



HERO Industry Research Review

The Effect of the Work Environment on Using Time at Work to Exercise

Study Title: Effect of the Work Environment on Using Time at Work to Exercise

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Publication: American Journal of Health Promotion, Volume 29, Number 6, 2015, 345 – 352

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Study Overview

Less than 50% of American adults 18 and older meet CDC guidelines for physical activity despite well-documented evidence about its benefits.¹ Since most adults spend the majority of their time at the workplace, it provides an ideal opportunity to promote physical activity. Evidence suggests that modest gains in physical activity can be achieved through workplace physical activity interventions and a supportive work environment, but employers and future workplace physical activity policies would benefit from stronger research about which characteristics of the work environment predict worker levels of physical activity. A built environment, which focuses on the physical characteristics of a workplace, should not be mistaken for the *supportive* work environment characteristics under review in this study. Specifically, the goal was to determine the association between work environment characteristics and participation in policy that allowed workers to use time at work to exercise.

Six work environment characteristics were evaluated to determine which were predictive of using time at work for exercise, including:

- job satisfaction,
- ability to take time off work to exercise,
- ability to take time off work for personal matters,
- ability to change start and quit times,
- having too much work, and
- having enough time in the workday to do their job well.

Methodology

The study used data from the Physical Activity and Lifestyle Study (PALS), which is a prospective evaluation of the effect of providing time during the workday for exercise. Study participants included 188 university faculty and staff representing 30 departments who were randomized into one of two treatment blocks (fall and spring), with data analysis focusing on employees who were provided 30 minutes of paid time during the workday to exercise. All employees received a gym membership and the ability to exercise up to 30 minutes during the workday; one treatment group also received educational materials. Parameters were established for employees to utilize the 30 minutes of exercise during the workday. Specifically, they were required to:

- clear the time with their supervisor,
- utilize it for exercise only,
- utilize the 30 minutes for exercise preparation (e.g. change clothes), if desired,
- add 30 minutes to lunch or dinner breaks but could not leave early, and

- sign in and out when using the additional time.

Data analysis controlled for age, gender, ethnic group, BMI, marital status, education, income, treatment group, meeting CDC’s physical activity guidelines, method of work-time tracking, department type, season in which employee participated, and health literacy score.

Measurement of work environment characteristics relied on the National Institute for Occupational Safety and Health Quality of Worklife Module. Physical activity measurement also relied on self-report by study participants.

Results

Work Environment Characteristics that Influenced the Likelihood of Employees to Exercise at Work*	<ul style="list-style-type: none"> • Carried a manageable workload • Ability to complete work on time • Comfortable using the 30 minutes to exercise at work
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Work Environment Characteristics that Did Not Influence the Likelihood of Employees to Exercise at Work	<ul style="list-style-type: none"> • Ability to adjust workday start and stop time to exercise • Ability to take time off of work to handle personal matters • Job satisfaction
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Employee Demographics that Influenced the Likelihood to Exercise at Work	<ul style="list-style-type: none"> • Age – younger employees were 10% less likely to use work time to exercise for each year younger (average age of those using time = 44.5; average age of those not using time = 40.4) • Gender – females were up to 3 times as likely to exercise than their male counterparts • Education – employees with some college education were more likely to use the time than those with higher levels of education • Health literacy – employees with higher health literacy were more likely to exercise at work
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**Other potential influences were controlled for.*

Study Conclusions

The study determined that individuals who perceived their workloads to be manageable, were able to complete their work without diminishing performance, and were comfortable using time at work for physical activity were also more likely to engage in workday exercise.

Interestingly, although past researchers have found that job satisfaction and flexibility in the workplace tend to enhance an employee's workplace engagement, these factors were not identified as significant in this study after controlling for other factors. Although the majority of people were satisfied in their jobs, this factor did not influence their use of the 30 minutes to exercise; and those with flexibility in their workday were not likely to use the 30 minutes to exercise. Finally, participant recruitment to the study was low for the departments' involved (median 6 employees; 33% of eligible population), which minimized the study's representativeness.

HERO Reviewer's Commentary

Efforts to integrate physical activity into the workplace have been underway for many years. As stated in this particular article, and previously referenced in the study overview, those who participate in workplace physical activity initiatives often experience modest gains in physical activity. This study did not measure physical activity gains objectively (e.g. by tracking steps with an accelerometer), however, it does add to the minimal research that informs us that work time allotted for physical activity can have positive results for increasing adult physical activity, if in fact individuals are comfortable using time at work to exercise.

While this study denotes a physical activity policy, it does not translate in the fashion of a true behavior policy. For example, workplace policies are meant to provide all employees, not just those recruited, access to the policy parameters. In this study, the researchers/researched company did not allow employees who were not enrolled in the study to utilize the 30 minutes. Had all employees, regardless of study enrollment, been allowed to use the time, adherence to exercise may have been greater than levels observed by the researchers. In addition to policy

availability, policies that are designed to positively influence behaviors should not present barriers to utilization. Specifically, employees who participated in this study were required to obtain approval from their managers in order to utilize the 30 minutes. Although the researchers point to workload as the potential reason that those with flexible schedules did not utilize the time, obtaining a supervisor's permission may also have been a contributor. If an employee had the perception that their supervisor would not approve the use of time, the employee may have simply disregarded the opportunity. This observation/recommendation aligns itself with the reason(s) in which we strive for active leadership participation and support in wellness. If an employee perceives that the organization/leadership is supportive, they are more likely to engage.²

Recognizing that this article positively contributes to the literature, there continues to be a need for future studies that address work time allotted to physical activity that integrate objective measures into research design, rather than relying solely on self-report. Enhancing measurement methods can only strengthen the evaluation of behavior change and/or effectiveness of physical activity interventions in the workplace. In addition, and although a challenge, future research studies that address this topic should work toward larger sample sizes and enhanced study designs. Studies with larger sample sizes would provide a greater representation within the participating company and could potentially lead to different results. Studies with control groups would provide the opportunity for researchers to determine effectiveness of interventions in the workplace, which could provide value to the business case behind the development and implementation of physical activity policies.

About the HERO Reviewer

Colleen Saringer, Vice President, Wellness Consultant, works for Alliant Insurance Service's National Employee Benefits practices. Colleen is responsible for partnering with companies in the strategy, design, implementation, performance, and evaluation management of their corporate wellness programs. Colleen works to ensure that a company's wellness program is evidence-based and in line with industry best practices.

Colleen has worked in corporate wellness for over 15 years. She has a Bachelor's Degree in Health Education, Health Promotion and Sports Medicine from Bowling Green, Ohio; a Master's Degree in Exercise Science from Cleveland State University, Ohio; and a PhD in Exercise Psychology from Georgia State University. Colleen's research objective is to understand the influence of behavioral policies in the workplace as an integrated solution of a corporate wellness strategy. Although this interest extends beyond physical activity, Colleen's goal is to continue to elaborate on her doctoral study efforts, which was to understand the effect of a physical activity policy on adults in the workplace.

References

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