

Effects of a Four-Week Intervention of Occupational Stress and Health of University Employees

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Maintaining a physically active lifestyle has been established as not only being a main component in maintaining good health and disease prevention, but also occupational well-being. **PURPOSE:** To determine if a daily 30-40 minute exercise program of eight short exercises, would have an effect on occupational stress and well being of university employees with a sedentary job. **METHODS:** Seventeen employees (height: 166.18 ± 10.93 cm, mass: 75.30 ± 14.18 kg, age: 43.76 ± 11.83 yrs) elected to be in the control (CON) or experimental (EXP) group. Subjects attended a baseline testing session and post intervention testing session in which each individual filled out two forms: short form-36 and an occupational stress test questionnaire. The EXP group was asked to attend an additional information session in which all daily exercises were explained and demonstrated. Body composition analysis and physical fitness tests were also completed at that time. At the end of every week, blood pressure, and resting heart rate were collected on both the EXP and CON groups. The EXP group also turned in a weekly adherence log to track exercise adherence. **RESULTS:** There were no changes in occupational stress or health reported; however, there were limited changes in anthropometric and physical variables. There was a change in body fat percent (CON: Pre $34.54 \pm 9.72\%$, Post $35.50 \pm 9.15\%$; EXP: Pre $32.09 \pm 7.38\%$, Post $31.43 \pm 7.75\%$, $p = .05$), systolic blood pressure (CON: Pre 127.57 ± 9.81 mmHg, Post 117.86 ± 17.64 mmHg; EXP: Pre 130.80 ± 18.88 mmHg, Post 124.10 ± 16.43 mmHg, $p = .05$), upper body flexibility (CON: Pre 18.57 ± 4.83 in, Post 16.71 ± 4.28 in; EXP: Pre 21.15 ± 5.84 in, Post 25.40 ± 4.00 in, $p < .01$) and partial curl-up test (CON: Pre 22.70 ± 13.66 reps, Post 34.30 ± 11.32 reps; EXP: Pre 29.00 ± 17.69 reps, Post 33.14 ± 16.54 reps, $p = .02$) over the four week intervention period. No other significant differences were found. **CONCLUSION:** Overall, the exercise protocol did not significantly decrease stress levels or impact self-reported health measures. However, the EXP group demonstrated improvements in upper body flexibility and over the four weeks, both groups showed a decrease in systolic blood pressure and an increase the number of partial curl-ups completed. It is thought a continuation of this exercise protocol would have a greater impact over a longer duration.