

**Table S1** Intraclass correlation coefficient (ICC) of scales of intrapersonal, interpersonal, and environmental items.

<b>Item</b>	<b>ICC</b>
<b>Attitude toward physical activity</b>	0.62
Unimportant/Important	0.72
Unsafe/Safe	0.63
Bad/Good	0.58
Harmful/Healthy	0.65
Boring/Fun	0.59
<b>Self-efficacy</b>	0.70
Lack of company	0.67
Demotivated	0.66
Screen access in free-time	0.62
Invitation to do other things by friends	0.64
Laziness	0.54
Lack of physical activity skills	0.70
Lack of places near home	0.68
Lack of instruction	0.68
<b>Social support from friends</b>	0.66
Encouragement	0.61
Physical activity practice together	0.67
Invitation to physical activity with them	0.63
Observation (watching)	0.71
Positive comments	0.63
<b>Social support from parents</b>	0.62
Encouragement	0.66
Physical activity practice together	0.64
Providing transport to physical activity	0.62
Observation (watching)	0.59
Positive comments	0.56
Conversation (talking)	0.63
<b>Social support from teachers</b>	0.69
Encouragement	0.70
Invitation to physical activity with them	0.66
Supervision (watching)	0.64
Positive comments	0.67
Conversation (talking)	0.61
<b>Perception of neighborhood safety</b>	0.58
Pollution	0.64
Condition of sidewalks	0.64
Safety for walking	0.62
General safety	0.57
Safety for cycling	0.58
<b>Perception of neighborhood facilities</b>	0.67
Physical activity facilities	0.65
Physical activity practice by peers	0.63
Physical activity places	0.61
Proximity of physical activity places	0.85
General appearance	0.64
<b>Perception of school environment</b>	0.65
Physical activity facilities in free-time	0.58
Enjoyable physical activity facilities	0.63
Appearance of physical activity facilities	0.66

Note: adapted from Barbosa Filho et al (2016).

**Table S2** Multiple mediation analysis of the effect of the Strengthen Your Health program on the moderate-to-vigorous physical activity in the total sample with imputation data. Brazil, 2014.

Potential mediators	Coefficient <i>a</i> (95%CI)	p-value	Coefficient <i>b</i> (95%CI)	p-value	Coefficient <i>ab</i> (95%CI) *	p-value	Mediation (%)
Total effect					<b>0.750</b> <b>(0.362; 1.139)</b>	<b>&lt; 0.010</b>	
Direct effect					<b>0.446</b> <b>(0.062; 0.830)</b>	<b>0.023</b>	
Attitude	<b>1.133</b> <b>(0.571; 1.696)</b>	<b>&lt; 0.010</b>	<b>0.090</b> <b>(0.051; 0.130)</b>	<b>&lt; 0.010</b>	<b>0.103</b> <b>(0.040; 0.180)</b>		<b>13.7</b>
Social support friends	<b>1.668</b> <b>(0.763; 2.571)</b>	<b>&lt; 0.010</b>	<b>0.074</b> <b>(0.049; 0.099)</b>	<b>&lt; 0.010</b>	<b>0.123</b> <b>(0.050; 0.211)</b>		<b>16.4</b>
Social support teachers	<b>2.184</b> <b>(1.284; 3.084)</b>	<b>&lt; 0.010</b>	<b>0.025</b> <b>(0.000; 0.049)</b>	<b>0.049</b>	0.054 (-0.001; 0.117)		7.1
Perception of school environment	<b>0.934</b> <b>(0.480; 1.387)</b>	<b>&lt; 0.010</b>	0.027 (-0.021; 0.075)	0.276	0.025 (-0.019; 0.076)		3.3
Multiple mediation analysis					<b>0.304</b> <b>(0.175; 0.447)</b>		<b>40.5</b>

95%CI: 95% confidence interval.

Note: values written in bold: statistical significance ( $p < 0.05$ ); coefficient *a*: non-standardized coefficient of the effect of treatment (intervention vs. control) on the potential mediator; coefficient *b*: non-standardized coefficient of the association between potential mediator and moderate-to-vigorous physical activity; coefficient *c*: non-standardized coefficient of the total effect of treatment (intervention vs. control) on moderate-to-vigorous physical activity; coefficient *ab*: product of coefficients *a* and *b*.

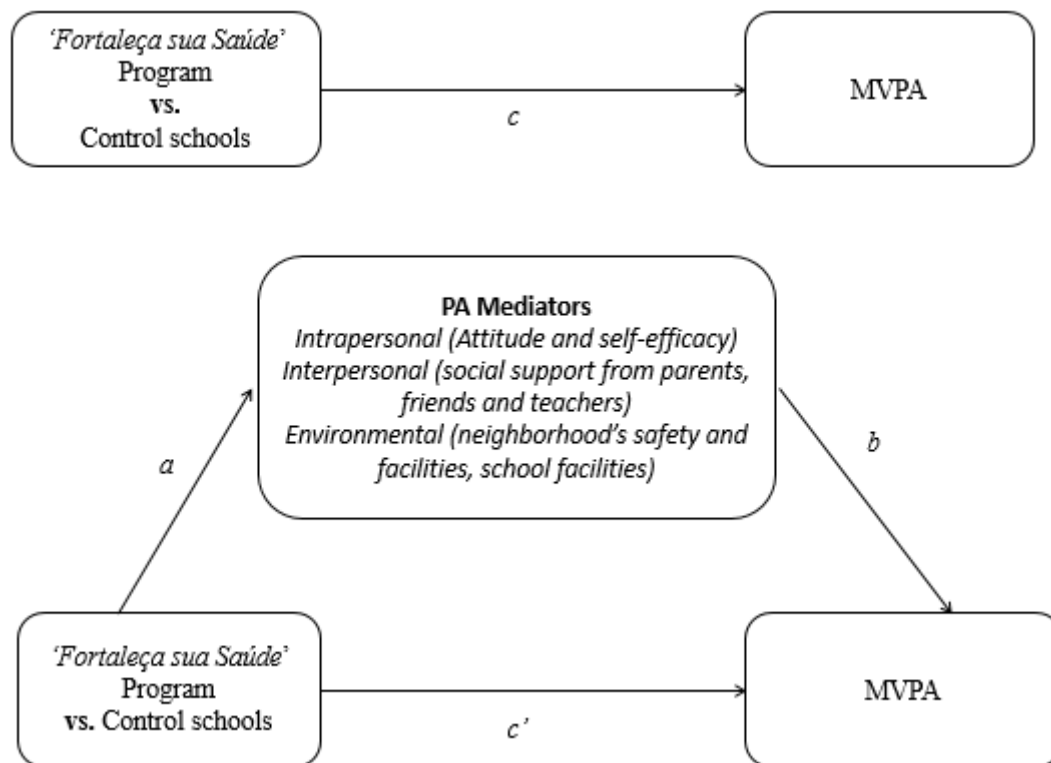
\* 95%CI confidence interval based on bootstrapping (5,000 samples).

**Table S3** Multiple mediation analysis of the effect of the Strengthen Your Health program on the moderate-to-vigorous physical activity in girls and boys students with imputation data. Brazil, 2014.

Potential mediators	Coefficient <i>a</i> (95%CI)	p-value	Coefficient <i>b</i> (95%CI)	p-value	Coefficient <i>ab</i> (95%CI)	p-value	Mediation (%)
<b>Boys (n = 609)</b>							
Total effect					0.549 (0.072; 1.026)	0.024	
Direct effect					0.267 (-0.201; 0.735)	0.260	
Attitude	1.360 (0.584; 2.136)	< 0.010	0.107 (0.058; 0.156)	< 0.010	0.145 (0.046; 0.304)		26.40
Social support friends	1.838 (0.534; 3.143)	0.017	0.058 (0.028; 0.087)	< 0.010	0.106 (0.022; 0.215)		19.30
Social support teachers	1.500 (0.273; 2.727)	< 0.010	0.021 (-0.010; 0.052)	0.177	0.032 (-0.020; 0.099)		5.80
Multiple mediation analysis					0.282 (0.131; 0.456)		51.40
<b>Girls (n = 573)</b>							
Total effect					1.025 (0.403; 1.647)	< 0.010	
Direct effect					0.763 (0.132; 1.394)	0.020	
Attitude	0.925 (0.102; 1.747)	0.028	0.092 (0.029; 0.154)	0.010	0.085 (0.004; 0.209)		8.30
Social support teachers	3.026 (1.720; 4.332)	< 0.010	0.046 (0.006; 0.085)	0.020	0.138 (0.015; 0.302)		13.50
Perception of school environment	1.006 (0.374; 1.637)	< 0.010	0.038 (-0.043; 0.120)	0.360	0.038 (-0.035; 0.129)		3.80
Multiple mediation analysis					0.262 (0.091; 0.482)		25.50

95%CI: 95% confidence interval.

Notes: values written in bold: statistical significance ( $p < 0.05$ ); coefficient *a*: non-standardized coefficient of the effect of treatment (intervention vs. control) on the potential mediator; coefficient *b*: non-standardized coefficient of the association between potential mediator and moderate-to-vigorous physical activity; coefficient *c*: non-standardized coefficient of the total effect of treatment (intervention vs. control) on moderate-to-vigorous physical activity; coefficient *ab*: product of coefficients *a* and *b*; 95%CI confidence interval based on bootstrapping (5,000 samples).



**Figure S1** Theoretical model of the Strengthen Your Health program [*Fortaleça Sua Saúde* program].

MVPA: moderate-to-vigorous physical activity; PA: physical activity.

Note: coefficient *a*: intervention effect on potential mediators; coefficient *b*: association between potential mediators and moderate-to-vigorous physical activity; coefficient *c*: the total effect of the intervention on moderate-to-vigorous physical activity, coefficient *c'*: the direct effect of the intervention on moderate-to-vigorous physical activity.