

SUPPLEMENTAL MATERIAL

Supplemental material 1. Crude and adjusted associations between predictors and anxiety (SCAS-S) and health-related quality of life (Kidsscreen-10) were analyzed with multi-level mixed linear regression models												
Model	Anxiety (SCAS-S)						Health-related quality of life (Kidsscreen-10)					
	Crude			Adjusted			Crude			Adjusted		
	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta
1. MVPA												
1.1 MVPA whole week	854	-0.058 (-0.091, -0.025)	-0.138	831	-0.035 (-0.062, -0.007)	-0.082	873	0.044 (0.028, 0.060)	0.157	848	0.036 (0.021, 0.051)	0.130
1.2 MVPA leisure time (weekdays)	1000	-0.072 (-0.106, -0.038)	-0.136	971	-0.062 (-0.089, -0.034)	-0.118	1023	0.049 (0.029, 0.068)	0.137	991	0.043 (0.025, 0.061)	0.122
1.3 MVPA leisure time (weekend)	866	-0.017 (-0.038, 0.004)	-0.053	843	-0.011 (-0.030, 0.010)	-0.033	886	0.030 (0.019, 0.041)	0.144	861	0.028 (0.017, 0.039)	0.135
1.4 MVPA school time	1000	-0.095 (-0.147, -0.043)	-0.135	971	-0.006 (-0.047, 0.036)	-0.008	1023	0.056 (0.022, 0.090)	0.117	991	0.019 (-0.013, 0.052)	0.052
2. SED												
2.1 SED whole week	854	0.009 (0.002, 0.017)	0.077	831	0.011 (-0.004, 0.026)	0.089	873	-0.009 (-0.016, -0.002)	-0.113	848	-0.021 (-0.029, -0.012)	-0.261
2.2 SED bouts (10 min) whole week	854	0.008 (-0.001, 0.017)	0.064	831	0.000 (-0.010, 0.010)	0.001	873	-0.013 (-0.018, -0.007)	-0.155	848	-0.011 (-0.016, -0.005)	-0.130
2.3 SED leisure time (weekdays)	1000	0.009 (0.004, 0.015)	0.081	971	0.026 (0.011, 0.041)	0.228	1023	-0.005 (-0.009, 0.000)	-0.063	991	-0.027 (-0.040, -0.015)	-0.358
2.4 SED leisure time (weekend)	866	-0.003 (-0.009, 0.002)	-0.036	843	0.004 (-0.007, 0.015)	0.042	886	-0.004 (-0.008, 0.001)	-0.056	861	-0.014 (-0.020, -0.008)	-0.230
2.5 SED school	1000	0.024 (0.009, 0.039)	0.112	971	-0.009 (-0.030, 0.011)	-0.045	1023	-0.013 (-0.025, -0.001)	-0.091	991	-0.011 (-0.026, 0.004)	-0.079
3. Organized sports												
Did not participate	291	ref		209	ref		296	ref		213	ref	
Participated	750	-1.589 (-2.743, -0.435)		604	-0.963 (-2.07, 0.141)		766	0.855 (0.036, 1.674)		617	0.407 (-0.554, 1.367)	
4. Screen time weekday												
≤2 hours	343	ref		329	ref		348	ref		333	ref	
3-4 hours	492	0.388 (-0.599, 1.375)		483	0.407 (-0.481, 1.295)		503	-0.827 (-1.529, -0.124)		493	-1.007 (-1.591, -0.423)	
≥5 hours	235	2.626 (1.135, 4.117)		226	2.409 (1.083, 3.735)		242	-2.521 (-1.529, -0.125)		232	-2.633 (-3.381, -1.885)	
5. Screen time weekend												
≤2 hours	169	ref		159	ref		174	ref		164	ref	
3-4 hours	392	1.302 (0.132, 2.471)		383	0.461 (-0.609, 1.531)		402	-0.594 (-1.474, 0.286)		391	-0.261 (-1.078, 0.555)	
≥5 hours	507	2.368 (1.236, 3.501)		495	1.896 (0.881, 2.912)		515	-1.607 (-2.582, -0.633)		502	-1.485 (-2.385, -0.585)	

B unstandardized coefficients, beta standardized coefficients, CI confidence interval

MVPA Moderate-to-vigorous physical activity, SED sedentary time, SCAS-S Short version of the Spence Children's Anxiety Scale

The adjusted models have been controlled for gender and parental education. Further, Model 3 were adjusted for time spent in MVPA, and Models 1-3 were adjusted for accelerometer wear-time

Supplemental material 2. Crude associations between predictors and anxiety (SCAS-S) and health-related quality of life (Kidsscreen-10) were analyzed with multi-level mixed linear regression models stratified by gender		
Model	Anxiety (SCAS-S)	Health-related quality of life (Kidsscreen-10)

	Girls			Boys			Girls			Boys		
	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta	n	Unstandardized B (95% CI)	Standardized beta
1. MVPA												
1.1 MVPA whole week	461	-0.043 (-0.079, -0.007)	-0.095	393	-0.026 (-0.060, 0.008)	-0.078	473	0.027 (0.004, 0.05)	0.093	400	0.044 (0.020, 0.069)	0.171
1.2 MVPA leisure time (weekdays)	517	-0.096 (-0.139, -0.055)	-0.169	483	-0.037 (-0.067, -0.007)	-0.090	531	0.049 (0.023, 0.07)	0.132	492	0.042 (0.018, 0.067)	0.130
1.3 MVPA leisure time (weekend)	468	-0.021 (-0.049, 0.006)	-0.063	398	-0.003 (-0.025, 0.019)	-0.011	480	0.021 (-0.001, 0.043)	0.095	406	0.036 (0.021, 0.050)	0.189
1.4 MVPA school time	517	-0.012 (-0.080, 0.056)	-0.015	483	0.004 (-0.047, 0.054)	0.007	531	0.003 (-0.042, 0.048)	0.005	492	0.028 (-0.009, 0.066)	0.0637
2. SED												
2.1 SED whole week	461	0.000 (-0.008, 0.010)	0.004	393	0.006 (-0.002, 0.014)	0.063	473	-0.004 (-0.012, 0.003)	-0.057	400	-0.009 (-0.018, 0.000)	-0.119
2.2 SED bouts (10 min) whole week	461	-0.002 (-0.014, 0.009)	-0.017	393	0.003 (-0.008, 0.014)	0.028	473	-0.010 (-0.016, -0.003)	-0.122	400	-0.0100 (-0.018, -0.002)	-0.120
2.3 SED leisure time (weekdays)	517	0.001 (-0.007, 0.010)	0.010	483	0.008 (0.001, 0.014)	0.087	531	-0.003 (-0.009, -0.004)	-0.033	492	-0.004 (-0.010, 0.003)	-0.052
2.4 SED leisure time (weekend)	468	-0.003 (-0.011, 0.004)	-0.033	398	-0.000 (-0.008, 0.008)	-0.002	480	0.004 (-0.005, 0.006)	0.006	406	-0.009 (-0.014, -0.004)	-0.155
2.5 SED school	517	0.009 (-0.007, 0.025)	0.042	483	-0.010 (-0.027, 0.006)	-0.056	531	0.000 (-0.016, 0.016)	-0.000	492	-0.005 (-0.020, 0.010)	-0.034
3. Organized sports												
Did not participate	152	ref		139	ref		155	ref		141	ref	
Participated	376	-0.914 (-2.528, 0.700)		374	-2.009 (-3.445, -0.572)		386	0.132 (-1.110, 1.375)		380	1.358 (0.133, 2.58)	
4. Screen time weekday												
≤2 hours	168	ref		175	ref		173	ref		175	ref	
3-4 hours	257	0.550 (-0.984, 2.084)		235	0.014 (-1.135, 1.162)		261	-1.095 (-19.976, -0.213)		242	-0.587 (-1.546, 0.372)	
≥5 hours	120	3.856 (1.916, 5.796)		115	1.190 (-0.143, 2.523)		126	-3.190 (-4.292, -2.089)		116	-1.609 (-2.845, -0.372)	
5. Screen time weekend												
≤2 hours	546	ref		104	ref		69	ref		105	ref	
3-4 hours	65	1.126 (-1.097, 3.350)		168	-0.163 (-1.719, 1.393)		232	-0.903 (-2.388, 0.582)		170	0.0449 (-1.504, 1.594)	
≥5 hours	257	2.931 (0.924, 4.938)		250	0.992 (-0.222, 2.206)		260	-2.530 (-4.036, -1.025)		255	-0.615 (-2.100, 0.870)	

B unstandardized coefficients, beta standardized coefficients, CI confidence interval

MVPA Moderate-to-vigorous physical activity, SED sedentary time, SCAS-S Short version of the Spence Children's Anxiety Scale

Supplemental material 3. Unadjusted mean SCAS-S and Kidsscreen-10 score and SD for students in the highest and lowest groups of MVPA and screen time

	Anxiety (SCAS-S)				Health-related quality of life (Kidsscreen-10)			
	Girls		Boys		Girls		Boys	
	n	mean ± SD	n	mean ± SD	n	mean ± SD	n	mean ± SD
Screen time								
Weekday								
≤2 hours	168	15.46±8.37	175	10.29±6.60	173	39.62±5.29	175	41.70±5.22
≥5 hours	120	19.33±8.24	115	11.56±7.25	126	36.40±5.60	116	39.78±5.78
Weekend								
≤2 hours	65	14.71±7.19	104	10.04±6.73	69	39.96±5.34	105	41.34±5.77
≥5 hours	257	17.69±8.43	250	11.21±6.84	260	37.35±5.19	255	40.59±5.44
Physical activity								
MVPA lowest tertile	157	17.07±8.77	128	12.06±7.48	160	37.83±5.25	135	39.65±5.94
MVPA highest tertile	152	15.65±6.98	130	9.89±6.32	157	39.20±4.58	130	42.32±4.47
Organized sports								
Participated	376	16.31±7.67	374	10.02±6.28	386	38.41±5.01	380	41.41±4.90
Did not participate	152	17.28±8.61	139	12.06±7.01	155	38.35±5.59	141	39.97±5.77

MVPA moderate-to-vigorous-physical activity, SED sedentary time, SCAS-S Short version of the Spence Children's Anxiety Scale