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### Work-Related Exercise Programming for Firefighters: A Mixed Method Design

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Work-related fitness programs can improve overall health and fitness in firefighters. **PURPOSE:** This mixed-method analyses paired quantitative clinical and performance outcomes with firefighters' qualitative feedback of a work-related exercise training program. **METHODS:** A 14-week work-related exercise training program with assessments conducted pre- and post-training was completed with a group of local Firefighters. Clinical outcomes included weight, body mass index (BMI), body fat percent, resting heart rate, systolic blood pressure (SBP), and diastolic blood pressure (DBP). Performance outcomes included the Sharpened Romberg Balance Test, 1-RM leg press and bench press, graded exercise test (estimated  $VO_{2max}$ ), knee range of motion (ROM), and shoulder and hamstring flexibility. Self-administered surveys (Short Form-36, International Physical Activity Questionnaire, Barriers Self-Efficacy Scale, and Barriers to Being Active Quiz) were completed. Three groups of 3-4 participants examined firefighters experience in the training program and their health behaviors. **RESULTS:** Twenty training sessions were completed by 14 male ( $36.4 \pm 2.6$  years old) firefighters. There were no significant changes to weight, BMI, body fat percent, SBP, estimated  $VO_{2max}$ , balance, knee ROM, or hamstring flexibility. A significant decrease in DBP ( $p < 0.05$ ) and increase in shoulder flexibility ( $p < 0.001$ ) and leg press 1-RM volume ( $p < 0.05$ ) was noted. Improvements in physical and mental health, team building, and health behaviors were reported by the participants. **CONCLUSIONS:** Fourteen weeks of work-related exercise training in firefighters elicited improvements in clinical, performance, and self-reported physical activity and mental health outcomes.