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Process Evaluation of a Multi-Component "Sit Less, Walk More" Workplace Intervention for Office Workers

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Background: Sit Less, Walk More (SLWM) workplace intervention was designed for office workers with demonstrated efficacy in improving walking and some cardiometabolic biomarkers. However, little is known about the participants' perceptions of the program and each program component's contribution to observed program effects.

Purpose: To evaluate participants' perceptions of and engagement with the program components in the SLWM to understand program effects.

Methods: Process evaluation data were primarily collected during and immediately after the 12-week intervention period. The SLWM included multi-components: three monthly newsletters, six biweekly motivational tools, a team-based 10,000 steps challenge, environmental prompts, and walking routes and resources. A survey contained both closed and open-ended questions assessing frequency of use of components; perceptions of program components; factors that hindered the use of program components; and recommendations for improving program components. Qualitative data were analyzed using content analysis.

Results: Fifty-one (100%) intervention participants completed the post-intervention survey. Their ages ranged from 30 to 62 (mean = 52.1, *SD* = 6.57). The majority of participants were married (92.2%) and highly educated (60.8% had a college or graduate degree). For engagement with the program, during the 12-week intervention period, 84.3% of the intervention participants read 2 or more of the 3 monthly newsletters, while 78.4% read 3 or more of the 6 motivational tools. On a scale of 1-5, mean frequency of viewing prompting posters displayed throughout the workplace versus those loaded onto participants' office computers was 3.31 versus 3.82, respectively. Almost all (98.0%) reported wearing a pedometer and recording steps, while 86.3% reported recording sitting times at least 5 days a week.

For overall perceptions of the program, most participants were satisfied with the SLWM program (84.3%) and thought the program to be beneficial (78.4%) and effective (74.5%) to them in increasing physical activity and decreasing sitting behavior. Participants reported the team-based 10,000 steps challenge to be the most helpful component because of the motivation and encouragement elicited by the pedometer and Step Log (79.6%), goal setting (45.5%), and the use of the support group approach as well as group competition (29.6%). The walking route was not received well by the participants. The reasons for this included time constraints due to work or family obligations (54.1%), physical environment issues primarily due to weather (21.6%), and using their own preferred methods of exercise or walking routes (13.5%).

Participants suggested future interventions providing a pedometer or a wireless physical activity tracker with accurate, continuous automatic recording function (17.1%); using electronic versions of newsletters and motivational tools instead of printed ones (11.4%); and making Step Log and Sitting Log as simple and convenient as possible (11.4%).

Conclusion: The findings provided insight into participants' perceptions of and engagement with various components of the SLWM workplace intervention. The team-based 10,000 steps challenge was the most

helpful intervention component, specifically including the elements of pedometer and Step Log, Sitting Log, goal setting, and group competition. Moreover, newsletters, motivational tools, and environmental prompts can be employed to provide informational and motivational support to participants. However, the walking route designed to encourage participants to take walking breaks was less useful to our participants.

Title:

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Keywords:

Physical activity, Process evaluation and Workplace intervention

References:

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Abstract Summary:

Findings from the process evaluation provided insight into participants' perceptions of and engagement with various components of the "Sit Less, Walk More" workplace intervention. The team-based 10,000 steps challenge was the most helpful component, specifically including the elements of pedometer and Step Log, Sitting Log, goal setting, and group competition.

Content Outline:**I. Introduction**

A. Sit Less, Walk More (SLWM) workplace intervention was designed for office workers with demonstrated efficacy in improving walking and some cardiometabolic biomarkers.

B. Little is known about the participants' perceptions of the program and each program component's contribution to observed program effects.

C. The purpose of this process evaluation was to evaluate participants' perceptions of and engagement with the program components in the SLWM to understand program effects.

II. Body

A. During the 12-week intervention period, intervention participants' overall engagement with the program was good.

1. Most participants (84.3%) read 2 or more of the 3 monthly newsletters, with 62.8% reading all 3 newsletters.
2. Most participants (78.4%) read 3 or more of the 6 motivational tools, with 47.1% reading all 6.
3. On a scale from 1 (not at all) to 5 (a lot), mean frequency of viewing prompting posters displayed throughout the workplace versus those loaded onto participants' office computers was 3.31 versus 3.82, respectively.
4. Almost all (98.0%) reported wearing a pedometer and recording steps at least 5 days a week, with 90.2% reporting every day.
5. Most participants (86.3%) reported recording sitting times at least 5 days a week, with 66.7% recording it every day.

B. During the 12-week intervention period, intervention participants' overall perceptions of program components were positive.

1. Most participants (84.3%) were satisfied (≥ 4) with the SLWM program ($M = 4.1$).
2. Most participants (78.4%) thought the program to be beneficial (≥ 4) to them.
 - *The most frequently reported benefits of participating in the program were increasing the motivation for physical activity (53.7%), followed by a reduction in prolonged sitting time (24.4%) and better health and vitality (24.4%).*
3. Most participants (74.5%) found the program to be effective (≥ 4) in increasing physical activity and decreasing sitting behavior.
 - *The team-based 10,000 steps challenge was referred to as the most helpful component because of the motivation and encouragement elicited by the pedometer & Step Log (79.6%), goal setting (45.5%), and the use of the support group approach as well as group competition (29.6%).*
 - *On a scale from 1 (not at all) to 5 (a lot), the pedometer & Step Log ($M = 4.1$), Sitting Log ($M = 3.7$), goal setting ($M = 3.6$) and group competition ($M = 3.6$) were effective at helping participants increasing physical activity and decreasing sitting behavior.*
 - *However, the walking route was not received well by the participants primarily because of the reasons of time constraints due to work or family obligations (54.1%), physical environment issues mainly due to weather (21.6%), and using their own preferred methods of exercise or walking routes (13.5%).*

C. Participants provided suggestions for improving future interventions.

1. Providing a pedometer or a wireless physical activity tracker with accurate, continuous automatic recording function (17.1%).
2. Using electronic versions of newsletters and motivational tools instead of printed ones (11.4%).
3. Making Step Log and Sitting Log as simple and convenient as possible (11.4%).

III. Conclusion

A. The findings provided insight into participants' perceptions of and engagement with various components of the SLWM workplace intervention.

B. The team-based 10,000 steps challenge was the most helpful intervention component, specifically including the elements of pedometer and Step Log, Sitting Log, goal setting, and group competition.

C. Newsletters, motivational tools, and environmental prompts can be employed to provide informational and motivational support to participants.

D. The walking route designed to encourage participants to take walking breaks was less useful to our participants.

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