

Effects of Peer-led Resistance Training on the Physical and Psychological Health of Urban College Students

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ABSTRACT

Mental health challenges, particularly anxiety and depression, are common among American college students. Participating in cardiorespiratory exercise is known to improve psychological health. However, the effects of exclusive resistance training (RT) on psychological functioning, particularly among diverse, inner-city undergraduates, remain underexplored.

PURPOSE: The current study examined whether participation in a 10-week, peer-led resistance training (RT) program could produce measurable improvements in both physical and psychological health.

METHODS: Inactive students (RT: $n = 19$; control: $n = 13$; mean age = 20.4 ± 2.8 years) participated in either a 10-week, peer-based resistance training (RT) program or a no-exercise control group at York College in Jamaica, Queens. The RT program consisted of bi-weekly sessions. Once a week, sessions were led by a peer-student trainer and included a short lecture on the health benefits of exercise, followed by 60 minutes of resistance training. Pre- and post-training assessments of cardiovascular fitness, muscular strength, muscular endurance, anthropometric measures, and psychological health were conducted, with psychological health measured through self-report using the NIH Toolbox and the Patient-Reported Outcomes Measurement Information System (PROMIS) scales. The effects of RT relative to the control group were assessed using 2 (RT, control) x 2 (time) mixed factorial ANOVAs using an alpha level of .05 (two-tailed).

RESULTS: Participation in the 10-week peer-based RT program resulted in a significant decrease ($p < .05$) in both systolic and diastolic blood pressure. In addition, there was a statistically significant increase ($p < .05$) in self-efficacy and friendship perception, and a significant reduction ($p < .05$) in perceived hostility. No significant time effects were observed in the control group.

CONCLUSION: These findings are consistent with the existing literature, indicating that chronic RT improves physical health and enhances positive self-perceptions. They support further study of peer-mediated RT programs as a means to improve the quality of life among undergraduate students from diverse, inner-city demographics.