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HEALTH SCIENCES

PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF A 12-WEEK
FACULTY/STAFF EXERCISE PROGRAM IN A UNIVERSITY SETTING (82 pp.)

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Cardiovascular disease (CVD) is the number-one cause of death worldwide. Research strongly supports a relationship between physical activity and an associated reduced risk of premature death from CVD. **Purpose:** To determine the effects of a 12-week exercise program on the physiological and psychological health of employees in a major university. **Methods:** To better examine the effects of physical activity on the selected health variables, participants were divided into two groups (compliers, non-compliers) based on their average daily step count ($\geq 10,000$ steps/d) across the duration of the study. A total of 50 university employees (33 compliers, 17 non-compliers; mean age = 47.6 ± 10.2 yr) participated in the exercise sessions (60 min, 3 d wk^{-1} , 12 wk). Outcome measures include obesity, hypertension, dyslipidemia, prediabetes, depression, anxiety, and stress. **Results:** Physical activity patterns were significantly different between groups at all time points ($p \leq 0.05$). Body mass index (BMI) demonstrated a significant decrease ($p \leq 0.05$) from baseline to 12-weeks while impaired fasting glucose (IFG) increased ($p \leq 0.05$). Psychological health variables demonstrated a significant effect of time ($p \leq 0.05$) for depression, anxiety, and stress. There were no observed differences in sleep. **Conclusions:** Based on these results, this program was effective in improving participant psychological health regardless of physical activity level. Further,

while this program did demonstrate significant improvements in BMI and psychological health, an exercise program that is of longer duration is needed to demonstrate lifestyle changes and differences in the blood profile.