

Protocol Title: Work Break Study

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Co-Investigators: N/A

Study Coordinator: Karen L. Pepkin, MA

Population: Sample size is 100. The location is Houston, Texas. The age is ≥ 21 years old. Women and men who are able to do physical activity are eligible for the study. This study is restricted to middle managers of any organization.

Number of Sites: This study is a single site study in Houston, Texas.

Study Duration: Subjects will participate in group, physical activity sessions (known as Booster Breaks) during 15-minute work breaks during the work day for two weeks (a total of 10 sessions). Participants will complete surveys before and after participation. To account for the time to recruit organizations, luncheon presentations, sign-up of participants, and the logistics related to coordinating with the trainer, space, and timing of sessions, we request approval for nine months.

Subject Duration: As noted above, subject will complete 10 sessions in two weeks (Monday through Friday).

General Information

Empirical literature supports the value of health promoting work breaks to improve health, enhance job satisfaction, and improve co-worker relationships. Middle managers are essential to any organization and their support and encouragement are critical for the success of any health promoting initiative. As preliminary data for our R01 grant application to the National Cancer Institute, we plan to conduct a study with middle managers and elicit their feedback, recommendations, and support related to 15-minute work breaks and group physical activity sessions during the work day.

Background Information

Most work break behaviors are health compromising such as consuming unhealthy snacks, smoking, or sitting and surfing the net. Given the ubiquitous nature of 15-minute work breaks, there is an emerging trend to transform the 15-minute work break into a group activity dedicated to health-promoting behaviors such as physical activity, meditation, and rhythmic breathing. Health promoting work breaks are “Booster Breaks.” In this study, we focus on group physical activity sessions during 15-minute work breaks for middle managers. The empirical literature related to these types of breaks document favorable results for physical and psychological health as well as organizational morale (Taylor 2005; Taylor 2011; Taylor et al., 2010; 2013; 2014; 2016; Largo-Wight et al., 2017; Davy et al., 2011; Lombard & Goebel, 2009). However, there is no known study with middle managers as the target study population.

The hypotheses are:

Middle managers will favorably evaluate their physical activity work breaks.

Middle managers will support their staff to participate in physical activity work breaks.

Objectives

The two primary objectives are for: 1) middle managers to experience the physical activity work break; and 2) middle managers to provide feedback, recommendations, and support for physical activity work breaks. Middle managers will experience 10 sessions (two weeks - Monday through Friday) of physical activity work breaks and then evaluate their experience by completing a survey. Each organization will decide on the time for the sessions. In our previous work, typical times were 10:15 am to 10:30 am or 3:15 pm to 3:30 pm (to counter mid-afternoon slump).

Study Design

The study design is a pre- and post-test with a volunteer sample of middle managers. In our previous work with the same protocol, we completed the only known workplace physical activity intervention with three randomized conditions in a racially and ethnically diverse study sample (one-third non-Hispanic whites, Hispanics, and Blacks). In addition, the study included a blood draw prior to the intervention and after the intervention. The intervention was six months long with four, distinctly different workplaces (n=175). We reported positive results (Taylor et al., 2016). Therefore, efficacy has been demonstrated and there were no safety concerns. Similar to previous work, for the proposed study, the outcome data will be survey one (attached), assessment of physical activity, stress, etc., pre- and post-assessment. Survey two (attached), evaluation of work break experience, will be administered post-assessment only.

Study Population

All middle managers, who have not been medically prohibited to be physically active, are eligible to participate.

The recruitment strategy will be luncheon presentations at selected organizations and then subjects will volunteer and complete the consent form. After the presentation, all questions will be answered. In our previous work, this strategy was successful (Taylor et al., 2010; 2013; 2014; 2016).

Study Procedures

After completing the 10 sessions of 15-minute physical activity sessions, the principal investigator and study coordinator will distribute and collect surveys from the participants. Participants who attend all 10 sessions will be eligible for a raffle to win \$50.00 gift certificates. All data will be de-identified.

Each session will be led by a certified personal trainer. Each session will begin with two-minutes of warm up, 10- minutes of movements for all major muscle groups, followed by two minutes of cool down movements and a 30 second quiet time (i.e., meditation). This protocol is the same as in our previous work and has been thoroughly tested (Taylor et al., 2010; Taylor et al., 2016) (see attached protocol).

The outcome data will be survey one (attached), assessment of physical activity, stress, etc., pre- and post-assessment and survey two (attached), evaluation of work break experience, post-assessment only.

Data and Safety Monitoring

Prior to participation, participants will complete a screening questionnaire (attached) developed by the American College of Sports Medicine to assess safety to participate in physical activity. In our previous research, more than 250 participants completed the protocol with no adverse events. Safety is a top priority. The certified trainer begins each session with a clear message. Stop the routine, if you feel pain or tightness in your chest, become short of breath, or feel faint. In our previous studies, a safety monitoring board was not established. Any adverse events will be reported immediately to the Committee for the Protection of Human Subjects.

Statistics

We expect to enroll from 50 to 100 participants. The purpose of this study is to provide preliminary data for our R01 application; therefore, a formal power analyses was not conducted. As in our previous work, appropriate statistics will be conducted including measures of central tendency (means, medians, and modes), trend analyses, and tests for statistically significant differences ($p < 05$). Data from all eligible subjects will be used.

Ethics

The consent form will be approved by CPHS. All subjects will read and sign the approved consent form prior to participation.

Data handling and record keeping

All data will be de-identified. To protect subjects, only the principal investigator and project coordinator will have access to the confidential study code that links data to subjects. All surveys will be locked in a file cabinet in the workstation on a floor inaccessible to the general public. The principal investigator and project coordinator will have access to the file cabinet.

Quality control and assurance

The principal investigator or project coordinator will review all surveys for accuracy and completeness. There are no plans to have ongoing third party monitoring.

Publication Plan

Currently, there are no plans to return results to research subjects unless specifically requested by the subject. We plan to analyze the data and then determine whether the findings merit developing a paper to submit for publication.

ATTACHMENTS

1. Consent Document
2. Safety assessment prior to first session
3. Protocol for physical activity sessions
4. Two surveys
5. PDFs of selected publications (n=8)

References

Largo-Wight, E., Wlyudka, P. S., Merten, J. W., & Cuvelier, E. A. (2017). Effectiveness and feasibility of a 10-minute employee stress intervention: Outdoor Booster Break. *Journal of Workplace Behavioral Health*, DOI: 10.1080/15555240.2017.1335211.

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