

physical activity at lower levels of support (e.g., \approx one SD below the sample means). The intervention had a detrimental effect on sugary snack and drink consumption (increased) for drivers reporting lower levels of family support for dietary and exercise behaviors ($B = -0.03$, $p = .034$). And lastly, we observed a significant moderated effect for fruit and vegetable consumption in an unexpected direction. Specifically, the intervention had a beneficial effect on fruit and vegetable consumption at 18 months for drivers reporting higher levels of work-family conflict at the prior 6-month time point ($B=0.71$, $p=0.006$). In conclusion, a health intervention for commercial truck drivers produced significant long-term weight loss, but only for those who reported having a family-supportive supervisor at work. Additional moderated intervention effects for behavioral outcomes provide further general evidence for the importance of social support at work and at home for drivers' long term success making health changes. These findings are notable for a population that spends most of their time physically isolated from friends, family, and supervisors. This suggests that social support and stress factors are transmitted to drivers remotely through mobile communication channels, supervisors' management of driver schedules and requests, and/or that abbreviated in person time at home or at the terminal have meaningful (perhaps magnified) impacts. The need for support may be particularly acute for occupational drivers who are attempting to make and maintain health behavior changes under challenging working conditions that include long sedentary work hours and exposure to food swamps at truck stops. Employers can help by fostering and promoting family supportive supervision, which was associated with very positive long-term outcomes for drivers following their participation in a health intervention.

Diffusing a Sedentary Behavior Intervention Through Supervisors

Brad Wipfli (Oregon Health & Science University)

The Active Workplace Study is a six-month intervention that targets sedentary behavior in the workplace by providing active workstations to employees, along with environmental, organizational, and individual level support. The effectiveness of the intervention is currently being evaluated in a randomized controlled trial. During this study of intervention effectiveness, we are simultaneously conducting secondary studies of alternative intervention approaches. The alternative approaches are designed to reduce organizational and researcher time and effort required to implement the intervention, while still providing a similar intervention dose. If the effectiveness of these alternative models is similar to that of the full intervention it would represent a higher return on investment for an organization, and therefore may be more feasible for dissemination. One alternative intervention model we are implementing is focused on the role of supervisors in sedentary workplaces. This model of intervention delivery is based on diffusion of innovations theory, which describes how the flow of information about a new idea within a social environment influences the adoption of the new product or service. A key component of the theory is that opinion leaders, such as supervisors in a workplace setting, play a pivotal role in diffusing an innovation within a social system (Rogers, 2003). Evidence suggests that training supervisors in safety and family-supportive behaviors improves employee safety, health, and well-being (e.g. Hammer et al., 2015; Hammer et al, 2019; Kelly et al., 2014). Modeling has been shown to be important for safety related behaviors (Olson et al., 2009). As key influencers and role models in the workplace, supervisors may be important targets for workplace sedentary behavior interventions that involve new environmental components like sit-stand desks and

active workstations. In the spring of 2019, we will enroll supervisors and employees from a sedentary worksite to participate in the supervisor-oriented model of the Active Workplace Study. The intervention will span three months. Everyone at the worksite will have access to Desk Cycle pedal stands, which are active workstations that allows workers to engage in light physical activity while working. Supervisors will complete four computer-based trainings. Training will focus on the importance of supervisor support and role-modeling, the impact of sedentary behavior at work, what supervisors can do to make their workplace less sedentary, ergonomics and injury, and stress management. After each training supervisors will set goals and self-monitor a behavior related to the training topic. Once a month, supervisors will also lead a scripted health and safety discussion with employees that is aligned with that month's training topic. Employees will have access to pedal stands but will not participate in any intervention activities other than the group discussions that are led by supervisors. Supervisors and employees will complete assessments at baseline and after the three-month intervention. Assessments will include a survey with health, safety, psychosocial, and behavioral measures, and employee ratings of supervisor support. Supervisors and employees will wear ActiGraph accelerometers for one week at each assessment period to measure sitting time, standing time, and physical activity at work. During the intervention we will measure pedal stand use by attaching Fitbits to each pedal stand. Statistical analyses will evaluate the effectiveness of the supervisor-oriented model of the intervention on both supervisor and employee outcomes. We will also compare results from this study to results from the primary intervention. We hypothesize that the supervisor-oriented intervention will produce similar but slightly smaller improvements in health, safety, and well-being, and reduce workplace sedentary behavior in comparison to the full intervention. We also hypothesize that employee ratings of supervisor support will moderate the effects of the intervention on employee-level outcomes. Results from this study will inform dissemination methods of the Active Workplace Study and workplace intervention research to practice in general.

The Relationship Between Supervisor Support and Employee Sleep

Leslie Hammer (Portland State University)

Sleep is important for employees' well-being and health, safety, and performance at work (Barnes, 2012; Brossoit et al., in press; Litwiller, Snyder, Taylor, & Steele, 2017; Watson et al., 2015). As psychosocial factors at work are known to influence sleep (e.g., Linton et al., 2015), a promising approach to improving employee sleep is to increase job resources, such as supervisor support at work. Recent studies have identified sleep leadership and family-supportive supervisor behaviors (FSSB) as two specific types of supportive supervisor behaviors that contribute to sleep (Crain et al., 2014; Crain, Brossoit, & Fisher, 2017; Gunia, Sipos, LoPresti, & Adler, 2015). Sleep leadership refers to supportive supervisor behaviors that aim directly at improving employees' sleep such as encouraging employees to get adequate sleep. Sleep leadership has been shown to contribute to employees' sleep duration and sleep quality beyond general leadership support among soldiers on peacekeeping and combat missions (Gunia et al., 2015). In addition to sleep leadership, FSSB is a promising approach to improving employees' sleep (Berkman, Buxton, Ertel, & Okechukwu, 2010; Crain et al., 2014). Family-supportive supervisors exhibit behaviors that are supportive of employees' families and non-work lives, and help employees to manage both work and non-work responsibilities (Hammer, Kossek,

PHILADELPHIA, PA | NOVEMBER 6-9

Work, Stress and Health 2019

FULL PROGRAM



AMERICAN
PSYCHOLOGICAL
ASSOCIATION



Society for
Occupational
Health
Psychology

