

| Presentation Title  | Place in Schedule   |
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| The influence of a team competition on pedal stand use.   | Poster Session<br><i>Day 2 – Wednesday</i><br><i>May 9<sup>th</sup>, 2018</i><br><i>8:30am-9:30am</i>             |
| Description of Presentation   | Presenter Name(s) And Credentials   |
| <p>Workplace interventions that involve team competitions often produce greater results (e.g., Brownell, Cohen, Stunkard, Felix, &amp; Cooley, 1984; Brownell &amp; Felix, 1987; Stunkard, Cohen, &amp; Felix, 1989) and have lower participant dropout (Wilson et al., 2007) compared to other intervention strategies. Team competition interventions in the workplace have been effective for smoking cessation (e.g. Jason, Jayaraj, Blitz, Michaels, &amp; Klett, 1990), weight loss (e.g. Brownell et al., 1984), and increasing physical activity (e.g. Leahey, Crane, Pinto, Weinberg, Kumar, &amp; Wing, 2010). Active workstations, such as pedal stands and treadmill desks, have the potential to reduce workplace sedentary behavior, and team competitions could be an effective intervention technique to increase active workstation use. However, to our knowledge there is no research involving team competitions with active workstations. The purpose of this study is therefore to assess whether a team competition increases pedal stand use compared to a non-competition condition.</p> <p>We recruited participants from three call centers in Portland, OR to participate in a two-week intervention with two conditions: team competition and no competition. In both conditions, participants completed informed consent and a survey at initial recruitment, and participants wore an ActiGraph on their nondominant thigh during work hours. A Fitbit was attached to each pedal stand, allowing researchers to collect mileage data and report competition feedback. In the team competition condition, participants from one company (n=8) were divided into two teams, provided with pedal stands, and told they were competing to achieve the highest pedaling mileage in the proceeding two weeks. Participants received regular competition feedback throughout the intervention, comparing their team results to their</p> | Sara Wild, MPH<br><i>Oregon Institute of Occupational Health Sciences at Oregon Health and Science University</i> |

competitors. Employees in the non-competition condition (n=14) were given pedal stands and asked to pedal whenever deemed fit or desired. Participants in both conditions received a \$25 gift card for enrolling, and participants on the winning team in the competition condition received an additional incentive for pedaling the greatest distance.

We hypothesized that a team competition condition yields higher rates of pedaling time than a noncompetition

condition among sedentary employees. Pedaling time was determined from thigh-worn

ActiGraph data using a previously identified algorithm to identify pedaling time (O'Neill et al., 2017), and a between groups analysis of variance was used to examine differences in pedal stand use. Participants in the team competition spent a significantly greater amount of time pedaling at work (M=21.4% of work hours; SD=17.0) compared to the no-competition group (M=8.2% of work hours; SD=10.5;  $p<0.05$ ).

Additional planned analyses will examine whether the competition also affected pedaling intensity. These results will inform the development of effective intervention methods for the upcoming randomized Active

Workplace Study intervention, which uses the Total Worker Health approach to decrease sedentary behavior among call center employees.