

Supplementary File 6a. Intervention effects on motivational mediators at post-intervention assessment.

Variable	Control, Mean (SD)				p	Intervention, Mean (SD)				p	Intervention – Control Adjusted Difference in Change		p	Cohen's d	ICC			
	Baseline		Post-intervention			Baseline		Post-intervention			Estimate	95% CI			Student	Class	Teacher	School
Motivation and Needs Satisfaction in PE																		
Amotivation	n = 738	2.09 (0.88)	n = 630	2.05 (0.87)	0.096	n = 706	2.0 (0.84)	n = 625	1.92 (0.80)	0.026	0.06	-0.03 to 0.14	0.188	0.06	0.46	0.02	0.01	0.01
Autonomous Motivation	n = 738	3.97 (0.87)	n = 630	3.80 (0.86)	<0.001	n = 706	4.03 (0.80)	n = 624	3.89 (0.82)	<0.001	-0.03	-0.10 to 0.04	0.375	-0.03	0.53	0.04	0.00	-
Controlled Motivation	n = 738	2.85 (0.76)	n = 629	2.70 (0.73)	<0.001	n = 706	2.89 (0.80)	n = 625	2.73 (0.78)	<0.001	-0.01	-0.1 to 0.09	0.877	-0.01	0.44	0.02	0.02	-
Autonomy Need Satisfaction	n = 723	3.51 (1.32)	n = 610	3.50 (1.34)	0.492	n = 697	3.44 (1.29)	n = 617	3.48 (1.20)	0.566	0.02	-0.14 to 0.18	0.805	0.01	0.37	0.04	0.00	0.02
Competence Need Satisfaction	n = 723	4.54 (1.51)	n = 610	4.38 (1.50)	0.007	n = 697	4.57 (1.41)	n = 617	4.37 (1.42)	<0.001	-0.03	-0.17 to 0.13	0.729	-0.02	0.56	0.02	0.01	0.03
Relatedness Need Satisfaction	n = 723	4.19 (1.50)	n = 610	4.05 (1.47)	0.179	n = 697	4.37 (1.46)	n = 617	4.22 (1.34)	0.012	-0.05	-0.23 to 0.13	0.556	-0.03	0.44	0.03	0.01	-
Student Perceptions of PE Teacher Behavior																		
Controlling behavior	n = 719	2.85 (1.33)	n = 616	2.70 (0.73)	0.809	n = 693	2.65 (1.36)	n = 607	2.72 (0.78)	0.638	-0.03	-0.23 to 0.13	0.743	-0.02	0.33	0.06	0.01	-
Supportive behavior	n = 726	4.31 (1.31)	n = 631	4.37 (1.32)	0.340	n = 698	4.53 (1.27)	n = 616	4.60 (1.17)	0.204	0.03	-0.12 to 0.17	0.688	0.02	0.45	0.06	0.01	-
Motivation towards Leisure-time Physical Activity																		
Amotivation	n = 728	1.68 (0.86)	n = 624	1.67 (0.82)	0.732	n = 704	1.65 (0.82)	n = 621	1.59 (0.76)	0.164	-0.03	-0.15 to 0.07	0.522	-0.03	0.44	0.01	0.01	-
Autonomous Motivation	n = 729	3.55 (0.88)	n = 624	3.43 (0.88)	0.003	n = 704	3.50 (0.85)	n = 621	3.41 (0.88)	0.028	0.03	-0.06 to 0.13	0.497	0.03	0.52	0.02	0.00	-
Controlled Motivation	n = 729	2.40 (0.85)	n = 624	2.24 (0.80)	<0.001	n = 704	2.32 (0.86)	n = 621	2.30 (0.84)	0.794	0.15	0.04 to 0.25	0.005	0.18	0.47	0.01	0.02	0.01

Note: Note: Motivation variables and leisure-time physical activity frequency measured on scales from 1 to 5. Student need satisfaction and perceptions of teacher behaviour measured on scales from 1 to 7. Leisure-time physical activity duration measured on a scale from 1 to 8. Cohen's *d* = adjusted difference in change / pooled *SD* at baseline. “-” indicates that adjustments for school level clustering did not lead to a significant decrease in the chi-squared value.

Supplementary File 6b. Intervention effects on well-being outcomes and motivational mediators at maintenance assessment.

Variable	Control, Mean (SD)				p	Intervention, Mean (SD)				p	Intervention – Control Adjusted Difference in Change		p	Cohen's d	ICC			
	Baseline		Maintenance			Baseline		Maintenance			Estimate	95% CI			ID	Class	Teacher	School
	n	Mean (SD)	n	Mean (SD)		n	Mean (SD)	n	Mean (SD)									
Motivation and Needs Satisfaction in PE																		
Amotivation	n = 738	2.09 (0.88)	n = 525	2.10 (0.91)	0.239	n = 706	2.00 (0.84)	n = 507	2.02 (0.80)	0.471	0.05	-0.02 to 0.13	0.185	0.05	0.46	0.02	0.00	0.01
Autonomous Motivation	n = 738	3.97 (0.86)	n = 525	3.74 (0.87)	0.013	n = 706	4.03 (0.80)	n = 507	3.82 (0.83)	<0.001	0.01	-0.08 to 0.11	0.767	0.01	0.54	0.03	0.02	-
Controlled Motivation	n = 738	2.84 (0.76)	n = 525	2.70 (0.70)	0.001	n = 706	2.88 (0.80)	n = 507	2.79 (0.76)	0.182	0.06	-0.02 to 0.14	0.149	0.07	0.42	0.03	0.02	-
Autonomy Need Satisfaction	n = 723	3.51 (1.32)	n = 496	3.51 (1.35)	0.292	n = 697	3.45 (1.35)	n = 493	3.65 (1.26)	0.014	0.07	-0.06 to 0.21	0.333	0.05	0.30	0.04	0.00	0.04
Competence Need Satisfaction	n = 723	4.54 (1.51)	n = 496	4.44 (1.47)	0.911	n = 697	4.57 (1.41)	n = 493	4.48 (1.36)	0.280	-0.04	-0.18 to 0.09	0.574	-0.03	0.55	0.03	0.00	0.03
Relatedness Need Satisfaction	n = 723	4.19 (1.50)	n = 496	4.16 (1.49)	0.498	n = 697	4.37 (1.46)	n = 493	4.37 (1.33)	0.636	-0.05	-0.2 to 0.11	0.473	-0.03	0.39	0.03	0.00	0.02
Student Perceptions of PE Teacher Behavior																		
Controlling behavior	n = 719	2.85 (1.34)	n = 511	2.70 (0.71)	0.520	n = 693	2.65 (1.36)	n = 512	2.79 (0.76)	0.010	0.12	-0.06 to 0.29	0.181	0.09	0.27	0.07	0.01	-
Supportive behavior	n = 726	4.31 (1.31)	n = 518	4.47 (1.38)	0.080	n = 698	4.53 (1.27)	n = 512	4.47 (1.26)	0.397	-0.16	-0.32 to 0.01	0.059	-0.12	0.43	0.09	0.00	0.03
Motivation towards Leisure-time Physical Activity																		
Amotivation	n = 728	1.68 (0.86)	n = 503	1.75 (0.88)	0.304	n = 704	1.65 (0.82)	n = 501	1.65 (0.76)	0.496	-0.05	-0.14 to 0.04	0.210	-0.03	0.41	0.03	0.00	-
Autonomous Motivation	n = 729	3.55 (0.88)	n = 503	3.42 (0.92)	0.027	n = 704	3.50 (0.85)	n = 501	3.43 (0.92)	0.800	0.06	-0.01 to 0.13	0.094	0.03	0.53	0.01	0.00	-
Controlled Motivation	n = 729	2.40 (0.85)	n = 503	2.33 (0.90)	0.235	n = 704	2.32 (0.86)	n = 501	2.35 (0.86)	0.813	0.04	-0.03 to 0.13	0.269	0.15	0.45	0.00	0.02	-

Note: Motivation variables and leisure-time physical activity frequency measured on scales from 1 to 5. Student need satisfaction and perceptions of teacher behaviour measured on scales from 1 to 7. Leisure-time physical activity duration measured on a scale from 1 to 8. Cohen's *d* = adjusted difference in change / pooled *SD* at baseline. “-” indicates that adjustments for school level clustering did not lead to a significant decrease in the chi-squared value.