



SUBMISSION TO

HOUSE STANDING COMMITTEE ON HEALTH, AGED CARE AND SPORT

INQUIRY INTO SLEEP HEALTH AWARENESS IN AUSTRALIA NOVEMBER 2018

1. Introduction to ACCM

ACCM is a peak not-for-profit national community organisation whose mission is to support families, industry and decision makers in building and maintaining a media environment that fosters the health, safety and wellbeing of Australian children.

ACCM membership includes ECA (Early Childhood Australia), ACSSO (Australian Council of State Schools Organisations), APPA (Australian Primary School Principals Association), AHISA (Association of Heads of Independent Schools Australia); AEU (Australian Education Union), Parenting Research Centre, Council of Mothers' Union in Australia, NSW Parents Council, SAPPA (South Australian Primary Principals Association), and other state-based organisations and individuals.

ACCM's core activities include the collection and review of research and information about the impact of media on children's development, and advocacy for the needs and interests of children in relation to the media. ACCM also provides the free child-development-based review services *Know Before You Go* (movies) and *Know Before You Load* (apps).

This submission has been prepared by Ms Barbara Biggins OAM on behalf of the Board of ACCM.

2. Terms of reference

The Standing Committee on Health, Aged Care and Sport will inquire into and report on sleep health awareness in Australia, in particular:

- 1. The potential and known causes, impacts and costs (economic and social) of inadequate sleep and sleep disorders on the community;*
- 2. Access to, support and treatment available for individuals experiencing inadequate sleep and sleep disorders, including those who are: children and adolescents, from culturally and linguistically diverse backgrounds, living in rural, regional and remote areas, Aboriginal and Torres Strait Islander;*
- 3. Education, training and professional development available to healthcare workers in the diagnosis, treatment and management of individuals experiencing inadequate sleep and sleep disorders;*

Promoting healthy choices and stronger voices in children's media

4. *Workplace awareness, practices and assistance available to those who may be impacted by inadequate sleep or sleep disorders, with a focus on: rostering practices for shift workers, heavy-work requirements, and the transport industry as compared to international best practice; and*
5. *Current national research and investment into sleep health and sleeping disorders.*

3. Summary

The early establishment of healthy sleep patterns has great benefits for children's physical and cognitive development. High levels of screen use in early childhood have been shown to impact negatively on such development.

In Australia, parental awareness of the need to manage children's screen use from a very early age in ways that promote such healthy development, is not high. Ongoing education for both children's professionals, and parents about the impacts of screen use in early childhood is vital.

4. ACCM's Comment on Reference 1: and 5.

4.1. *The potential and known causes, impacts and costs (economic and social) of inadequate sleep and sleep disorders on the community*

Based on its reading of current research, ACCM takes the view that Australian children's use of screens and electronic media has the potential to seriously impact on their sleep health. This is of particular concern in regard to preschool children.

In 2017, the Australian Child Health Poll reported that

... almost all Australian teenagers, two-thirds of primary school-aged children and one-third of preschoolers now own their own tablet or smartphone.

As well as owning their own device, three in four teenagers, and one in six primary school-aged children, have their own social media accounts. The minimum age restriction on most social media platforms is 13.

The Director of the Australian Child Health Poll, paediatrician Dr Anthea Rhodes said one of the most significant findings, that directly affected children's health, was the impact of screen use at bedtime on sleep.

"Almost half of children regularly use screen-based devices at bedtime, with one in four children reporting associated sleep problems. Teenagers using screens routinely at bedtime were also more likely to report experiencing online bullying. It's best to have no screen-time an hour before bed and keep screens out of the bedroom, to ensure a better quality of sleep," she said.

The poll also reveals that 50 per cent of toddlers and preschoolers are using a screen-based device without supervision.

"The demands of the modern lifestyle mean a lot of parents are busy, so they use screen use as a digital babysitter. We found that 85 per cent of parents of young

children say they use screens to occupy their kids so they can get things done.” Dr Rhodes said.

“There is little evidence to support the idea that screen use benefits the development of infants and toddlers, but physical playtime and face-to-face contact is proven to be critical to a child’s development. If you do offer screen time to your young child, it’s better if you watch it with them, so you can talk together about what they are seeing and help children to learn from the experience.”

The poll found that

parents reported almost half (43%) of all children are regularly using screen-based devices at bedtime and of those a quarter (26%) are reported to have sleep problems related to screen use. Screen use at bedtime was most frequently reported among teenagers (69%) but also reported in one in three (38%) primary school-aged children and one in four (29%) preschoolers. Use of screen-based devices at bedtime was also associated with increased frequency of other parent reported screen-related problems including bullying, social withdrawal and excessive gaming.

In recent years, a number of international health and medical associations have expressed their findings on the topic of the impact of children’s media use on their sleep. These include the Canadian Paediatric Society (CPS) and the American Academy of Pediatrics (AAP)

The CPS Position statement (2017) found that

The amount of time spent viewing screens before bedtime is associated with an increase in sleep problems for this age group [6][85], and evidence suggests that volume of screen time—rather than content alone—is detrimental to sleep patterns [45][53][86][87]. The presence of any electronic device in a bedroom is associated with fewer minutes of sleep per night, due in part to melatonin suppression [26][85]. It recommends that children should avoid screens for at least 1 hour before bedtime, given the potential for melatonin-suppressing effects.

The AAP (2016) found that

Increased duration of media exposure and the presence of a television, computer, or mobile device in the bedroom in early childhood have been associated with fewer minutes of sleep per night.²⁴

Even infants exposed to screen media in the evening hours show significantly shorter night-time sleep duration than those with no evening screen exposure.²⁵ Mechanisms underlying this association include arousing content²⁶ and suppression of endogenous melatonin by blue light emitted from screens.²⁷

Early Childhood Australia recently released its position statement *Young children and digital technologies* (2018). ECA found that children’s sleep can be affected by screen-based digital technologies. Substantial evidence shows that exposure to television, video games, desktop and/or laptop computers before bedtime results in reduced quality and duration of sleep for children (Carter, Rees, Hale, Bhattacharjee & Paradkar, 2016; Cheung, Bedford, Saez De Urabain, Karmiloff-Smith & Smith, 2017)

In 2017, an extensive review of the literature by Le Bourgeois found that *Recent systematic reviews of the literature reveal that the vast majority of studies find an adverse association between screen-based media consumption and sleep health, primarily via delayed bedtimes and reduced total sleep duration. The underlying mechanisms of these associations likely include the following: (1) time displacement (ie, time spent on screens replaces time spent sleeping and other activities); (2) psychological stimulation based on media content; and (3) the effects of light emitted from devices on circadian timing, sleep physiology, and alertness.*

Further research reviews can be found at Cheung 2017, Carter 2016, Hale 2015, Hysing 2015, and Cain 2010.

4.2 Current national research and investment into sleep health and sleeping disorders.

Australia needs to invest in supporting parents of young children with research based information and strategies for managing early screen use so that children's sleep health and consequent healthy development are promoted and achieved.

As Australian sleep health researcher Prof Sarah Blunden notes *Screen media usage is here to stay. Moderate use, the timing of use and a balance of media/non media activities must be a priority for parents, teachers, school communities and policy makers. Dworak and Walter begin to unravel the complex relationship between sleep media and memory performance. However, the complex natures of this relationship are yet to be fully understood. Questions are rife for future studies which will evaluate these factors in greater detail.* (Blunden, 2015)

Government support for research-review -based education programs for parents about this important topic is much needed. Parents need such programs to counter misleading media headlines such as that given to one individual UK study (with admitted methodological limitations) recently. <https://www.bbc.com/news/technology-46109023>

However, the most recent review of the state of research in the field of media impacts on children's sleep concludes that while the impacts discussed above are widely observed, much more research needs to be done to explore *the mechanisms* by which these impacts occur. (Le Bourgeois, 2017) .

Such research must be a priority if Australia is to effectively promote early childhood health and development.

References

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