

Physical Activity and Psychological Well-Being in Different University Personnel

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INTRODUCTION

University personnel (UP) have been found to meet recommended physical activity (PA) levels (Smith et al. 2009), but the COVID-19 pandemic may have had an effect on PA in this population (Shahlaee & Nasiri, 2022). There is evidence that PA is associated with psychological well-being (PWB), such as flourishing and purpose in life (e.g., Mock & Smale, 2023; Zhang & Chen, 2021), but no research has examined PA and PWB among different UP as pandemic restrictions eased.

PURPOSE

The purpose of this study was to examine PA and PWB in UP at the near-end of the pandemic.

METHODS

PARTICIPANTS

- University Personnel: one Division I Midwest university ($n = 531$)
 - Administrators ($n = 58$; 36 women, 22 men)
 - $M_{age} = 47.3$ yrs
 - Faculty ($n = 170$; 112 women, 58 men)
 - $M_{age} = 51.1$ yrs
 - Adjunct faculty ($n = 47$; 34 women, 13 men)
 - $M_{age} = 59.2$ yrs
 - Staff ($n = 256$; 195 women, 61 men)
 - $M_{age} = 45.6$ yrs

MEASURES

American College Health Association – National College Health Assessment Survey, Fall 2022

- Physical Activity – 3 items
 - In the last 7 days, how many (total) minutes did you spend doing **moderate physical activity**? Examples: brisk walking, dancing, or household chores.
 - In the last 7 days, how many (total) minutes did you spend doing **vigorous physical activity**? Examples: running, swimming laps, or hiking.
 - In the last 7 days, on how many days did you do exercises to **strengthen or tone your muscles**? Examples: push ups, sit ups, or weightlifting/training.
- Flourishing Scale (Diener et al., 2009)
 - Measure of self-perceived success in important areas, such as relationships, self-esteem, purpose, and optimism.
 - 8 – items; Likert scale (1 = Strongly Disagree; 7 = Strongly Agree)
 - The scale provides a single psychological well-being score (PWB) ranging from 8 to 56 with larger values indicating greater PWB.

PROCEDURES

- Permission was obtained from the Institutional Review Board.
- After informed consent, data were collected from UP in Fall 2022.

RESULTS

The ratio of women to men was similar ($p > .05$) across UP groups, but age differences were found ($p < .001$). A series of ANCOVAs with age as the covariate were done to examine differences between UP groups for moderate physical activity (PA), vigorous PA, strengthening exercise, and psychological well-being. Post-hoc comparisons identified specific group differences (see Table 1).

Table 1. Means and Standard Deviations on Physical Activity and Psychological Well-Being (PWB) for University Personnel

Variables	Admin (A)	Adj Fac (AF)	Faculty (F)	Staff (S)	<i>p</i>
Moderate PA					
<i>M</i> (min/wk)	133.6	208.6	162.5	143.9	0.269
<i>SD</i>	124.5	161.1	138.8	229.6	
Vigorous PA					
<i>M</i> (min/wk)	47.6^D	83.4^A	41.9^C	35.2^B	0.002
<i>SD</i>	89.9	143.3	70.1	65.9	
Strength Ex.					
<i>M</i> (days/wk)	1.6	2.4^A	1.3^C	1.1^B	0.001
<i>SD</i>	2.0	2.3	1.9	1.8	
PWB					
<i>M</i>	47.1^A	45.8	46.4^A	44.2^D	0.021
<i>SD</i>	5.3	11.5	8.0	7.7	

Post hoc comparisons: A,B $p < .001$; A,C $p < .01$; A,D $p < .10$

Correlations were done to examine the relationship of moderate PA, vigorous PA, and strengthening exercise with psychological well-being for each university personnel group (see Table 2).

Table 2. Correlations of Physical Activity and Psychological Well-Being (PWB) for University Personnel

Variables	Admin <i>r</i>	Adj Fac <i>r</i>	Faculty <i>r</i>	Staff <i>r</i>
PWB & Moderate PA	-0.12	-0.12	0.14^T	-0.03
PWB & Vigorous PA	0.08	-0.02	-0.01	0.15*
PWB & Strength Ex.	0.09	-0.18	0.06	0.12^T

* $p < .05$; ^T $p < .10$

CONCLUSIONS

- Moderate physical activity was similar among university personnel groups.
- However, adjunct faculty reported more vigorous physical activity and strength days than other personnel groups, with staff reporting the lowest levels for both.
- Moreover, psychological well-being was lowest among staff, and psychological well-being was correlated with vigorous physical activity and strength exercise days *only* in staff.
- Thus, university wellness activities may wish to consider staff-specific outreach efforts to improve physical activity and psychological well-being.



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