



Supporting Information

Supplementary tables

**This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.**

Appendix to: Tooth L, Moss K, Hockey R, Mishra GD. Adherence to Australian screen time recommendations for Australian children aged 0–12 years. *Med J Aust* 2019; doi: 10.5694/mja2.50286.

Table 1. Univariable and multivariable logistic regression analyses of associations between mother, child, and household characteristics and non-adherence to Australian recommendations regarding maximum screen time: [†] odds ratios (with 95% confidence intervals)*

Characteristics	0–12 months		13–24 months		25 months – 4 years		5–12 years	
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Total number of children	146		185		1006		4090	
Mothers								
Age (per year) [†]	1.2 (0.9–1.6)	—	0.9 (0.7–1.1)	—	1.06 (0.9–1.2)	—	1.08 (1.00–1.16)	—
Area of residence								
Major cities	1	—	1	—	1	1	1	1
Inner regional	1.2 (0.5–3.1)	—	1.4 (0.6–3.0)	—	1.4 (0.98–1.9)	1.2 (0.8–1.7)	1.4 (1.1–1.7)	1.3 (0.9–1.7)
Outer regional	0.6 (0.1–2.7)	—	0.8 (0.3–2.3)	—	2.0 (1.2–3.1)	1.9 (1.2–3.1)	1.5 (1.1–2.1)	1.3 (0.9–2.0)
Remote/very remote	1.4 (0.1–16)	—	0.7 (0.0–11)	—	1.2 (0.5–2.9)	1.1 (0.4–2.9)	1.06 (0.5–2.1)	0.8 (0.3–1.7)
Highest level of education								
≤ 12 years	1.8 (0.5–5.7)	2.28 (0.6–9.2)	0.9 (0.3–2.9)	—	2.0 (1.2–3.3)	1.8 (0.99–3.1)	2.1 (1.6–2.9)	1.3 (0.9–1.9)
Trade/certificate/diploma	2.9 (1.1–7.8)	1.82 (0.6–5.8)	0.9 (0.4–1.9)	—	1.9 (1.3–2.7)	1.6 (1.04–2.4)	1.8 (1.4–2.3)	1.4 (1.0–1.8)
University	1	1	1	—	1	1	1	1
Body mass index								
Healthy/underweight	1	—	1	—	1	1	1	1
Overweight	2.0 (0.9–4.9)	—	0.8 (0.4–1.5)	—	1.4 (1.03–1.9)	1.2 (0.9–1.8)	1.4 (1.03–1.8)	1.09 (0.8–1.4)
Obese	2.1 (0.7–5.8)	—	1.4 (0.6–3.2)	—	2.3 (1.6–3.3)	1.7 (1.1–2.5)	1.8 (1.4–2.4)	1.00 (0.7–1.4)
Workforce participation								
Part-time	1	—	1	1	1	—	1	—
Full-time	0.9 (0.4–2.1)	—	3.0 (1.4–6.8)	2.7 (1.1–6.2)	1.1 (0.8–1.5)	—	1.1 (0.9–1.4)	—
Not working	1.8 (0.6–5.2)	—	2.6 (1.3–5.4)	2.7 (1.3–5.8)	1.2 (0.8–1.6)	—	1.4 (0.9–1.9)	—
Ability to manage on available income								
It is difficult or impossible	1.36 (0.6–3.0)	—	1.57 (0.8–3.0)	—	1.6 (1.2–2.1)	1.4 (1.0–1.9)	1.6 (1.3–2.0)	1.4 (1.1–1.7)
It is easy/not too bad	1	—	1	—	1	1	1	1
Passive leisure [‡]								
≤ 15 hours/week	1	—	1	—	1	1	1	1
> 15 hours/week	1.04 (0.5–2.4)	—	1.39 (0.7–2.7)	—	2.1 (1.5–2.9)	2.0 (1.3–2.9)	2.5 (1.9–3.2)	2.1 (1.6–2.7)

Characteristics	0–12 months		13–24 months		25 months – 4 years		5–12 years	
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Feel you have time on your hands you don't know what to do with								
Frequently	4.2 (1.7–10)	4.1 (1.5–11)	1.3 (0.5–3.1)	—	1.1 (0.8–1.7)	—	1.6 (1.2–2.1)	1.2 (0.9–1.7)
Never/rarely	1	1	1		1		1	1
Feel rushed, pressured, too busy								
Frequently	1	—	1	—	1	—	1	1
Never/rarely	1.9 (0.7–4.8)		1.7 (0.7–4.1)		0.8 (0.5–1.3)		2.0 (1.3–3.1)	1.6 (1.1–2.6)
Number of children living with mother								
1	1.9 (0.6–5.3)	—	3.6 (1.5–8.5)	2.6 (1.03–6.7)	1.01 (0.7–1.5)	—	2.1 (1.5–2.9)	1.6 (1.1–2.4)
2	1.4 (0.5–3.8)		2.9(1.4–6.1)	2.9 (1.3–6.5)	1.2 (0.9–1.6)		1.1 (0.9–1.4)	1.09 (0.8–1.4)
3 or more	1		1	1	1		1	1
Children								
Age (0–24 months: per month; 2–12 years: per 6 months)	1.2 (1.1–1.4)	1.2 (1.1–1.4)	1.09 (0.9–1.2)	—	1.08 (1.02–1.2)	1.09 (1.02–1.2)	1.05 (1.03–1.06)	1.02 (1.001–1.04)
Sex								
Girl	1		1		1		1	1
Boy	0.6 (0.3–1.3)	—	0.7 (0.4–1.3)	—	0.90 (0.7–1.1)	—	1.4 (1.2–1.5)	1.4 (1.2–1.6)
Duration of breastfeeding [§]								
6 months or less	0.8 (0.4–1.7)	—	1.6 (0.8–3.4)	—	1.4 (1.05–1.9)	0.93 (0.6–1.4)	1.3 (1.2–1.6)	1.1 (0.9–1.3)
More than 6 months	1		1		1	1	1	1
Attends child care								
Yes	2.1 (0.94–4.7)	—	NEP	—	0.8 (0.6–1.1)	—	0.8 (0.7–0.98)	0.95 (0.8–1.2)
No	1				1		1	1
Reading to child								
10 min/day or less	0.3 (0.1–1.0)	—	1.4 (0.6–2.8)	—	1.4 (0.9–2.1)	—	1.6 (1.2–1.9)	1.4 (1.1–1.9)
11–20 min/day	0.4 (0.1–1.6)		0.92 (0.4–1.9)		1.03 (0.7–1.4)		1.01 (0.8–1.3)	1.1 (0.8–1.5)
More than 20 min/day	1		1		1		1	1
Reading to child: age at start (per month)	1.03 (0.9–1.2)	—	1.02 (0.9–1.1)	—	1.04 (1.01–1.07)	1.05 (1.004–1.1)	1.01 (0.9–1.0)	—

Characteristics	0–12 months		13–24 months		25 months – 4 years		5–12 years	
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Children's bedrooms (contents)								
Books								
No	0.5 (0.3–1.2)	—	0.5 (0.2–1.8)	—	0.8 (0.5–1.1)	—	0.8 (0.5–1.1)	—
Yes	1		1		1		1	
Television	NA	NA	NA	NA	NA	NA		
No							1	1
Yes							2.6 (1.9–3.5)	1.3 (0.8–1.9)
Computer or electronic games	NA	NA	NA	NA	NA	NA		
No							1	1
Yes							2.7 (2.0–3.6)	1.7 (1.1–2.6)
Mobile electronic devices								
No					1	1	1	1
Yes					1.9 (1.1–3.1)	1.12 (0.7–1.9)	2.2 (1.9–2.7)	1.6 (1.2–2.0)

NA = not applicable (insufficient number of children had these items in their bedrooms to allow analysis); NEP = non-estimable parameter.

* Non-adherence: not adherent to recommendations on weekdays and weekends. † At survey 7. ‡ Watching TV, music, reading or relaxation. § If child still breastfeeding, value set to child's current age. **Bold type**: 95% confidence interval does not include 1.0.

The Australian recommendations¹ include "5 years of age" in two categories (2–5 and 5–12 years); to avoid double counting, we applied cut-offs of 25 months to 4 years and 5–12 years, consistent with Canadian 24 hour Movement Guidelines² and World Health Organisation Guidelines on Physical Activity, Sedentary Behaviour and Sleep.³

Table 2. Adherence of children aged 0–12 years to Australian recommendations regarding maximum screen time,¹ by mother, child, and household characteristics: odds ratios (with 95% confidence intervals)*

	0–12 months		13–24 months		25 months – 4 years		5–12 years	
	Always or sometimes adherent	Never adherent	Always or sometimes adherent	Never adherent	Always or sometimes adherent	Never adherent	Always or sometimes adherent	Never adherent
Total number of children	146		185		1006		4090	
Number of children	105 (72%)	41 (28%)	72 (39%)	113 (61%)	534 (53%)	472 (47%)	3475 (85%)	615 (15%)
Mother characteristics								
Age (years), mean (SD) [†]	38.3 (1.4)	38.7 (1.5)	38.5 (1.3)	38.3 (1.2)	38.7 (1.4)	38.8 (1.5)	39.3 (1.4)	39.1 (1.4)
Area of residence								
Major cities	74 (71%)	28 (72%)	50 (71%)	76 (70%)	370 (73%)	297 (65%)	1935 (59%)	287 (50%)
Inner regional	18 (17%)	8 (20%)	12 (17%)	23 (21%)	91 (18%)	94 (20%)	870 (27%)	180 (32%)
Outer regional	10 (10%)	2 (5%)	7 (10%)	8 (7%)	38 (7%)	58 (13%)	379 (11%)	87 (15%)
Remote/very remote	2 (2%)	1 (3%)	1 (1%)	1 (1%)	11 (2%)	10 (2%)	99 (3%)	14 (2%)
Highest level of education								
≤ 12 years	10 (10%)	5 (13%)	5 (7%)	7 (7%)	33 (7%)	51 (11%)	358 (11%)	100 (18%)
Trade/certificate/diploma	11 (11%)	10 (26%)	13 (19%)	19 (18%)	69 (14%)	101 (22%)	683 (22%)	163 (30%)
University	81 (79%)	23 (60%)	51 (74%)	80 (76%)	388 (79%)	297 (66%)	2123 (67%)	287 (52%)
Body mass index								
Healthy/underweight	63 (62%)	16 (42%)	33 (47%)	51 (47%)	302 (61%)	215 (47%)	1726 (54%)	242 (43%)
Overweight	25 (24%)	14 (37%)	24 (34%)	29 (27%)	127 (25%)	129 (28%)	864 (27%)	164 (29%)
Obese	15 (15%)	8 (21%)	13 (19%)	28 (26%)	70 (14%)	111 (24%)	623 (19%)	151 (27%)
Workforce participation								
Full-time	13 (13%)	8 (21%)	24 (34%)	49 (45%)	114 (23%)	114 (25%)	373 (11%)	87 (16%)
Part-time	44 (43%)	16 (42%)	31 (44%)	24 (22%)	263 (52%)	228 (50%)	1712 (53%)	275 (49%)
Not working	66 (45%)	14 (37%)	15 (21%)	35 (32%)	128 (25%)	114 (25%)	1149 (35%)	196 (35%)
Ability to manage on available income								
It is difficult or impossible	29 (28%)	14 (37%)	21 (30%)	44 (42%)	177 (36%)	217 (48%)	1257 (40%)	282 (51%)
It is easy/not too bad	73 (72%)	24 (63%)	48 (70%)	62 (58%)	313 (64%)	233 (52%)	1916 (60%)	269 (49%)
Passive leisure [‡]								
≤ 15 hours/week	74 (72%)	26 (68%)	51 (73%)	70 (65%)	434 (86%)	337 (74%)	2668 (83%)	364 (65%)
> 15 hours/week	30 (29%)	12 (32%)	19 (27%)	37 (35%)	71 (14%)	116 (26%)	563 (17%)	194 (35%)

Feel you have time on your hands you don't know what to do with								
Frequently	12 (12%)	14 (37%)	9 (13%)	18 (17%)	448 (89%)	397 (87%)	446 (14%)	118 (21%)
Never/rarely	92 (88%)	24 (63%)	61 (87%)	90 (83%)	57 (11%)	59 (13%)	2780 (86%)	442 (79%)
Feel rushed, pressured, too busy								
Frequently	89 (86%)	29 (76%)	62 (89%)	89 (82%)	470 (93%)	430 (94%)	3086 (95%)	508 (91%)
Never/rarely	15 (14%)	9 (24%)	8 (11%)	19 (18%)	35 (7%)	26 (6%)	150 (5%)	52 (9%)
Number of children living with mother								
1	28 (27%)	14 (34%)	14 (19%)	33 (30%)	84 (16%)	65 (14%)	190 (5%)	64 (11%)
2	50 (48%)	19 (46%)	30 (42%)	60 (54%)	254 (48%)	254 (54%)	1770 (52%)	314 (52%)
3 or more	26 (25%)	8 (20%)	28 (39%)	19 (17%)	188 (36%)	148 (32%)	1467 (43%)	224 (37%)
Child characteristics								
Age (years), mean (SD)	5.7 (3.8)	8.5 (2.6)	18.3 (4.1)	19.1 (3.1)	3.11 (0.8)	3.14 (0.8)	8.3 (2.2)	8.9 (2.3)
Sex								
Boy	60 (57%)	18 (44%)	41 (57%)	58 (51%)	294 (55%)	251 (53%)	1735 (50%)	361 (59%)
Girl	45 (43%)	23 (56%)	31 (43%)	55 (49%)	239 (45%)	221 (47%)	1737 (50%)	254 (41%)
Duration of breastfeeding [§]								
6 months or less	64 (62%)	22 (56%)	15 (21%)	35 (33%)	108 (21%)	135 (30%)	1004 (30%)	230 (40%)
More than 6 months	39 (38%)	17 (44%)	56 (79%)	70 (67%)	404 (79%)	320 (70%)	2290 (70%)	342 (60%)
Attends child care								
Yes	21 (20%)	15 (37%)	46 (64%)	82 (75%)	416 (78%)	350 (74%)	1484 (43%)	226 (37%)
No	82 (80%)	26 (63%)	26 (36%)	29 (26%)	114 (21%)	120 (25%)	1959 (57%)	383 (63%)
Reading to child								
10 minutes/day or less	75 (74%)	26 (63%)	23 (32%)	45 (40%)	97 (18%)	116 (25%)	1589 (46%)	345 (57%)
11–20 minutes/day	19 (19%)	8 (20%)	26 (36%)	35 (31%)	188 (35%)	160 (34%)	1027 (30%)	143 (24%)
More than 20 minutes/day	7 (7%)	7 (17%)	23 (32%)	33 (29%)	244 (46%)	194 (41%)	818 (24%)	119 (20%)
Reading to child: age at start (months), mean (SD)	1.8 (2.4)	2.0 (2.7)	3.01 (3.1)	3.39 (4.1)	3.3 (5.1)	4.0 (5.3)	4.8 (9.3)	5.9 (9.4)

Child's bedroom (contents)								
Books								
No	43 (41%)	12 (29%)	13 (18%)	18 (16%)	62 (12%)	40 (8%)	259 (7%)	33 (5%)
Yes	61 (59%)	29 (71%)	59 (82%)	95 (84%)	469 (88%)	431 (92%)	3203 (92%)	576 (95%)
Television								
No	NA	NA	NA	NA	NA	NA	3246 (94%)	505 (83%)
Yes							216 (6%)	104 (17%)
Computer or electronic games								
No	NA	NA	NA	NA	NA	NA	3297 (95%)	526 (86%)
Yes							165 (5%)	83 (14%)
Mobile electronic devices								
No					499 (94%)	422 (90%)	2304 (66%)	277 (45%)
Yes					32 (6%)	49 (10%)	1158 (33%)	332 (54%)

NA = not applicable (insufficient number of children had these items in their bedrooms to allow analysis); SD = standard deviation.

* Non-adherent: not adherent to recommendations on weekdays and weekends; always or sometimes adherent: adherent to recommendations either on weekdays, weekends, or both.

† At survey 7. ‡ Watching TV, music, reading or relaxation. § If child still breastfeeding, value set to child's current age.

References

- 1 Australian Department of Health. Australia's Physical Activity and Sedentary Behaviour Guidelines and the Australian 24-Hour Movement Guidelines. Updated Apr 2019. <http://www.health.gov.au/internet/main/publishing.nsf/content/health-pubhlth-strateg-phys-act-guidelines#npa05> (viewed June 2019).
- 2 Tremblay M, Chaput J, Adamo K, et al. Canadian 24-hour movement guidelines for the early years (0-4 years): an integration of physical activity, sedentary behaviour and sleep. BMC Public Health 2017; 17 (Suppl 5): 874.
- 3 World Health Organization. Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age. Geneva: WHO, 2019. <https://apps.who.int/iris/handle/10665/311664> (viewed July 2019).