

Table 2 | Intervention characteristics, main results and results of the quality assessment of the included studies

School setting												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Haerens et al. (2007) [23] Belgium	CRCT	n = 281 10 schools mean age 13,2 (SD 0,7) 48% boys	1 hour - baseline - 3 months after intervention	- total PA level (TPA) (min/day): school related PA index (school PA) (active transportation + extracurricular activities) + leisure time sport index (LTS) and leisure time active transport index (LTAT)	total PA: ↔ school PA: + LTS: ↔ LTAT: ↔	***	***	***	**	***	***	***
Verstraete et al. (2006) [31] Belgium	CRCT	n = 249 7 schools I: mean age 10.8 (SD 0.6) (final sample) C: mean age 10.9 (SD 0.7) (final sample) 49% boys	3 months - baseline - 3 months after baseline	- total activity counts: light (LPA), moderate (MPA) and vigorous intensity activity (VPA) during morning recess and lunch break (% of recess time and lunch break) - MVPA engagement: moderate + vigorous intensity activity (% of recess time and lunch break)	morning recess: LPA: + (♀) MPA:+++ (♀) VPA: ↔ MVPA:++ (♀) lunch break LPA: +++ MPA: +++ VPA: +++ MVPA: +++	**	***	*	**	***	***	**
Hill et al. (2007) [28] UK	CRCT	n = 620 22 classes 1 school mean age (final sample) 16.97 (SD 1,4) 49% boys	20 min. - baseline - 3 weeks after intervention	- average number of exercise sessions for at least 30 min/week during or after school without PE	exercise sessions: ++ in L, LQ, LI	**	***	**	**	*	***	**
Tsorbatzoudis (2005) [30] Greece	CT	n = 366 4 schools mean age 14,2 (SD 0,69) 48% boys	12 weeks (36 PE lessons) - baseline A. end of the intervention B. 4-6 weeks after intervention (subsample)	- exercise habits (score)	A. exercise habits: +++ B. exercise habits: ↔	**	***	**	**	***	*	**
Lubans and Sylva (2006) [38] UK 'Lifetime Activity Program'	RCT	n = 78 individuals who elected to participate in an unit on health and fitness rather than the traditional team sports offered at school mean age 16,7 (SD 0,5); 38,5% boys	10 weeks (2x/week) - baseline A. end of intervention B. 3 months after intervention	- moderate to vigorous PA (min/week) of 20 min. or longer (MVPA)	A. MVPA: +++ B. MVPA: ↔	*	***	***	*	***	***	*
Murphy et al. (2006) [40] Ireland	CRCT	n = 90 sedentary girls 5 schools mean age 16,3 (SD 0,6)	6 months - baseline A. end of intervention B. 1 month after intervention (subsample, process evaluation)	- daily PA: duration (hours/week) and intensity of PA. (above 13 on the BORG RPE scale: moderate to vigorous PA)	A. in both I groups: (P-value NR) duration: (+) intensity: (+)	**	***	*	**	*	***	*
Lindberg et al. (2006) [37] Sweden 'An adventure with Pelle Pump'	Cross sectional	n = 1369 mean age I:12,5 (SD 0,60) C: 12,5 (SD 0,50) 50% boys	3 months - after 2 year program	- PA index (score)	PA index: ↔	**	*	*	***	**	***	*
Chatzisarantis and Hagger (2005) [33] UK	RCT	n = 83 2 schools mean age 14,60 (SD 0,47) 49,5% boys	5 min - baseline - after 5 weeks	- PA during leisure time: frequency of mild, moderate and vigorous PA in the last 5 weeks	PA participation: ↔	**	***	**	*	***	*	*
Digelidis et al. (2003) [34] Greece	CT	n = 783 4 I, 19 C schools I: mean age 11,88 (SD 0,60); 50% boys C: mean age 12,14 (SD 0,77); 47% boys	one school year (3x/week, 45 min) - baseline A. end of intervention B. 10 months after intervention	- behaviour: frequency of regular exercise in the previous month: regular exercise: intensive out of school exercise at least 2x/week for 1 hour or more	A. PA behaviour: ↔ B. PA behaviour: ↔	*	***	**	*	*	*	*

School setting with involvement of family												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Harrison et al. (2006) [24] Ireland 'Switch off – get active'	CT	n = 312 9 schools in areas of social disadvantage mean age 10,2 (SD 0,70) 57% boys	16 weeks (10 lessons/30 min) - baseline - end of intervention	- moderate to vigorous PA (MVPA): principal PA + intensity (30 min blocks/day)	MVPA: +	**	***	***	**	***	***	***
Haerens et al. (2006, 2007) [27,43] Belgium	CRCT	n = 2840 15 schools mean age 13,1 (SD 0,8) 63% boys 32.5% of higher SES	2 school years - baseline A. end of first school year B. end of intervention	- total PA level (TPA) (min/day): school-related PA index (school PA) + leisure time PA index (LTPA) (leisure time sport (LTS) + leisure time active transportation (LTAT)) <i>Subsample</i> - accelerometer data: sedentary, PA of light intensity (LPA) and PA of moderate to vigorous intensity (MVPA) (min/day)	A. School PA: + (I and I+P) LTAT: +++ (♀) (I) TPA: ↔ LTS: ↔ Accelerometer data: LPA: + (I and I+P) MVPA: + (I+P) meeting guidelines: ↔ B. School PA: + (♂) LTPA: ↔ Accelerometer data sedentary: ↔ LPA: +++ (♂); + (♀) MVPA: (+ ♂trend)	**	***	***	**	***	**	**
Christodoulos et al. (2006) [26] Greece	CRCT	n = 78 2 schools I: mean age 11,2 (SD 0,40) C: mean age 11,2 (SD 0,30) 54% boys	1 school year (two 45 min PE classes /week) - baseline - end of intervention	- duration, frequency and total time spent on total moderate to vigorous PA and organised moderate to vigorous PA: weekly leisure supervised activities out of school (hours/week TMVPA, OMVPA) - % meeting the guidelines: 60 min/day of moderate to vigorous PA	OMVPA: + TMVPA: ↔ (trend) meeting the guidelines: +	**	***	***	**	***	*	**

School setting with involvement of family and community												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Simon et al. (2004-2006) [29,44] France 'ICAPS'	CRCT	n = 954 8 schools mean age 11,7(SD 0,6) 46,3% I; 51,8% C boys.	4 school years - baseline - 6 months of intervention	- leisure organised PA in and outside sport clubs (%)	LOPA: ++	***	***	***	*	***	***	**
Jurg et al. (2006) [35] The Netherlands 'JUMP-in'	CT	n = 510 6 schools (4 I, 2C) 49% I, 48% C boys 9-12 years I: 71% ,C: 94% foreign ethnicity;	1 school year - baseline - end of intervention	- total PA score: min/day at least moderately active: daily activity score: PA score in moderate active min/day (MET-score ≥ 5) + sports score: total amount of min/day organized sports. - meeting the guidelines: 60 min/day of moderate PA	total PA score: + grade 4-5: ↔ grade 6: +++ meeting the guidelines: + grade 4-5: ↔ grade 6: +++	**	***	***	*	*	*	*
Moon et al. (1999) [39] UK 'Wessex Healthy School award Scheme'	two group pre-post design	n = 16 schools; pupil numbers ranged from 440 to 1486 mean age NR 11-16 years % boys NR	4 school terms (15 months) - baseline - end of intervention	- PA behaviour : % taking part in sports at school (not PE) once or more a week	PA behaviour: ↔	**	**	*	*	*	**	*

Community with involvement of schools												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Baxter et al. (1997) [25] UK 'Action Heart'	CT	1991: n = 2685 1994: n = 3224 4 schools 11 and 14 years (years 7 and 10)	3 years - baseline - end of intervention	- exercise: % of the students that exercise 3 or more times weekly	exercise: ↔ (I increased with 4%, C remained stable, p-value NR)	**	***	**	**	**	***	**
Primary care												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Ortega-Sanchez et al. (2004) [41] Spain	RCT	n = 448 mean age 17,0 (SD 2,4) 58 % boys	3 x 5-10 min (baseline, 6 and 12 month visit) - baseline A. 6 month after 1 st session B. 12 month after 1 st session	- proportion of actives: % of the sample - duration (min/week), frequency (days/week) and intensity in points (mild = 1, moderate = 2, vigorous = 3)	A. proportion of A: ++ duration: + frequency: ++ intensity: ++ B. proportion of A: ++ duration: ++ frequency: ++ intensity: +++	**	***	**	*	*	**	*
Walker et al. (2002) [42] UK	RCT	n = 1488 eight general practitioners mean age 14,8 49% boys	20 min - baseline - 3 months after intervention - 12 months after intervention	- prevalence of health related behaviour (PA): % of teenagers who reported positive behaviour change	A. PA behaviour: ↔ B. PA behaviour: ↔	**	***	*	*	*	*	*
Kelleher et al. (1999) [36] Ireland	one group pre-post design	n = 203 (8-11 years); n = 111 (12-15 years), n = 196 (adults) mean age NR 47 % boys	10 min. - baseline - 1 year after intervention	- lifestyle characteristics: exercise: times/week,	exercise behaviour: ↔	**	*	*	*	*	**	*
Individual												
Intervention details						Quality assessment						
Study/ country	Study design	Sample characteristics	Duration/ measurements	Outcomes	Main results	Selection bias	Study design	Control for confounders	Blinding	Data collection	Withdrawals and dropouts	Global rating
Woods et al. (2002) [32] Scotland	RCT	n = 459 mean age 19 (SD 4,5) 38% boys	PAL1 distributed in Jan., PAL 2 in Nov. - baseline - 7 months after baseline	- exercise behaviour: membership of the Sport and Recreation Service at the university (%)	exercise behaviour: +++	**	***	***	**	***	*	**

+++ = p≤0.001

++ = p≤0.01

+ = p≤0.05

↔ no significant effect (I vs C), sustained effect

*** = strong

** = moderate

* = weak

I: intervention group

C: control group

PA: physical activity

PE: physical education

NR: not reported

NA: not applicable