The S2 Table A shows the estimates of the independent factors a) annual best performance and b) annual rate of change for the prediction of the adult personal best performances, calculated for the ages from 14 to 18 years old. Based on partial correlation coefficients, the annual best performance and the annual rate of change of performance positively correlated with the personal best performance for all ages from 13 to 18 years. The  $R^2$  coefficients increased throughout the youth (from 13 to 18 years old).

		Men – High-jump			Men – Long-jump				Women – Higl	h-jump	Women – Long-jump		
	Independent variables	β	Partial R	$R^2$	β	Partial R	$R^2$	β	Partial R	$R^2$	β	Partial R	$R^2$
Age 14 y				0.286			0.194			0.631			0.522
	Perf. at 13	0.491	$0.454^{*}$		0.205	0.349*		0.862	$0.776^*$		0.837	$0.714^{*}$	
	Change 13–14	0.552	$0.497^{*}$		0.206	$0.440^{*}$		0.695	$0.266^{*}$		0.613	$0.598^{*}$	
Age 15 y				0.534			0.526			0.685			0.536
	Perf. at 14	0.508	$0.595^{*}$		0.515	$0.591^{*}$		0.683	$0.772^{*}$		0.628	$0.672^{*}$	
	Change 14–15	0.574	$0.642^{*}$		0.625	$0.665^{*}$		0.526	0.683*		0.501	$0.587^{*}$	
Age 16 y				0.637			0.481			0.754			0.602
	Perf. at 15	0.728	$0.760^{*}$		0.739	$0.675^{*}$		0.826	$0.881^{*}$		0.737	$0.751^{*}$	
	Change 15–16	0.560	$0.668^*$		0.548	$0.562^{*}$		0.473	$0.367^{*}$		0.457	$0.577^{*}$	
Age 17 y				0.794			0.668			0.807			0.714
	Perf. at 16	0.849	$0.877^*$		0.745	$0.786^{*}$		0.893	$0.866^{*}$		0.830	0.834*	
	Change 16–17	0.522	$0.746^{*}$		0.497	$0.647^{*}$		0.377	$0.590^{*}$		0.445	$0.629^{*}$	
Age 18 y				0.815			0.744			0.846			0.793
	Perf. at 17	0.882	$0.896^{*}$		0.841	$0.852^{*}$		0.943	$0.918^{*}$		0.866	$0.884^{*}$	
	Change 17–18	0.385	$0.662^{*}$		0.411	0.623*		0.407	$0.707^{*}$		0.341	$0.597^{*}$	

Table A - Multiple regression analysis to predict adult best performance

The p values of the partial R are reported as \*p<0.001.

The S2 Table B shows the estimates of the independent factor annual best performance for the prediction of the adult personal best performances, calculated for the ages from 14 to 18 years old. Based on partial correlation coefficients, the annual best performance performance positively correlated with the personal best performance for all ages from 13 to 18 years. The  $R^2$  coefficients increased throughout the youth (from 13 to 18 years old).

		Men – High-jump			Men – Long-jump			V	Women – Higl	n-jump	Women – Long-jump		
	Independent variables	β	Partial R	$R^2$	β	Partial R	$R^2$	β	Partial R	$R^2$	β	Partial R	$R^2$
Age 14 y													
	Perf. at 14	0.455	$0.455^{*}$	0.207	0.389	0.389*	0.152	0.640	$0.640^{*}$	0.410	0.540	$0.540^{*}$	0.290
Age 15 y													
	Perf. at 15	0.586	$0.586^{*}$	0.343	0.492	$0.492^{*}$	0.240	0.766	$0.766^{*}$	0.586	0.635	0.635*	0.402
Age 16 y													
	Perf. at 16	0.732	$0.732^{*}$	0.536	0.655	$0.655^{*}$	0.428	0.789	$0.789^{*}$	0.622	0.726	$0.726^{*}$	0.527
Age 17 y													
	Perf. at 17	0.819	0.819*	0.671	0.762	$0.762^{*}$	0.580	0.833	0.833*	0.693	0.824	$0.824^{*}$	0.679
Age 18 y													
	Perf. at 18	0.890	$0.890^{*}$	0.791	0.815	$0.815^{*}$	0.664	0.867	$0.867^{*}$	0.752	0.848	$0.848^{*}$	0.720
The p values of the partial R are reported as $*p < 0.001$ .													

Table B - Regression analysis to predict adult best performance