

**Table 4: Multiple mediator models explaining mathematics performance**

Variables	Intervention on mediator			Mediator on outcome			Intervention on outcome			Mediated effect		
	A ( $\beta$ )	<i>p</i>	95% CI	B ( $\beta$ )	<i>p</i>	95% CI	C' ( $\beta$ )	<i>p</i>	95% CI	AB (SE)	<i>p</i>	95% CI
Bootstrapped models (unadjusted for clustering)												
MVPA% in PE	4.82 (.52)	<.001	3.078 to 6.559	-.22 (-.03)	.227	-.588 to .139	14.35 (.19)	<.001	8.477 to 20.224	-1.08 (.95)	.256	-2.946 to .783
MVPA leisure time %	-.67 (-.13)	.199	-1.702 to .354	.21 (.01)	.598	-.568 to .986				-.14 (.37)	.706	-.873 to .591
Behavioral engagement	-.07 (-.10)	.295	-.211 to .064	-3.24 (-.03)	.284	-9.172 to 2.687				.24 (.39)	.539	-.522 to 1.000
Cognitive engagement	-.01 (-.01)	.892	-.179 to .156	.38 (.01)	.886	-4.819 to 5.579				.00 (.24)	.985	-.479 to .470
Emotional engagement	-.05 (-.05)	.607	-.242 to .141	-1.25 (-.02)	.569	-5.528 to 3.037				.06 (.27)	.820	-.475 to .600
Models adjusted for clustering												
MVPA% in PE	4.82 (.52)	.003	1.682 to 7.955	-.22 (-.03)	.179	-.552 to .103	14.35 (.19)	<.001	6.730 to 21.971	-1.08 (.91)	.233	-2.859 to .696
MVPA leisure time %	-.67 (-.13)	.221	-1.754 to .406	.21 (.01)	.602	-.577 to .995				-.14 (.32)	.664	-.777 to .495
Behavioral engagement	-.07 (-.10)	.286	-.209 to .061	-3.24 (-.03)	.253	-8.800 to 2.315				.24 (.31)	.436	-.361 to .839
Cognitive engagement	-.01 (-.01)	.878	-.160 to .136	.38 (.01)	.909	-6.135 to 6.895				.00 (.04)	.920	-.091 to .082
Emotional engagement	-.05 (-.05)	.652	-.268 to .168	-1.25 (-.02)	.549	-5.326 to 2.834				.06 (.16)	.702	-.258 to .383

*Note.* Control and intervention groups were coded '0' and '1' respectively; A = unstandardized regression coefficient for treatment condition predicting mediators at 18-months; B = unstandardized regression coefficient for mediators at 18-months predicting academic performance at 18-months;  $\beta$  = standardized regression coefficient; AB = product-of-coefficients estimate; C' = unstandardized regression coefficient for treatment condition predicting academic performance at 18-months with adjustment for mediators, otherwise known as the direct effect; SE = standard error, 95% CI = 95% confidence interval for the mediated effect, MVPA % in PE = Percentage of time spent in moderate-to-vigorous physical activity during physical education lessons; MVPA leisure time % = Percentage of leisure time spent in moderate-to-vigorous physical activity.