Affordable Exercise Opportunities Improve the Health and Fitness of Inner-City Residents

Jordan McIntire, Mitchel Sermersheim, and Tracie Arnold

Department of Kinesiology, School of Physical Education and Tourism Management, IUPUI, Indianapolis, IN

Background: Physically Active Residential Communities and Schools (PARCS) is an 11-year old community-based exercise program in inner-city Indianapolis. Staffed by 200 undergraduate students who provide health/fitness assessments and exercise leadership for academic credit, PARCS offers exercise opportunities where none existed. Purpose: We present member demographic, baseline and outcome health/fitness data after one month of joining. Methods: Members (N = 113) who joined between February and May 2012 and received a one month follow-up assessment are included. Cost was $20/year or free with a medical referral. Members signed a consent form, completed health and demographic questionnaires, and were evaluated for upper-body (UBS), lower-body (LBS) strength and endurance, cardiovascular fitness (CVF), body mass index (BMI), resting heart rate (RHR), systolic and diastolic blood pressure (SBP and DBP). One-month follow-up assessments were encouraged but not required. Attendance and health metrics were logged. Analyses were performed using IBM SPSS Statistics.

Results: Members were 48.75±14.64 years old, 46.25% Black, 45.99% White, 5.43% Hispanic, and 2.33% multiracial/other. Data showed 11.95% did not attend or complete high school, 23.9% obtained a diploma or GED, 32.57% obtained a Bachelor’s or Master’s degree, and 65.78% earned <$40,000/year. Average attendance was 2.90 times/month. Baseline vs. follow-up measures showed an improvement in UBS (113 ± 20.08 vs. 115 ± 5.98, arm curls/30 sec, p <0.001), LBS (14.03 ± 5.19 vs. 15.54 ± 5.14, p<0.001 chair stands/ 30 sec), CVF (85.02±24.42 vs. 95.35±28.20, p<0.001, steps/2 min), RHR (76.92 ± 13.28 vs. 73.10 ± 13.28, beats/min, p<0.001), SBP (127.03 ± 14.00 vs. 122.87 ± 11.62 mmHg, p<0.001), and DBP (78.74 ± 10.13 vs. 75.39 ± 9.55 mmHg, p<0.001). BMI (34.77 ± 10.76 vs. 34.33 ± 10.47) was maintained. Conclusion: Members were able to exercise enough to improve or maintain health/fitness outcomes suggesting affordable and accessible exercise programs could benefit community health.

Mentors: NiCole R. Keith Department of Kinesiology, School of Physical Education and Tourism Management, IUPUI Indianapolis, IN; Allison S. Plopper Department of Kinesiology, School of Physical Education and Tourism Management, IUPUI Indianapolis, IN; Kisha Virgil, Department of Health Sciences, IU School of Health and Rehabilitation Sciences, Indianapolis, IN.