

Supplemental table 3: Timing of measurements, physical activity outcome measure used and results of included studies aimed at increasing physical activity in **adolescents** (named reference is the main reference, all reference numbers relate to the study).

Study Ref	Timing of measurements	PA measure*	INT results	CON results	INT vs CON
EDUCATIONAL interventions					
Jago, 2006 ^{w48}	Post-intervention 6M follow-up (two waves of inclusion analysed separately)	Accelerometer A. Mean MVPA minutes/day B. Mean counts per min	A. Spring wave: post-int: 25.3 (SE 2.2); 6M: 29.4 (SE 2.4). Fall wave: post-int: 24.1 (SE 1.7); 6M: 27.2 (SE 1.9) B. Spring wave: post-int: 452 (SE 18); 6M: 449 (SE 19). Fall wave: post-int: 399 (SE 14); 6M: 428 (SE 16)	A. Spring wave: post-int: 27.7 (SE 2.4); 6M: 28.9 (SE 2.7). Fall wave: post-int: 22.8 (SE 1.6); 6M: 24.2 (SE 1.7) B. Spring wave: post-int: 451 (SE 20); 6M: 426 (SE 22). Fall wave: post-int: 397 (SE 13); 6M: 398 (SE 14)	A. ns B. ns
Patrick, 2006 ^{w49}	Post-intervention	7-day PAR A. <i>Squared</i> mean MVPA minutes/week B. % meeting recommendation	A. Girls increased from 316.1 (SD 49.2) to 324.6 (SD 61.5). Boys increased from 418.4 (SD 54.5) to 486.0 (SD 75.3) B. Girls: decreased from 37.8 to 33.6. Boys: increased from 45.3 to 55.4	A. Girls increased from 284.3 (SD 45.8) to 313.9 (SD 62.2). Boys increased from 374.0 (SD 55.0) to 419.8 (SD 79.2) B. Girls: increased from 27.8 to 36.1. Boys: decreased from 41.9 to 38.0	A. ns for girls and boys B. Girls: RR 0.83 (95% CI 0.61, 1.10). Boys: RR 1.47 (95% CI 1.19, 1.75)
Robbins, 2006 ^{w50}	Post-intervention	Child and Adolescent Activity Log (CAAL): mins MVPA per 4 days	Increased from 79.8 (SD 99.2) to 192.4 (SD 190.6)	Increased from 126.3 (SD 177.0) to 200.7 (SD 205.7)	ns

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Frenn, 2005 ^{w51}	Post-intervention	Child and Adolescent Activity Log: MVPA minutes/week	If completed $\geq 50\%$ of sessions, increased by 22 minutes	Decreased by 46 minutes	Overall: ns. If completed $\geq 50\%$ of sessions: $p=0.05$
Schofield, 2005 ^{w52}	Mid-intervention (wk 6) Post-intervention	A. Pedometer: mean 4-day step count, per 1000 B. 3-day PAR: mean number of 30-minute blocks of MVPA	A. Wk 6: INT 1: 37.4 (SD 74.6); INT 2: 29.0 (SD 67.9), $p=0.04$. Post-int: INT 1: 41.0 (SD 115.4) INT 2: 32.9 (SD 6.1), ns. B. Wk 6: INT 1: 12.8 (SD 8.1); INT 2: 8.1 (SD 6.6). Post-int: INT 1: 14.2 (SD 9.4); INT 2: 11.9 (SD 9.7)	A. Wk 6: 36.1 (SD 9.3) Post-int: 34.2 (SD 84.3) B. Wk 6: 7.9 (SD 9.7) Post-int: 9.7 (SD 8.5)	A. INT 1 > CON, $p=0.03$ B. ns
Tsorbatzoudis, 2005 ^{w53}	Post-intervention (4/5-week follow-up in sub sample)	Questionnaire: total score on exercise habits	<i>Data not presented</i>	<i>Data not presented</i>	Positive intervention effect: $F_{1,294}=6.92$ ($p<0.001$)
Wilson, 2005 ^{w54}	Post-intervention (during last week INT)	Accelerometer: mean MVPA min/day	Increased from 89.1 (SD 40.3) to 111.5 (SD 29.7)	Decreased from 104.3 (SD 41.4) to 81.2 (SD 30.5)	$p<0.01$
Bayne-Smith et al, 2004 ^{w55}	Post-intervention	Questionnaire (assessing non-school related PA): mean change in sessions per week	+0.8 (SD 2.6)	+0.6 (SD 3.2)	Mean difference: 0.2 (SE 0.3), ns
Hsu, 2004 ^{w56}	Post-intervention	Questionnaire: PA score	Increased from 24.4 (SD 21.0) to 28.9 (SD 17.7), $p<0.01$	Decreased from 23.0 (SD 20.3) to 21.3 (SD 21.6), ns	ns
Ortega-Sanchez, 2004 ^{w57}	Post-intervention 6M follow-up	Questionnaire (% doing >30 minutes of MVPA on ≥ 3 days/wk, change from baseline)	Post-int: +31.0% (95% CI 7.4, 54.8), $p=0.010$; 6M: +41.5% (95% CI 17.3, 65.6), $p=0.001$	Post-int: -12.5% (95% CI -33.5, 87.8), ns; 6M: -9.1% (95% CI -30.7, 12.8), ns	$p=0.002$ for trend over time

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Prochaska, 2004 ^{w58}	3M	Accelerometer: MVPA minutes per day (change from baseline)	- Boys: INT 1: +9 (SD 36); INT 2: +2 (SD 25). - Girls: INT 1: -14 (SD 33); INT 2: -9 (SD 29)	- Boys: -33 (SD 50) - Girls: -15 (SD 28)	- Boys (INT 1&2 vs CON): d=0.96, p=0.013 - Girls: ns
Frenn, 2003 ^{w59}	Post-intervention	Child and Adolescent Activity Log: change in PA mins/week	-8.6	-37.6	p=0.024
Gortmaker, 1999 ^{w60}	Post-intervention	Youth Activity Questionnaire (and TV and Video Questionnaire): hours/day of MVPA	Increased from 1.7 to 1.9, ns	Increased from: 1.7 to 1.7, ns	Adjusted difference: 0.36 (95% CI -0.63, 1.35), ns
Perry, 1994 ^{w61,62}	Yearly follow-up for 7 years	Questionnaire: hours of exercise per week	Ranged from 4.2 to 5.9 in females and 5.6 to 6.8 in males over the 7 years	Ranged from 3.4 to 5.5 in females and 5.1 to 6.5 in males over the 7 years	Positive effect over time for girls (difference between INT and CON ranging from 0.4 to 0.8, p<0.05), ns positive trend for boys.
Nader, 1992 ^{w63}	Mid-intervention (3M) Post-intervention 12M, 24M, & 36M follow-up	Physical activity recall (interview)	<i>Data displayed separately by ethnicity and sex at each measurement period</i>	<i>Data displayed separately by ethnicity and sex at each measurement period</i>	Only significant increase in Anglo-American boys at 12M (difference score 1.76, p=0.02) and 36M (difference score 2.23, p=0.02). No other significant effects reported.
Killen, 1988 ^{w64,65}	2M (4M after baseline)	PA questionnaire: % of non-regular exercisers becoming regular exercisers (defined as 20 mins VPA >3x/week)	30.2%	20.0%	p=0.0003
Perry, 1987 ^{w66}	Post-intervention	PA questionnaire A. Time spent exercising: score (1-6, 1=never) B. Do regular exercise program: score (1-5)	A. Boys: 4.9; girls: 4.1 B. Boys: 2.3; girls: 2.0	A. Boys: 5.1; girls: 4.3 B. Boys: 2.3, girls: 2.4	A. Boys: ns; girls: ns B. Boys: ns; girls: p<0.05 favouring INT

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ENVIRONMENTAL interventions					
Sallis, 2003 ^{w67,68}	Mid-intervention (1yr) Post-intervention	A. SOFIT (during PE): mean minutes of MVPA B. Leisure time PA Questionnaire (MVPA score)	A. Mid-int: 19.0 (SD 3.3); post-int: 19.5 (SD 3.1) B. Post-int: boys: 115 (SD 25); girls: 93 (SD 18)	A. Mid-int: 17.0 (SD 2.1); post-int: 16.9 (SD 2.1) B. Post-int: boys: 104 (SD 19); girls: 91 (SD 17)	A. p=0.02 Stratified: significant effects in boys only. B. Boys: d=0.09, ns; girls: d=0.25, ns
MULTI-COMPONENT interventions					
Young, 2006 ^{w69}	Post-intervention	7-day PAR: total daily energy expenditure, mean kcal/kg	Decreased from 34.6 (SD 3.2) to 34.2 (SD 2.9)	Decreased from 34.9 (SD 2.7) to 34.2 (SD 2.1)	ns
Haerens, 2005 ^{w70,71}	Post-intervention	A. Questionnaire (school-based PA): minutes/day B. Accelerometer: MVPA minutes/day (subgroup only)	INT-1 + INT-2 A. Boys: 18.3 (SD 18.7) to 25.9 (SD 21.3); Girls: 12.7 (SD 13.0) to 17.6 (SD 15.9). B. Boys: 33.9 (SD 19.3) to 32.1 (SD 26.4); Girls: 20.5 (SD 17.7) to 25.5 (SD 20.6)	A. Boys: 22.6 (SD 14.8) to 22.8 (SD 16.2). Girls: 16.5 (SD 12.2) to 16.6 (SD 12.1) B. Boys: 53.4 (SD 19.0) to 42.1 (SD 28.1); Girls: 18.7 (SD 12.7) to 19.1 (SD 15.7)	A. Boys: p<0.05; girls: ns. B. boys: p<0.08; girls: ns
Pate, 2005 ^{w72-74}	Post-intervention	3-Day PAR; % students reporting: A. ≥2 30-min blocks of MVPA/day B. ≥1 20-min block of VPA/day	Adj. means at post-int A. 72.3 (SE 1.8) B. 44.5 (SE 2.6)	Adj. means at post-int A. 70.3 (SE 2.2) B. 36.4 (SE 2.9)	A. ns B. p=0.05 (mediated by self-efficacy)

Study Ref	Timing of measurements	PA measure*	INT results	CON results	INT vs CON
Jamner, 2004 ^{w75}	Post-intervention	2-Day PAR A. average daily METs - moderate activity B. average daily METs - total activity C. 30-min blocks in moderate activity	A. 16.5 (SD 13.6) to 12.8 (SD 10.5) B. 59.0 (SD 11.7) to 60.8 (7.0) C. 4.6 (SD 3.7) to 3.3 (SD 2.5)	A. 22.9 (SD 19.6) to 8.5 (SD 8.5) B. 61.1 (SD 15.0) to 57.8 (SD 5.9) C. 6.2 (SD 5.0) to 2.4 (SD 2.6)	A. p=0.007 B. p=0.043 C. p=0.009
Simon et al, 2004 ^{w76}	Mid-intervention (6M)	Questionnaire, % students participate in leisure-organised PA	Boys 69 to 81. Girls: 59 to 83.	Boys: 67 to 66. Girls: 48 to 50.	Boys: OR 1.73, p=0.01 Girls: OR 3.38, p<0.001
Neumark-Sztainer, 2003 ^{w77}	Post-intervention 8M follow-up	Questionnaire (hrs per wk PA outside of PE)	Post-int: 6.21; 8M: 6.31	Post-int: 5.87; 8M: 6.24	ns at both post-int and 8M

Notes: M: Months; PA: Physical activity; (M)VPA: Moderate-vigorous/vigorous physical activity; WBPA: Weight-bearing physical activity; PE: Physical education; CSA: Computer Science Applications (now known as MTI); (PD)PAR: (Previous Day) Physical Activity Recall; SAPAC: Self-administered PA checklist; SOFIT: System for Observing Fitness Instruction Time; CON: Control group; INT: Intervention group; ns: Non-significant; SD: standard deviation; SE: standard error; d: effect size.

*refers to overall PA unless specified