cook Islands, Niuean and Pākehā caregivers.	Māori parents often receive support and guidance from whānau. While some infant care practices align with Western methods, Pacific ethnic groups, including Samoan and Tongan-raised participants, frequently share a bed with infants, attributing benefits to practical, psychological, and spiritual reasons, with traditional beliefs linking a baby's well-being to bedsharing.
<b>Crestani et al. (2024)</b>	Ageing and Society	Qualitative	Interviews	23	Māori/ Non-Māori	Older people	To explore the role of sleep and the socio-cultural factors and sleep-related beliefs, attitudes and experiences with ageing among older people.	Older individuals consider their sleep based on quality societal norms, and daily life impact. They perceive sleep patterns to shift with age and often place less importance on sleep compared to other aspects of life. They develop personal sleep-improvement practices while recognising habits that disrupt sleep. Typically, they do not consider sleep issues as medical problems but relate them to overall health and quality of life.
<b>Elder et al. (2023)</b>	Journal of Clinical Sleep Medicine	Mixed methods	Questionnaires: Children's Sleep Habits, Self	72	Māori/ NZE	Children	To examine differences by ethnicity and socioeconomic status in attitudes to sleep and	The findings suggested that more adverse differences in sleep habits and attitudes in children are most likely to be

*(Continued)*



Table 2. Continued.

Author, Year	Journal	Methodology	Instruments Used to Study Sleep	N	Ethnicity	Life Stage	Aim or Overview	Conclusions
<b>Fa'alau et al. (2003)</b>	Pacific health dialog: a publication of the Pacific Basin Officers Training Program and the Fiji School of Medicine	Qualitative/Political Ecology	Sleep Report/ Interviews N/A	N/A	Pacific	Infant	bedtime routine among children aged 7–9 years. To examine risk factors for SIDS from a political ecology perspective.	related to socioeconomic status than to ethnicity. Through addressing the low socio-economic status of Pacific people in AoNZ, the so-called 'unmodifiable' SIDS risk factors are modifiable.
<b>Fangupo et al. (2022)</b>	Sleep Health	Qualitative	Interviews	10	Pacific	Children	To explore the sleep habits of children in ethnically diverse Pacific families EDPF, and the experiences of their parents.	A variety of sleep habits and related parenting practices were observed in this sample, who recognised that raising children in multi-ethnic families was associated with distinct opportunities as well as challenges.
<b>Foley et al. (2013)</b>	Pediatrics	Quantitative	Surveys: Multi-media Activity Recall for Children and Adults (MARCA)	2017	Māori/ Pacific/ Asian/ NZE	Children/ Adolescents	To describe the activities undertaken 90 minutes before sleep onset and to examine the association between activities and time of sleep onset in young people.	The top 20 most popular activities were identified and grouped into 3 intuitive behavioural sets: screen sedentary time (television, computer, and video games), nonscreen sedentary time (eg, reading, eating, and talking), and self-care (eg, showering, brushing teeth, and getting ready for bed).
<b>Ford et al. (2020)</b>	New Zealand Medical Journal	Quantitative	Questionnaire: study specific/ Sleep diary: study specific	163	NZE/ Māori/ Asian/ Pacific/ Middle Eastern/ Latin American/ African	Children	To obtain an overview of the current sleep habits and sleep hygiene practices in a group of intermediate-aged students and establish whether these	Most students achieved a sleep duration within advised guidelines, despite often not following sleep hygiene practices in the pre-bed routine. Parental guidance, with respect to bedtimes and

<b>Galland et al. (2017)</b>	Sleep Health	Quantitative	Surveys: Pittsburgh Sleep Quality Index (PSQI), The Adolescent Sleep Hygiene Scale (ASHS).	692	NZE/ Māori/ Asian/ Pacific/ Other	Adolescents	To examine the sleep hygiene practices and specifically evening technology and caffeine use, in relation to sleep quality and as a function of gender among adolescents.	students achieve adequate sleep.
<b>Gantley (1994)</b>	Early Human Development	Qualitative	N/A	N/A	Bangladeshi/ Welsh/ Māori/ NZE	Infant	To discuss comparative data on infant caring practices from an anthropological perspective among Bangladeshi and Welsh families in Cardiff, and among Māori and non-Māori families	Shows that the sensory environment of the infant in Māori populations is qualitatively different from that of the white western infant.
<b>George et al. (2020)</b>	AlterNative	Qualitative	Interviews	17	Māori	Infants/ Children/ Family	To explore the diverse realities of sleep in 14 Māori whānau.	Concludes that infant sleep interventions for Māori children must take into account the often pressing social circumstances of many Māori whānau that are a barrier to adopting infant sleep recommendations, otherwise sleep interventions could create yet another oppressive standard that whānau fail to live up to.
<b>Henderson et al. (2010)</b>	Pediatrics	Quantitative	Survey, study specific	412	NZE/ Māori/ Pacific/ Other (Asian/Indian/ European/Latin American).	Infants	To examine parents' expectations of and opinions about infant sleep consolidation, the temporal timing and definitions of sleeping	Showed that parents have realistic expectations of infant capabilities for sleep consolidation that were within contemporary clinical guidelines. A new parent-

(Continued)

Table 2. Continued.

Author, Year	Journal	Methodology	Instruments Used to Study Sleep	N	Ethnicity	Life Stage	Aim or Overview	Conclusions
<b>Jones et al. (2017)</b>	New Zealand Journal of Psychology	Mixed methods/ Kaupapa Māori	Survey: study specific/ Interviews	58	Māori	Infants	through the night and sources of advice about their infant's sleep.  To describe what approaches Māori parents use to get their babies to sleep, and what factors they identify as influencing their decision-making process when selecting approaches.	based definition of sleeping through the night is presented that has social and developmental validity.  Holding, feeding and co-sleeping techniques were often used by Māori parents to aid their infants' sleep. Self-soothing approaches were less popular due to concerns about crying, cultural influences, extended family involvement, safety and convenience. Although some desired separate sleeping arrangements, only a few interviewees consistently followed this preference.
<b>MacFarlane et al. (2021)</b>	International Journal of Gynecology and Obstetrics	Qualitative/ Kaupapa Māori	Interviews	30	Māori/ Non-Māori (Pacific, NZE, Asian, Other)	Infants	To explore pēpē sleep practices and the key motivators among selected Māori and non-Māori māmā, in relation to the risk of SUDI.	Two-thirds of the mothers, especially Māori mothers, had experience with bed-sharing. Their primary motivation was the essential need for adequate sleep, with closeness and convenience being secondary reasons. These findings were attributed to factors like innate fear, cultural influence, and the knowledge applied by mothers in their decisions.
<b>George et al. (2021)</b>	Sleep Medicine	Qualitative/ Fonofale Model	Interviews	17 (Families)	Pacific	Family/ Children	To provide a rare and valuable glimpse into the familial, cultural, social, and economic context of	Pacific families prioritise values such as family, community, culture, and faith, which contribute to their sleep practices. The study

underscores how these values and limited economic resources impact sleep practices in Pacific households. It emphasises the importance of considering and respecting these factors when implementing sleep initiatives to ensure positive outcomes.	sleep for Pacific families and children.		
Healthy preschool sleep is crucial for children's well-being and family harmony. Variations in views and practices stem from factors such as health beliefs, socioeconomic status, maternal autonomy, employment, parenting styles, and societal expectations. Recognising the significance of maternal perspectives and addressing societal factors is vital for preschool sleep initiatives.	To explore how good and poor preschooler sleep health is perceived and experienced by Māori and non-Māori mothers, with low and high SEP.	31	Interviews/ Questionnaire: study specific
Promoting good sleep in preschoolers centers on four themes: child health, bedroom environment, routines, and adapting strategies to family preferences. Mothers' ability to implement these strategies are affected by factors such as finances, work schedules, education practices, housing quality, and access to culturally sensitive sleep advice.	To explore facilitators and barriers to 4-year-old children sleeping well, as experienced by Māori and non-Māori mothers, with low and high SEP.	31	Interviews/ Questionnaire: study specific

*(Continued)*



Table 2. Continued.

Author, Year	Journal	Methodology	Instruments Used to Study Sleep	N	Ethnicity	Life Stage	Aim or Overview	Conclusions
<b>Nairn (2010)</b>	Gender, Place and Culture	Qualitative	Interviews	N/A	Māori/ Pacific/ NZE	Adolescents/ Young Adults	To demonstrate how apparently mundane arrangements such as the organisation of sleeping might reveal the ongoing hegemonic social and spatial relations of teaching and learning geography.	Shows how ordinary sleeping arrangements during field trips convey significant messages regarding sexuality, gender, and cultural practices. The importance of understanding how these arrangements reflect and perpetuate social and spatial hierarchies in geography education are emphasised. More than half of the mothers reported that their infants shared a mattress with others. The study emphasises the need to address educational and housing challenges faced by many Pacific families in AotNZ, alongside effective information delivery, to help parents make informed choices about infant care practices.
<b>Paterson et al. (2002)</b>	New Zealand Medical Journal	Quantitative	Interviews	1376	Pacific	Infants	To examine the type and extent of bed sharing and the maternal and sociodemographic factors associated with this infant care practice.	
<b>Thorpe et al. (2023)</b>	Gender, Work and Organisation	Qualitative	Interviews	38	Mixed ethnicity/ Asian/ Middle Eastern/ NZE/ Samoan/ Māori/ South American/ American/ Australian/ South African/ British	Adult Women	To examine how the pandemic disrupted women's everyday rhythms and routines, prompting new ways of thinking about the gendered dimensions of their pre- and post-pandemic working and social lives.	The pandemic disrupted women's routines, causing things such as insomnia and prompted reflections on their busy pre-pandemic lives. This led to a recognition of the need for rest and self-care as a feminist response to neoliberal pressures. The pandemic encouraged a re-evaluation of pre-pandemic routines and a shift toward a

more holistic approach to health, relationships, and personal enjoyment. Emphasises the crucial role of partners in CPAP usage, motivating individuals to seek treatment and facilitating successful therapy management through collaborative problem-solving. The study highlights the need to formally include partners in the treatment process, advocating for their involvement in nurse-led and clinician consultations to improve home-based therapy success.

**Ward et al. (2018)**

Collegian

Qualitative

Interviews

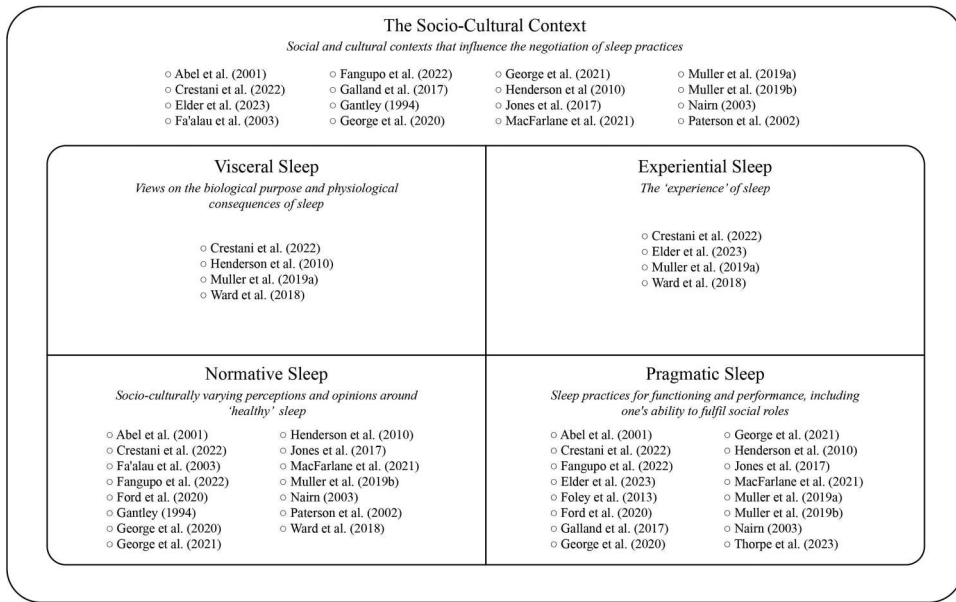
16

NZE/ Maori/  
Samoan/  
Indian/ Other

Adults

To explore individual's experiences with living with CPAP to understand success with this therapy.

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**Figure 3.** Mapping of 20 articles onto Meadows 'embodied conceptual framework of sleep'.

described how Māori parents often implement approaches to infant sleep that are deeply influenced by their cultural heritage, even when they may not explicitly recognise this influence. Additionally, Jones et al. (2017) describe intergenerational transmission of knowledge, illustrating how Māori cultural practices related to sleep persist across generations:

The tendency for parents in this study to implement similar approaches to that of their ancestors can be seen as a product of culture and the intergenerational transmission of this knowledge. Most parents did not recognise or conceptualise their approaches to infant sleep as culturally influenced; they just did what felt right to them. (Jones et al. 2017, p. 36)

Pacific cultural contexts were also significant within the included literature (Fa'alau et al. 2003; Fangupo et al. 2022; George et al. 2021). For example, George et al.'s (2021) exploration of Pacific families' sleep practices reveals that cultural values, such as strong family bonds, flexible living arrangements, and religious commitments, are deeply embedded in their sleep routines. In contrast, Fangupo et al. (2022) showed how ethnically diverse Pacific families (EDPF) responded to their specific living conditions, which highlighted the adaptation of Pacific cultural sleep practices to the context in which families lived.

When managing children's sleep, EDPF generally responded to the context in which they lived; they often recognised that this meant that their practices might differ from those of families in the Pacific Islands, or from those of some other Pacific families within New Zealand. (Fangupo et al. 2022, p. 93)

### **Social contexts**

Social contexts were also explored in terms of their potential impacts on how sleep practices are negotiated. For example, Muller et al. (2019a) described how

socioeconomic status influenced the degree of control mothers had over bedroom spaces, housing quality, the consistency of bedtime routines, access to financial resources, parental work patterns, and the quality of early childhood education environments, all of which influenced children's sleep. Elder et al. (2023) similarly described how children attending low-decile NZ schools experienced more negative sleep – related daytime effects, such as taking more naps and feeling sleepier. It is suggested that this could be linked to differing sleep environments influenced by socioeconomic factors:

Children attending low-decile schools were also more likely to experience negative daytime effects from sleep, such as taking more naps and feeling sleepier throughout the day ... These findings could result from differing sleep environments because lower-income families may be more likely to sleep in inadequate physical environments, such as being too cold or having too much noise, and this is associated with reduced sleep durations and later sleep times. (Elder et al. 2023, p. 131)

George et al. (2021) showed how cultural contexts related to socioeconomic status, which in turn, impacted sleep practices. They noted that Pacific families often face harsh economic pressures to which they respond by taking on shift work, multiple jobs, and overtime to meet financial needs, subsequently affecting sleep patterns and practices. Paterson et al. (2002) also described how both social and cultural contexts were associated with infant bed-sharing practices among Pacific families:

Living in overcrowded conditions, limited English fluency, living in a married relationship or being non-partnered, maternal reports of lack of SIDS [sudden infant death syndrome] awareness, and a high level of alignment with the Pacific way of life and customs, or low levels of alignment with both Pacific and New Zealand way of life and customs were also significantly associated with infant bed-sharing. (Paterson et al. 2002, pp. 241–242)

Life course factors provided an additional social context that had a significant role in how sleep practices are negotiated (Crestani et al. 2024; Fangupo et al. 2022). Crestani et al.'s (2024) interviews with older people living in AoNZ found that their sleep practices were often shaped by how satisfied they were with their current sleep status and its alignment with their waking priorities. Their findings suggested that these older people were willing to continue activities that prioritised waking roles and responsibilities over supporting sleep, potentially considering shorter or fragmented sleep as satisfactory.

'... So, no matter how long I sleep for, I'm happy to get up to see my kids and my grandchildren.' (Crestani et al. 2024, p. 18)

In contrast, Fangupo et al. (2022) highlight that children's bedtimes and sleep routines are seen as a priority and predominantly determined by their parents or caregivers at this life stage. The child's age often influences sleep routines. When the child matures, these rules may adapt to grant older children more autonomy in managing their own sleep routines:

As would be expected, the age of the child had an important effect on what was included in the routine. The oldest child in the sample (11 years) managed his own bedtime routine. (Fangupo et al. 2022, p. 92)

## **Normative sleep**

### ***Perceptions around 'healthy' sleep vary culturally***

Normative perceptions of 'healthy' sleep, vary across cultures, and were consistently highlighted in the literature. Sleeping spaces exemplify these variations, with some cultures (like Pākehā and some Pacific families) valuing privacy and separate arrangements (Nairn 2010), while others, such as Māori communities, being more likely to favour communal sleeping arrangements. These differing cultural norms significantly shape individuals' sleep experiences and their definitions of 'healthy' sleep. Crestani et al. (2024) demonstrate that adhering to traditional customs, like sleeping on a marae can be disruptive to the sleep of older Māori:

'Your sleep definitely is different on a marae. Because there's coughing and snoring. You know, it wouldn't be my choice. Well, yeah. It's something that you do because of tikanga [traditional customs and practices], more than a choice. I mean now there's some things you can't choose to do can you, you have to go with the flow.' (Crestani et al. 2024, p. 10)

However, participants also considered such practices as essential for overall spiritual, emotional, and social wellbeing, emphasising that culturally informed sleep practices may deviate from Western norms, yet remain 'healthy' within specific cultural contexts.

Furthermore, exploration into cultural variations in 'healthy' infant sleep practices was prominent across a substantial portion of the articles. For example, infant bed-sharing was underscored as a cultural norm among Pacific and Māori families:

... adult–infant bedsharing was the norm amongst caregivers from all of the Pacific ethnic groups. (Abel et al. 2001, p. 1140)

For many reasons, all but one whānau co-slept with their babies at some stage. (George et al. 2020, p. 155)

Abel et al. (2001) also described that, for many, bed-sharing is considered a robust cultural tradition with perceived psychological and spiritual benefits for the baby:

'[One] concern is with the fact that nowadays mothers tend to let their babies sleep on their own, in their own little cot or bed. There is a Tongan belief that there is such a thing that we call kaliloa, when the mother opens her arms and continuously holds the baby close to her most of the time. We believe that this is the best way of bringing up any child and this is their rightful place.' (Abel et al. 2001, p. 1140)

In contrast, other cultures do not promote bedsharing as a 'healthy' sleep practice. With some research identifying mothers' strong fears of accidental suffocation or harm, which can override cultural practices:

The primary motivation for practicing safe sleep reported by māmā was their fear that their pēpē would be accidentally suffocated or squashed to death if they bed shared with others. This fear was so strong in some māmā that they described it overriding the influence of their culture or their partner/whānau. (MacFarlane et al. 2021, p. 312)

### ***Negotiating sources of 'healthy' sleep***

Sources of information and advice regarding 'healthy' sleep practices were present in the literature (Ford et al. 2020; Fangupo et al. 2022) and form an aspect of normative sleep

practices (Meadows 2005). A multitude of channels through which parents seek guidance on infant sleep practices were described including child health nurses, family and friends, web-based internet sites, midwives, hospital or birth unit nurses, and healthcare providers like Well Child. Conversely, family physicians, specialist sleep therapists, and paediatricians were rarely mentioned as sources of advice. This diverse range of sources underscores the potential variability in information about ‘healthy’ sleep practices for infants.

The articles also described how cultural differences may result in common sources of information and advice regarding infant sleep practices being unsuitable. For example, advice from healthcare providers may not be appropriate or align with some cultural values around ‘healthy’ sleep.

Several of the mothers referred to occasions where they had either not agreed with messages or advice from Well Child or other healthcare providers, or had found it difficult to consistently follow advice ... Parents did not always feel comfortable talking about their decisions with providers ... (Fangupo et al. 2022, p. 93)

Gantley (1994) further illustrates how cultural norms and practices related to perceptions of ‘healthy’ infant sleep can differ significantly from Western or Pākehā practices. He explains how the sensory environment of infants in certain cultures may differ:

What is clear from both the Bangladeshi and Māori populations is that the sensory environment of the infant is qualitatively different from that of the white western infant. It is these white infants who are encouraged to sleep alone, in quiet environments, for as long as possible. (Gantley 1994, p. 207)

Similarly, Jones et al. (2017) demonstrated how cultural factors influence the advice received and the practices followed by Māori. Whānau (extended family) are mentioned as important sources of advice and influence:

Whānau connection and support was a consistent theme mentioned by parents when asked about how their approaches to infant sleep are influenced by cultural factors. (Jones et al. 2017, p. 35)

### ***Life course informed normative perceptions of sleep***

Life course factors have been demonstrated to shift expectations and perceptions around what constitutes ‘healthy’ sleep. Crestani et al. (2024) highlighted that the older adults they interviewed prioritised achieving satisfactory rather than socially ‘ideal’ sleep. It reflects a shift from an idealised or ‘perfect’ sleep pattern to one that enables them to maintain quality of life during waking hours:

The thought that sleep was less necessary or would deteriorate with ageing or disease shaped participants’ expectations regarding what constituted a ‘satisfactory’ sleep at this stage of life. (Crestani et al. 2024, p. 10)

Crestani et al. (2024) emphasise that many appeared aware of normative sleep patterns but do not consistently prioritise them.

‘I don’t sleep long, four, five hours. I think I like it though. You know if I sleep longer than that I think I’m lazy.’ (Crestani et al. 2024, p. 11)

### ***Embedded use of sleep innovations/ medicines in everyday life***

Another aspect explored was the perceptions around the presence of (and appropriate and healthy use of) sleep innovations or medicines in everyday life. For example, Ward et al. (2018) explored individuals' experiences with using a medical device and face mask for managing symptoms of obstructive sleep apnoea, illustrating the journey people undergo when integrating long-term non-pharmaceutical sleep treatments into their lives. This process involves emotional responses, motivation, problem-solving, and ultimately, the establishment of a new normal in daily routines to ensure the healthy and appropriate use of such treatments:

Once the challenges of using CPAP [continuous positive airway pressure] were overcome, getting used to CPAP became relatively straightforward. With time, using CPAP became routine and a normal part of daily life for both users and partners. (Ward et al. 2018, p. 83)

Crestani et al. (2024) illustrated that older people's perceptions around the medicalisation of sleep varied, with some individuals being open to trying sleep medications in case of persistent insomnia. However, the majority expressed reluctance or embarrassment associated with using sleep medications, indicating their aversion to the idea:

Embarrassment around the use of medications for sleep indicates a degree of social taboo around medicalising sleep; that to treat it formally indicates illness or failure to self-manage sleep, which contradicts the expectation that sleep ought to come naturally. (Crestani et al. 2024, p. 17)

### ***Pragmatic sleep***

#### ***Pragmatics of sleep within family contexts***

Themes surrounding the pragmatics of sleep for family performance and function were explored (George et al. 2020; Fangupo et al. 2022). It is evident that families actively make informed decisions regarding where and how their members sleep, with a profound awareness of the influence of these decisions on the overall functioning of the family unit. For example, some families appear to prioritise separate sleeping arrangements as they believe it results in better sleep quality for all.

... other families had made a distinct effort to consistently maintain separate sleeping spaces. Due to parents feeling that everyone got a better sleep when they were in separate spaces. (Fangupo et al. 2022, p. 92)

George et al. (2020) addressed the complexities faced by larger families, necessitating the adoption of more adaptable bedtime practices and arrangements, such as children sharing bedrooms. Furthermore, the literature consistently underlined the notion that sleep routines reflect each family's unique circumstances, values, resources, and priorities. This point is illustrated by George et al. (2020), who highlight the diverse ways in which different families interpret and implement the concept of 'routine.'

... how 'routine' was interpreted varied from participant to participant ... The reality of how routine was enacted was unique to each family's values, resources, and competing priorities. (George et al. 2020, p. 156)

Fangupo et al. (2022) found that the parents they interviewed often prioritised pragmatic considerations over normative advice when it comes to their child's sleep. The parents reported adapting their practices based on their child's needs and what works best for them, indicating pragmatic and individualised approaches to infant sleep.

In many cases, parents had initially tried to follow advice closely, but changed their practices or became more 'flexible' if they noticed that other practices ... appeared to result in their child settling to sleep better or staying asleep for longer. (Fangupo et al. 2022, p. 93)

Negotiations around bed-sharing were also evident, with some finding that sharing came with challenges, such as the need to go to bed at the same time as the child, which might not be desirable due to other responsibilities or the desire for personal time in the evenings. However, others sometimes prioritised bed-sharing due to the convenience and practicality of attending to a baby's needs (Jones et al. 2017).

### *Sleep and social roles*

The influence of social roles on sleep practices is shown particularly regarding age and gender (Foley et al. 2013; Galland et al. 2017; Ford et al. 2020; Crestani et al. 2024). Foley et al. (2013) discussed gender and age differences in the sleep patterns of children – demonstrating variations in screen time, sedentary activities, and self-care activities before bedtime:

In general, younger participants had an earlier sleep onset than older participants ... older participants and male participants engaged in more screen time in the presleep period than did younger participants and female participants, respectively. The opposite trajectory was found for nonscreen sedentary time and self-care; younger participants and female participants spent more time in these activities in the presleep period than did older participants and male participants, respectively. (Foley et al. 2013, p. 279)

While the authors note that screen time may delay sleep onset via somatic arousal or suppression of melatonin; it was also noted that age-related differences could be associated with the amount of discretionary time that children can access and engage in screentime. Screentime is influenced by the amount and ordering of activities such as school and homework, mealtimes, selfcare, and recreation (Foley et al. 2013).

Crestani et al. (2024) noted that many of the older adults in their sample described sleep as something that could be adjusted to suit their preferences regarding daily time use. For example, being alert enough to carry out daily activities and fulfil responsibilities. This suggests an adaptation of sleep based on social roles rather than simply adhering to somatic sleep needs or societal expectations.

Winne illustrates how she could not put a number on her typical sleep duration, her time is governed by her strong waking responsibilities which during this busy time of her life means less-predictable sleep. 'Having the time of my life' was about embracing this period and carrying on in recognition that time with others is precious. By implication, time spent sleeping is time not spent connecting with others and completing important tasks (Crestani et al., p.18)

Sleep practices and arrangements have also been explored with regards to gender and sexuality (Nairn 2010; Thorpe et al. 2023). For example, Nairn (2010) investigated sleeping arrangements on field trips, showing that these arrangements are often rooted in unspoken assumptions about heterosexuality. The separation of sexes is perceived as a

means to manage heterosexual desires and avoid embarrassment. This practice underscores the deep-seated heteronormativity in educational contexts, where heterosexuality is the assumed norm, rendering other sexualities invisible. It also suggests that considering diverse sexualities might lead to alternative sleeping arrangements.

Gender was also key in Thorpe et al.'s (2023) exploration of women's routines, including sleep patterns during the Covid-19 pandemic lockdown. They found that the pandemic compelled many to re-evaluate the busyness of their pre-pandemic working lives and recognise the importance of slowing down and attuning to their bodies:

Thus, acknowledging the need to rest, recover and relax during the pandemic might be considered an everyday feminist counter-rhythm to the neoliberal time-space pressures on women to work through pain and/or exhaustion in order to be 'successful' and 'productive' citizens. (Thorpe et al. 2023, p. 1560)

Thus, pointing towards notions of self-care as well as the experiential and visceral elements of sleep.

### **Experiential sleep**

The literature provides insights into how feelings and emotions can influence sleep practices. For example, Crestani et al. (2024) describe how their older participants adjusted their sleep practices based on how they felt during the day:

'I don't miss a lot of sleep. And I know when I need it. That's when I have a bit of a zzzz in the afternoon.' (Crestani et al. 2024, p. 13)

Crestani et al. (2024) also highlighted that older Māori differed in their experiences and feelings towards sleep compared to older non-Māori. Specifically, for Māori times of wakefulness during the night were not necessarily viewed as inconveniences but rather as opportunities for quiet reflection on life. Night awakenings and vivid dreams were seen as facilitating creative endeavours or fostering positive spiritual connections with deceased individuals:

Māori were more likely to note that times of wakefulness during the night offered a quiet time of life reflection ... Similarly, night awakenings or vivid dreams were presented by some as facilitating capacity for creative endeavours, or positive spiritual connections with those who had died. (Crestani et al. 2024, p. 17)

Elder et al. (2023) investigated children's sleep-related emotional responses and feelings. They found that children described a good night's sleep as one in which they slept well and woke up feeling refreshed and not tired. Compared to children's views on what a good night's sleep is their views on a bad night's sleep were closely tied to waking up in a bad mood, highlighting the substantial impact of their post-sleep emotional state on their perception of sleep quality.

Finally, differing perceptions of sleep were also evident in Ward et al.'s (2018) work concerning the treatment of obstructive sleep apnoea. Participants reported positive experiences around no longer feeling as sleepy and feeling the physical and psychological health benefits served as a powerful motivator for participants to prioritise and maintain the use of their CPAP device. The study also highlighted that the fear of untreated sleep apnoea and its potential life-limiting effects was another potent motivating factor. Such

research underscores the deep emotional and experiential dimensions associated with sleep and how these factors can strongly influence an individual's commitment to therapeutic interventions.

### **Visceral sleep**

In the present papers, the visceral embodiment of sleep (representing views on the biological purpose of sleep, physiological consequences of sleep, and perceived clinical sleep disorders) was often overshadowed by practical considerations and normative beliefs. For example, Crestani et al. (2024) highlight a belief held by older New Zealanders that a decrease in sleep duration might not actually reflect a reduced somatic need for sleep but rather a decrease in the amount of sleep obtained due to various factors such as fragmented or poor-quality sleep.

'People do say that the older you get the less sleep you need. But maybe it's less sleep they have rather than the less sleep you need.' (Crestani et al. 2024, p. 12)

Henderson et al. (2010) considered parents' expectations about infants' sleep needs. Views around infant's self-regulated sleep timing and duration varied by family dynamics and socioeconomic factors. This indicates potentially differing views in what constitutes 'good' sleep or potentially problematic sleep.

In the context of preschoolers, Muller et al. (2019b) explored perceptions of sleep health, illustrating how mothers perceive sleep as a factor affecting their preschool-aged children's mental and physical well-being. They found that preschoolers' sleep can considerably impact maternal mental and physical health, sleep quality, and daytime functioning. These findings underscore how sleep behaviours and practices are intricately linked to biological sleep needs and the positive and negative physiological outcomes associated with sleep.

Finally, Ward et al. (2018) provided valuable insights into how individuals with obstructive sleep apnoea perceive and adapt to their conditions. Some participants expressed relief at finally having a solution to their snoring and sleepiness, while others were disappointed about needing the CPAP device.

... illustrates participants' reports of relief at finally having a solution to snoring and sleepiness or disappointment about receiving the device ... Comparing and balancing how unwell they felt before CPAP with subsequently enhanced wellbeing affirmed the positive consequences of CPAP and supported prioritising CPAP. (Ward et al. 2018, p. 83)

This example highlights the emotional complexities surrounding clinical sleep disorders and the diverse ways that individuals perceive their biological sleep needs.

### **Discussion**

The findings of this scoping review offer unique insights into how sleep literature in AoNZ resonates with sociological perspectives, addressing a gap that previous reviews have not filled. The literature reviewed was charted onto Meadows' (2005) 'embodied conceptual framework of sleep,' covering diverse sleep practices, perspectives, and experiences, along with the broader socio-cultural factors that influence sleep in AoNZ. The narrow timeframe of the research reviewed reflects the nature of the research,

local funding agendas, and the recent and rapid shift towards more social approaches to sleep. Nevertheless, within the context of this timeframe, the body of literature identified was small, reflecting a scarcity of research directly focusing on the social and cultural aspects of sleep in Aotearoa New Zealand. Consequently, several aspects in this domain lack depth or remain largely unexplored.

The literature primarily focused on infant and children's sleep, constituting 80% of the reviewed articles, indicating a gap in the investigation of other life stages. Only infants, children, and older adults were considered in how the context of life course factors influence sleep practices. The differences described between these age groups align with international research which describes the transition from communally negotiated sleep practices with parental input during youth to self-regulated sleep practices in adulthood (Taylor 1993). Furthermore, previous Aotearoa New Zealand-based research highlights that major life transitions, such as adolescence (Borlase et al. 2013; Shochat et al. 2014), pregnancy and early parenthood (Signal et al. 2014; Ladyman and Signal 2018), as well as retirement or elder care (Gibson et al. 2015; Gibson and Gander 2021; Gibson et al. 2020), often disrupt sleep patterns and the circadian time keeping system with implications for physical and mental health. Together, such research demonstrates that sleep status, beliefs, behaviours, and help-seeking change over the life course, underscoring the importance of considering life course contexts across all life stages.

The intricate interplay of social, cultural, and socioeconomic factors that influence sleep practices are explored in the included articles. There is an emphasis on the influence of Māori and Pacific cultures on sleep-related perspectives, expectations, and practices. These works align with existing international knowledge concerning the pivotal roles played by beliefs, culture, living environments, parenting style, family dynamics, and broader societal influences in shaping time use and sleep practices (Ball 2002; Williams 2005; Staton et al. 2019; Billings et al. 2020). Aotearoa New Zealand is a colonised nation and sleep-related differences for indigenous and minority groups are likely influenced by systematic discrimination and racism embedded in Aotearoa New Zealand, which inherently affects health status and services (Malcolm 1996; Reid and Robson 2007). Furthermore, Māori beliefs and practices associated with whakapapa (ancestry), taiao (environment), wairua (spirituality), and tātai arorangi (astronomy) have an influence on perceptions and uses of time as well as definitions of illness (including sleep disorders) and appropriate treatments (Durie 2004; Whaanga and Matamua 2016). The local literature reviewed thus reaffirms the notion that sleep practices in Aotearoa New Zealand are intricately enmeshed within a complex matrix of cultural, social, and economic influences.

The reviewed literature describes the cultural diversity in perceptions and opinions regarding what constitutes 'healthy' sleep, which challenges conventional biomedical models. This cultural variance is especially evident when considering infant sleep practices; where bedsharing practices, often stigmatised as 'unhealthy' from a biomedical standpoint, are redefined through the cultural lenses of Māori and Pacific populations (Abel et al. 2001; Fangupo et al. 2022; George et al. 2020). On an international scale, cultural variations in sleep experiences and practices have been explored showing that some cultures maintain traditions of multiple sleeps, short naps, or siestas, although these practices face growing challenges from the influence of biomedical sleep models (Steger 2003; Yetish et al. 2015). Broader Aotearoa New Zealand literature shows that Māori and Pacific populations

face an elevated likelihood of experiencing restricted or disordered sleep, often linked to health inequities (Paine et al. 2004; Paine and Gander 2016; McLay et al. 2023).

Furthermore, increased awareness and resurgences of indigenous perspectives and practices are evident concerning seasonal, spiritual, and astronomical rituals. All of which have the ability to influence the patterning of sleep and wake (Whaanga et al. 2022; Lindsay et al. 2022; Haami et al. 2024). This underscores the importance of incorporating te ao Māori perspectives on health when considering models of sleep-related models to maintain culturally appropriate approaches and holistic definitions of sleep and its 'disorders' (Hale et al. 2019; Wilson et al. 2021).

There is limited exploration within the reviewed articles concerning the 'healthy' use of sleep medicine and innovations, which is an aspect of Meadows' (2005) normative sleep embodiment. The literature included in this review provided insights into older people's perceptions against the medicalisation of 'poor sleep' (Crestani et al. 2024) and individuals' experiences with CPAP (Ward et al. 2018). This aligns with works from elsewhere, noting the tendency for sleep apnoea to be more readily medicalised compared to symptoms of insomnia (Williams et al. 2008). Gender-related differences regarding the experience of sleep disorders, symptoms, and help-seeking behaviours have been noted in the international literature (Krishnan and Collop 2006; Meadows et al. 2008; Arber et al. 2009 Meadows et al. 2008). However, the literature in the present scoping review did not delve into such gender differences which suggests an area for future research in AoNZ. Finally, sociologists point to nuanced differences in movements towards the 'personalisation' and 'healthicisation' of sleep in modern society (Hislop and Arber 2003c; Williams and Boden 2004) which are useful considerations for future research on sleep as a social science in AoNZ.

The AoNZ literature illustrates the negotiation of sleep practices at a practical level by exploring the prioritisation of practices within family contexts. Families make decisions about their sleeping arrangements, believing that these choices significantly affect not only the quality of their sleep but also the overall functioning of the family unit (George et al. 2020; Fangupo et al. 2022). This finding relates to the broader sociological sleep field where international research has demonstrated the intricate interplay between sleep, family roles, and overall family functioning. For example, Williams (2005) has highlighted aspects of family roles and relationships on sleep, Venn et al. (2008) has emphasised the gendered nature of sleep disruption (particularly the unequal distribution of nighttime childcare responsibilities in couples with children) and, more recently Zarhin et al. (2022) indicated the unique intimacies of co-sleeping with partners and pets.

In AoNZ research, some articles have explored how sleep practices relate to social roles, particularly gender and sexuality (Nairn 2010; Foley et al. 2013; Galland et al. 2017; Ford et al. 2020), but there is room for further investigation. Studies elsewhere (such as Hislop and Arber 2003a, 2003b, 2003c; or Burgard and Ailshire 2013) provide insights into how sleep practices are intertwined with gender roles, highlighting how social expectations perpetuate disparities in nighttime caregiving and emotional labour. Women tend to bear more responsibilities, resulting in sleep disruptions and reduced sleep quality. When examining the link between sleep practices and sexuality, Nairn (2010) described unspoken heterosexual assumptions in educational settings. While not directly investigating sleep practices in relation to sexuality, previous work

suggests there are unique complexities to be considered, for example surrounding the sleep arrangements for the LGBTQI+ community (Frost and Meyer 2009). Ultimately, previous international work has illustrated the intricate relationships between sleep, gender roles and sexuality, a topic partially explored in the AoNZ literature but deserving of further expansion in future research agendas around sleep experiences and practices.

The reviewed literature includes exploration of individuals' 'experience' of sleep, but this aspect is explored to a lesser degree than the normative and pragmatic embodiments of sleep. There is an emphasis on the significant role of emotions and feelings in shaping sleep practices, particularly for older individuals (Crestani et al. 2024), children (Elder et al. 2023), and those with sleep disorders (Ward et al. 2018). Additionally, the reviewed literature highlights the cultural variation in how people 'experience' sleep (Crestani et al. 2024), which is consistent with the recognition of the cultural significance of night-time, sleeping, and dreaming in Māori culture (Lindsay et al. 2022; Whaanga et al. 2022; Haami et al. 2024). International literature further underscores the distinctions between Indigenous and Western cultures in their experiences and beliefs related to night and dreaming, emphasising the importance of considering cultural diversity in understanding how different groups experience sleep (Glaskin 2011; Airhihenbuwa et al. 2016).

Lastly, the visceral aspects of sleep were addressed in some of the reviewed literature (although again to a lesser extent than other modes). This literature demonstrates the intricate relationship between individuals' perceived sleep needs and their corresponding sleep practices, again with content particularly concerning older individuals (Crestani et al. 2024), parents' perceptions of children's sleep needs (Henderson et al. 2010; Muller et al. 2019b), and individuals with sleep apnoea (Ward et al. 2018). International research has shown that established sleep duration recommendations for different age groups have important health implications when not met (Cappuccio et al. 2010; Watson et al. 2015; Hirshkowitz et al. 2015). Furthermore, research has uncovered diverse perceptions and approaches to managing sleep issues within different groups such as New Zealanders caring for infants (Abel et al. 2015), children (Muller et al. 2019a; Muller et al. 2019b), those of advanced age (Gibson et al. 2020), people with dementia and their carers (Gibson et al. 2014), and older CPAP patients (Gibson et al. 2018). These insights collectively underscore the need to further consider perceived sleep needs among diverse populations within an AoNZ context.

## Limitations

This scoping review has several potential limitations that should be acknowledged. Firstly, the review exclusively focused on published, peer-reviewed empirical literature, omitting grey literature sources. Consequently, this approach may have overlooked important perspectives and findings from non-peer-reviewed sources, potentially limiting the comprehensiveness of the review. Secondly, the search for relevant literature was confined to online databases, well-known repositories for peer-reviewed health-related research. Although this method aligns with the review's scope, it's crucial to recognise that not all pertinent studies may be indexed in these databases. Moreover, studies employing different terminology or conceptual frameworks to assess socio-cultural practices of sleep might have eluded the search strategies employed. Furthermore, it's important to note the absence of quality assessment and critical appraisal of

the included studies. Unlike systematic reviews, scoping reviews do not assess the methodological quality of the studies they incorporate (Grant and Booth 2009). Consequently, the review may encompass studies of varying quality and potential bias, impacting the overall validity of its findings. Lastly, the 93 articles considered on the periphery of the topic were deemed outside of the scope of the present review. These were organised into the subgroups ‘epidemiology,’ ‘sleep regulation,’ and ‘sleep arrangements’, however future work is required to map this literature and their associations with the core studies to comprehensively illustrate the broader research base relevant to this field.

## Conclusion

This synthesis of AoNZ sleep literature highlights works that recognises sleep as a socio-culturally variable practice. There was a particular focus on infant and children’s sleep practices within family contexts and variations in perceptions and practices across Māori, Pacific, and Pākehā populations. However, the analysis and discussion of the reviewed literature suggest that sociological approaches in AoNZ are still at an early stage compared to elsewhere. This is possibly reflective of funding and expertise within AoNZ, where sleep-related research facilities are limited compared to elsewhere. Consequently, there are topics and populations yet to be explored or represented, such as gaps in the consideration of sleep practices across the life cycle, gender differences, the consideration of sexuality; as well the personalisation and medicalisation of sleep in AoNZ. Cultural differences have been recognised in Māori and Pacific cultures but would benefit from further consideration and expansion in areas, such as cross-cultural considerations for time use, spirituality, and sleep experiences. Moreover, considering the ethnic diversity of AoNZ, future research that focuses on other ethnic groups could enhance our understanding of sleep practices within a AoNZ context. Future research could also use qualitative research methodologies to help explore lived experiences and perspectives of some of the key contexts identified in the review. Furthermore, broader social considerations of how sleep is represented and practiced in AoNZ is warranted. For example, through assessing occupational schedules, political influences, media discourses, or artistic expressions. Ultimately, this scoping review lays the foundation for future research that expands the field of sleep as a social and cultural science in AoNZ. Literature adopting sociological approaches is instrumental in advancing our understanding of sleep and its nuances within AoNZ, transcending existing health paradigms and informing appropriate support for sleep health.

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