Supplemental Table 1. Baseline demographics, body composition, physical fitness, and mental health of the recruits of the three classes at academy B

	Historical Control	Pandemic interrupted Class	Intervention Class	*P* value comparing recruits of the three classes
N	36	38	37	
Age	28.8 ± 6.5	30.7 ± 7.0	29.1 ± 4.9	0.385
Male N (%)	34 (94.4%)	34 (89.5%)	37 (100.0%)	0.141[a]
BMI (kg/m²)	26.5 ± 3.2	29.1 ± 4.6	28.5 ± 4.2	0.022
%BF	17.5 ± 5.6	28.7 ± 7.4	23.9 ± 7.2	<0.001
Push-Ups	36.6 ± 13.8	28.5 ± 9.2	28.7 ± 10.9	0.003
Pull-Ups	5.7 ± 4.8	5.1 ± 5.3	6.7 ± 5.2	0.436
Run Time 1.5 miles (minutes)	11.7 ± 1.3	12.1 ± 2.1	12.3 ± 2.2	0.498
PREDIMED score	6.4 ± 2.3	7.4 ± 2.2	7.1 ± 2.2	0.182
MEDI-lifestyle score	4.1 ± 1.2	3.7 ± 1.2	4.0 ± 1.1	0.287
Beck Questionnaire	0 (0-0.25)	0 (0-1)	0 (0-1)	0.619[b]
PCL Questionnaire	2 (0-4)	3 (0-7)	1.5 (0-6)	0.648[b]
PHQ Score	0 (0-1.25)	0 (0-3)	0 (0-2.25)	0.741[b]

Median (Q1-Q3) for Beck questionnaire, PCL questionnaire, and PHQ score. Mean ± SD for other variables except for Male.
BMI: Body Mass Index. %BF: Percent Body Fat. Beck: Beck Depression Inventory for Primary Care. PCL: Post-Traumatic Stress Disorder (PTSD) Questionnaire. PHQ: Patient Health Questionnaire.
[a] Derived from Fisher's exact test.
[b] Derived from Kruskal-Wallis rank sum test.

Supplemental Table 2. Changes in recruits' selected body composition and physical fitness measurements from baseline to graduation of the three classes at academy B

	Historical Control	Pandemic interrupted Class	Intervention Class	*P* value comparing recruits of the three classes
N	36	38	37	
BMI (kg/m²)	0.01 ± 0.04	-0.01 ± 0.05	0 ± 0.03	0.065
%BF	-0.05 ± 0.27	-0.11 ± 0.13	0.01 ± 0.15	0.020
Systolic blood pressure (mmHg)	-6.0 ± 10.3	NA	-7.2 ± 10.0	0.595
Push-Ups	9.7 ± 6.5	7.1 ± 4.6	8.2 ± 4.9	0.118
Run Time 1.5 miles (minutes)	-0.9 ± 0.6	0.2 ± 1.5	-1.0 ± 0.9	<0.001
MEDI-lifestyle score	1 (-1 – 2)	NA	0 (0 – 2)	0.848[a]
Beck Questionnaire	0 (0 – 0)	NA	0 (-1 – 0)	0.058[a]

Median (Q1-Q3) for MEDI-lifestyle score and Beck questionnaire. Mean ± SD for other variables. BMI: Body Mass Index. %BF: Percent Body Fat. Beck: Beck Depression Inventory for Primary Care. NA: Not Available.
Absolute number changes for push-ups and run time. Percent changes for BMI and %BF.
[a] Derived from Wilcoxon rank sum test with continuity correction.

Supplemental Table 3. Multivariable adjusted selected health profiles comparing the academy training effects on the pandemic interrupted class to the historical control class at academy B

Outcome	Predictor	Beta Coefficient	Standard Error	*P* value
BMI (kg/m²)	Time	0.137	0.111	0.220
	Interrupted Class	-2.055	0.824	0.015
	Interrupted Class × Time	-0.327	0.155	0.036
%BF	Time	-0.846	0.371	0.024
	Interrupted Class	7.954	1.182	<0.001
	Interrupted Class × Time	-0.727	0.517	0.162
Push-Ups	Time	4.847	0.465	<0.001
	Interrupted Class	2.119	3.659	0.564
	Interrupted Class × Time	-1.295	0.649	0.048
Run Time 1.5 miles (minutes)	Time	-0.476	0.098	<0.001
	Interrupted Class	-0.949	0.490	0.057
	Interrupted Class × Time	0.574	0.135	<0.001

BMI: Body Mass Index. %BF: Percent Body Fat.
Statistics derived from age, sex, baseline BMI, baseline percent body fat, and/or baseline pushup capacity adjusted mixed effects models.
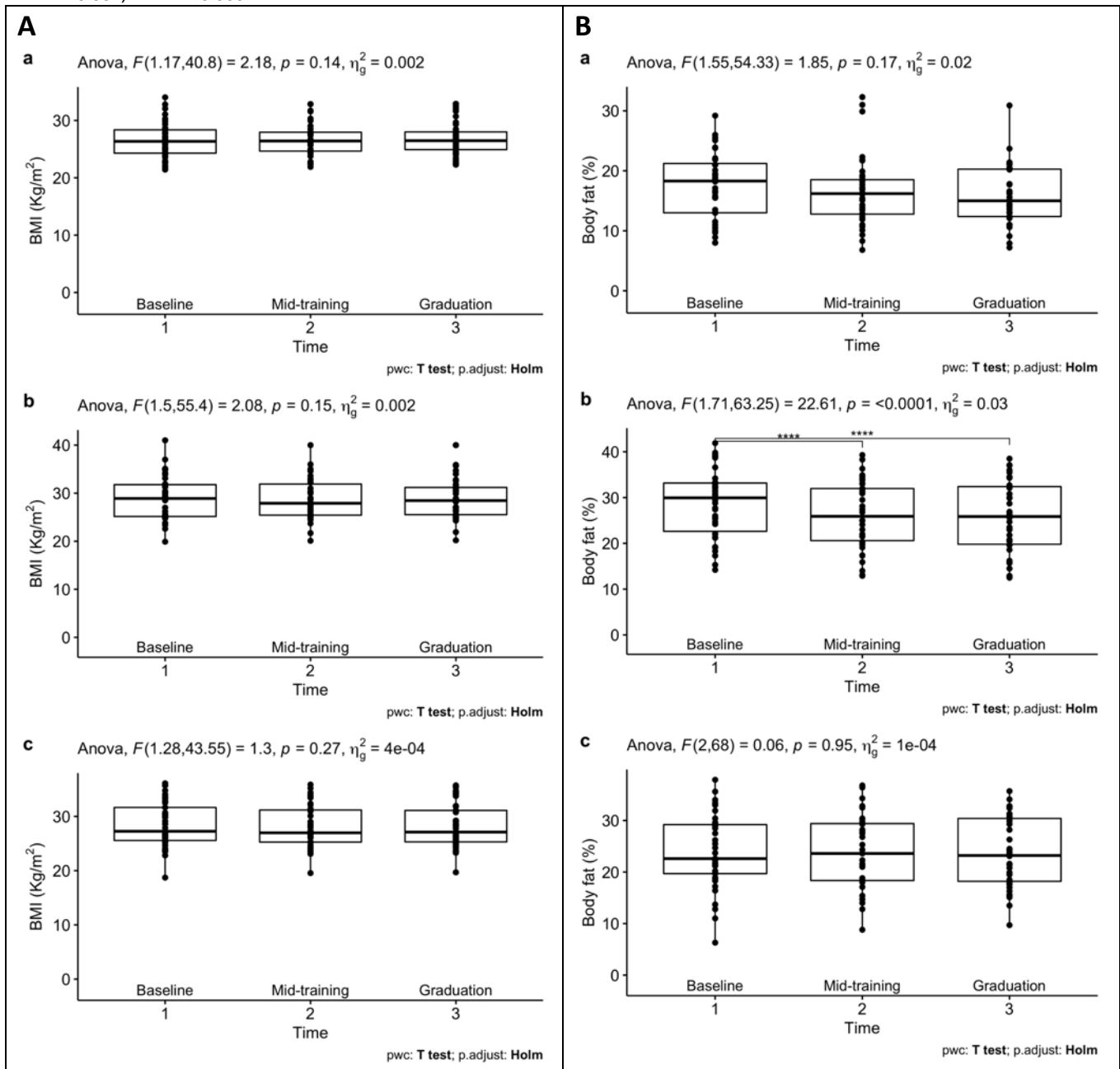
Supplemental Table 4. Multivariable adjusted selected health profiles comparing the academy training effects on the Intervention class to the historical control class at academy B
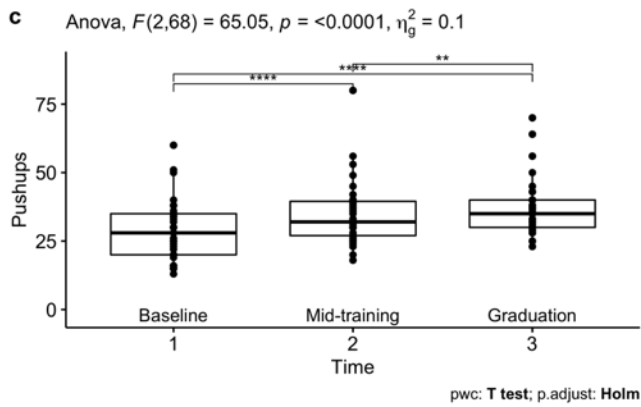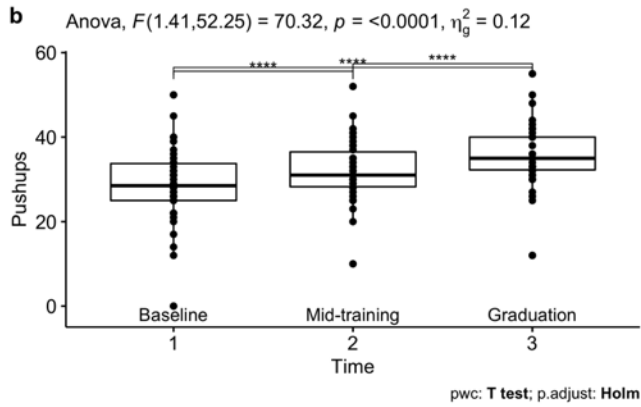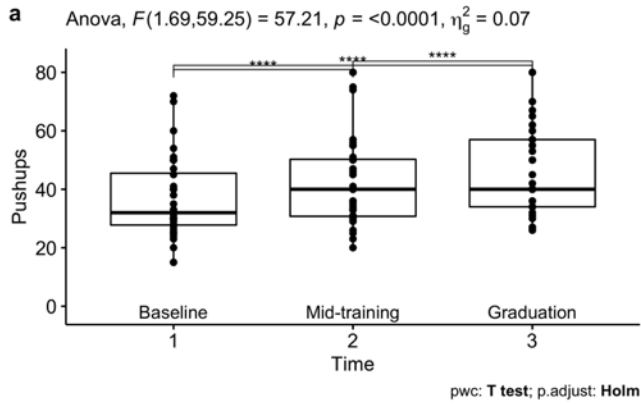
Outcome	Predictor	Beta Coefficient	Standard Error	P value
%BF	Time	-0.85	0.36	0.019
	Intervention Class	4.37	1.71	0.013
	Intervention Class × Time	0.77	0.50	0.125
Systolic blood pressure	Time	-2.99	0.85	<0.001
	Intervention Class	-4.17	2.81	0.142
	Intervention Class × Time	-0.64	1.19	0.595
Push-Ups	Time	4.85	0.48	<0.001
	Intervention Class	-2.19	3.20	0.495
	Intervention Class × Time	-0.75	0.67	0.261
MEDI-lifestyle score	Time	0.28	0.11	0.017
	Intervention Class	0.26	0.38	0.503
	Intervention Class × Time	-0.01	0.16	0.963
Beck questionnaire	Time	-0.01	0.09	0.880
	Intervention Class	0.50	0.40	0.220
	Intervention Class × Time	-0.24	0.13	0.064

BMI: Body Mass Index. %BF: Percent Body Fat. Beck: Beck Depression Inventory for Primary Care.

Statistics derived from age, sex, baseline percent body fat, baseline pushup capacity, and/or baseline Beck Depression Inventory for Primary Care score adjusted mixed effects models.

Supplemental Figure. Box plots showing the distributions of recruits' selected health profiles at baseline, mid-training, and academy graduation comparing a) the historical control class (n=36), b) the pandemic interrupted class (n=38), and c) the Intervention class (n=37). A. Body Mass Index (BMI); B. Percent Body Fat; C. Push-ups; D. 1.5-mile running time. The plots were derived from the recruits whose data were available at each time point. Post-hoc paired analysis with Holm adjustments were demonstrated by *: P<0.05, **: P<0.01, ***: P<0.001, ****: P<0.0001.

C

a Anova, $F(1.69, 59.25) = 57.21$, $p = <0.0001$, $\eta_g^2 = 0.07$

b Anova, $F(1.41, 52.25) = 70.32$, $p = <0.0001$, $\eta_g^2 = 0.12$

c Anova, $F(2,68) = 65.05$, $p = <0.0001$, $\eta_g^2 = 0.1$

pwc: **T test**; p.adjust: **Holm**

D

a Anova, $F(2,64) = 77.84$, $p = <0.0001$, $\eta_g^2 = 0.21$

b Anova, $F(1.53, 55.13) = 0.2$, $p = 0.76$, $\eta_g^2 = 0.00066$

c Anova, $F(1.48, 50.49) = 31.21$, $p = <0.0001$, $\eta_g^2 = 0.05$

pwc: **T test**; p.adjust: **Holm**