

Table A.2.i. Sleep duration and quality and sedentary behaviour, children and adolescents

Questions: What is the association between **sedentary behaviour** and health-related outcomes? Is there a dose response association (total volume and the frequency, duration and intensity of interruption)? Does the association vary by type and domain of sedentary behaviour?

Population: Children aged 5-under 18 years of age

Exposure: Greater volume, decreased frequency, duration or intensity of interruption of sedentary behaviour

Comparison: Lesser volume, increased frequency, duration or intensity of interruption of sedentary behaviour

Outcome: Sleep duration and quality

***Importance:** IMPORTANT

No GRADE Evidence Profiles from Australian 24-Hour Movement Guidelines for Children (5-12 years) and Young People (12-17 years)(26) and **no systematic reviews identified by WHO.**

No. of studies/ Study design No. of participants	Quality Assessment					Summary of findings	Certainty	US PAGAC evidence (27)
	Risk of bias	Inconsistency	Indirectness	Imprecision	Other			
8 Longitudinal studies n = NR	Serious risk of bias ^a	No serious inconsistency	Serious indirectness ^b	Could not be determined ^c	None	Belmon et al. 2019 (5) (45 longitudinal studies; n=NR) ^d : 4/4 studies found that more screen time was associated with shorter sleep duration and 5/5 studies found that more TV watching was associated with shorter sleep duration. 2/2 studies reported no association between computer use/gaming and sleep duration. 1/1 study found no association between screen time and sleep quality or sleep timing.	VERY LOW ^e	Outcome not included

Abbreviations: NR = not reported; SB = sedentary behaviour; TV = television

^aAs determined by WHO

^a Serious risk of bias. All included studies were rated as low quality.

^b Serious indirectness. Measures of SB were limited to screen time and TV watching

^c Precision unable to be determined based on data reported in review.

^d Review included 45 total studies examining the correlates of sleep behaviour in children and adolescents. 8/45 studies examined the association between SB and sleep.

^e The quality of evidence from longitudinal studies was not upgraded from “low” to “moderate” due to serious risk of bias and was downgraded to “very low” from “low” due to serious indirectness and inability to determine imprecision.