

**Additional file 5**

Relative risk ratio (RRR) of mid back pain according to screen-based activity and physical activity, respectively, among the 45,555 pre-adolescents included in the study population (The Danish National Birth Cohort, born 1996-2003)

	Model 1 <sup>ab</sup>			Model 2 <sup>bc</sup>		Model 3 <sup>bd</sup>	
	No. of cases Moderate/Severe	Moderate pain RRR (95% CI)	Severe pain RRR (95% CI)	Moderate pain RRR (95% CI)	Severe pain RRR (95% CI)	Moderate pain RRR (95% CI)	Severe pain RRR (95% CI)
SBA, Girls (h/day)							
< 2	797/249	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 to < 4	1,619/556	1.12 (1.03-1.23)	1.24 (1.06-1.44)	1.11 (1.02-1.22)	1.22 (1.05-1.42)	1.09 (1.00-1.20)	1.18 (1.01-1.37)
4 to < 6	671/235	1.42 (1.27-1.59)	1.59 (1.32-1.91)	1.38 (1.24-1.55)	1.54 (1.28-1.85)	1.33 (1.19-1.49)	1.42 (1.18-1.71)
≥ 6	278/140	1.82 (1.56-2.12)	2.93 (2.36-3.64)	1.75 (1.51-2.04)	2.78 (2.23-3.47)	1.65 (1.42-1.93)	2.45 (1.96-3.06)
SBA, Boys (h/day)							
< 2	397/86	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 to < 4	1,246/288	1.16 (1.03-1.31)	1.24 (0.97-1.59)	1.15 (1.02-1.30)	1.23 (0.96-1.57)	1.14 (1.01-1.29)	1.21 (0.95-1.55)
4 to < 6	777/189	1.43 (1.26-1.63)	1.60 (1.24-2.08)	1.39 (1.22-1.58)	1.56 (1.20-2.03)	1.36 (1.19-1.55)	1.49 (1.15-1.93)
≥ 6	382/150	1.57 (1.35-1.83)	2.85 (2.17-3.74)	1.50 (1.29-1.75)	2.71 (2.06-3.56)	1.44 (1.23-1.68)	2.47 (1.88-3.25)
Physical activity behavior							
Inactive	796/298	1.33 (1.22-1.45)	1.65 (1.43-1.89)	1.21 (1.11-1.33)	1.32 (1.14-1.53)	1.18 (1.08-1.29)	1.25 (1.08-1.44)
Lightly active	2,927/859	1.21 (1.14-1.28)	1.17 (1.05-1.30)	1.17 (1.10-1.24)	1.09 (0.98-1.21)	1.15 (1.08-1.22)	1.04 (0.94-1.16)
Moderately active	2,185/662	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Vigorously active	259/74	1.03 (0.90-1.18)	0.97 (0.76-1.14)	1.05 (0.91-1.20)	1.01 (0.79-1.30)	1.05 (0.91-1.20)	1.01 (0.79-1.29)

a Crude model (SBA was analyzed as the interaction between SBA and child's sex)

b Reference categories: For explanatory variables; less than 2 hours used on SBA daily and being moderately physically active, and for outcome variables; not having reported moderate or severe mid back pain in DNBC-11 (No pain)

c Simultaneously modeled for the interaction between SBA and child's sex, and physical activity behavior, but without further adjustments.

d Adjusted for child's age, parity, family type, parental education, household income and simultaneously modeled for the interaction between SBA and child's sex, and physical activity behavior

Test of interaction between SBA and physical activity: P = 0.029