

Supplemental Table 1. Total, indirect, and direct effect estimates from models testing mediation of associations between childhood intelligence quotient score and midlife cardiorespiratory fitness by physical activity, obesity, smoking, and educational attainment.

Estimates reflect standardized effect-sizes (interpretable as the square root of variance explained in the dependent variable). Percentile-based 95% Confidence Intervals (CIs) were estimated from 1,000 bootstrap repetitions.

	<u>b</u>	<u>95% CI</u>	<u>% Mediation</u>
Total Effect Estimate for Childhood IQ- Adult Fitness Association	0.11	[0.05, 0.18]	
Model Testing Mediation by Physical Activity			
Indirect Effect	0.02	[0.01, 0.03]	16%
Direct Effect of Childhood IQ	0.09	[0.03, 0.16]	
Model Testing Mediation by Lifetime Obesity History			
Indirect Effect	0.05	[0.02, 0.09]	47%
Direct Effect of Childhood IQ	0.06	[0.00, 0.12]	
Model Testing Mediation by Lifetime Smoking History			
Indirect Effect	-0.01	[-0.03, 0.00]	NA
Direct Effect of Childhood IQ	0.12	[0.06, 0.19]	
Model Testing Mediation by Educational Attainment			
Indirect Effect	0.02	[-0.03, 0.06]	14%
Direct Effect of Childhood IQ	0.10	[0.03, 0.18]	
Model Testing Mediation by All Variables			
Indirect Effect of Physical Activity	0.02	[0.01, 0.03]	
Indirect Effect of Obesity	0.05	[0.02, 0.09]	
Indirect Effect of Smoking	-0.01	[-0.03, 0.00]	
Indirect Effect of Education	0.03	[-0.01, 0.06]	
Total Indirect Effect	0.08	[0.03, 0.13]	74%
Direct Effect of Childhood IQ	0.03	[-0.04, 0.10]	