



# Mid Atlantic Regional Chapter of the American College of Sports Medicine

Annual Scientific Meeting, November 4<sup>th</sup>- 5<sup>th</sup>, 2017  
Conference Proceedings

International Journal of Exercise Science, Issue 9, Volume 6



## Impact of a 6-Week Exercise Intervention on Prison Inmates

Jenna A. Duff, Katelynn C. Kletzli, Alexander P. Kern, Jonathan M. Timko, Aryana J. Wing, Brett M. Kelly, Jake E. Reed, Kellie S. Ferlin, Aileen R. Roulston, Kelsey E. Finn, Lance C. Savidge, Joseph M. Blumer, Ariane C. Guillergan, Leslie M. Peterson, Sarah Hess, Marketa Schublova, Sarah Kuehn, Rebecca Ridener, Kimberly A. Smith. Slippery Rock University, Slippery Rock, PA

**PURPOSE:** Due to public sentiment, limited budgets, and a changing political climate, many correctional institutions are choosing to reduce or eliminate exercise equipment and/or exercise programs in order to make prison life less comfortable and more punitive. As such, many inmates adopt a sedentary lifestyle during their incarceration. The purpose of this investigation was to examine the effects of a 6-week exercise intervention on inmates in the Butler County Prison. **METHODS:** Interested inmates were randomly selected to participate in either the exercise intervention or control group. During the first week of the program, fitness assessments including body composition (bioelectric impedance analysis), muscular strength (grip strength), muscular endurance (1-minute curl up, pushups), cardiovascular endurance (3-minute step test), and flexibility (sit and reach), were administered to both the intervention and control groups. Following the initial week of testing, only participants in the intervention group participated in a 60-minute exercise session, three days per week, for 6 weeks. Each exercise session included a warm-up, cardiovascular exercise, muscle conditioning exercises, and a cool-down including flexibility exercises. After the 6 weeks, inmates in both the intervention and control groups completed post-fitness testing. **RESULTS:** After 6 weeks of exercise training, inmates in the intervention group had statically better results compared to the control group in cardiovascular endurance ( $141 \pm 16$  vs.  $162 \pm 25$  bpm) ( $p < 0.01$ ), muscular endurance of the trunk ( $52 \pm 15$  vs.  $40 \pm 14$  curl-ups) ( $p < 0.01$ ), and flexibility ( $34.27 \pm 11$  vs.  $28 \pm 8$  cm) ( $p = 0.32$ ), respectively. **CONCLUSIONS:** A 6-week guided exercise intervention can be a feasible and effective way to improve the fitness levels of incarcerated individuals with limited access to fitness equipment.

Statement of Disclosure: Funded by Slippery Rock University Internal Grants- Student Research, Scholarship, and Creative Activity, and Summer Undergraduate Research Experience