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Is Baseline Physical Activity a Determinant of Participation in Worksite Walking Clubs? Data From the HealthWorks Trial

Jeffrey J. VanWormer,
Dept of Epidemiology and Community Health, University of Minnesota, Minneapolis, MN. Epidemiology Research Center, Marshfield Clinic Research Foundation, Marshfield, WI

Jennifer A. Linde,
Dept of Epidemiology and Community Health, University of Minnesota, Minneapolis, MN

Lisa J. Harnack,
Dept of Epidemiology and Community Health, University of Minnesota, Minneapolis, MN

Steven D. Stovitz, and
Dept of Family Medicine and Community Health, University of Minnesota, Minneapolis, MN

Robert W. Jeffery
Dept of Epidemiology and Community Health, University of Minnesota, Minneapolis, MN

Abstract

Background—Some evidence suggests that physical activity programs mainly attract employees who are already active. This study examined the degree to which baseline physical activity was associated with enrollment in worksite walking clubs.

Methods—All variables were measured at baseline. Walking club participation was measured over 2 years. There were 642 individuals from 3 worksites with complete data available for logistic regression analyses.

Results—Baseline physical activity [OR (95% CI) = 1.00 (0.99, 1.01)] was not a significant predictor of walking club participation. Participants who were older [OR = 1.03 (1.01, 1.04)] or indicated more social support for physical activity [OR = 1.13 (1.02, 1.25)] had significantly higher odds of participation relative to those who were younger or indicated less social support, respectively. In addition, men [OR = −0.25 (0.18, 0.36)] and employees from the second worksite [OR = −0.41 (0.25, 0.67)] had significantly lower odds of participation relative to women and employees from the first or third worksites, respectively. Sensitivity analyses arrived at similar conclusions.

Conclusions—Worksite walking clubs were appealing across varying levels of physical activity. Future research should improve marketing and program design to engage harder-to-reach segments of the workforce, particularly young men and those with limited social support.

Keywords

engagement; regression

Excess body weight has a negative impact on the American public's health,[1–3] with more than one-third of 20–74 year olds being clinically obese in the U.S.[2,4] Current evidence suggests limited efficacy for weight loss interventions as a long-term obesity management strategy[5–10] and some experts have advocated for a more pragmatic focus on the prevention of weight gain across large populations.[4,11,12] Some evidence indicates that weight gain prevention interventions are efficacious,[13] particularly when they emphasize increased physical activity.[1,14] High physical activity is among the strongest predictors of weight

maintenance.[15] A large (n = 34,079) prospective cohort study of female adults found that regular physical activity (~1 hour daily) was the strongest predictor of primary weight gain prevention over 15 years.[16] There may also be a dual feedback loop reinforcing this process in that overfeeding during short time periods has been causally linked to decreases in leisure-time walking.[17]

A recent meta-analysis examined the health and behavioral effects of workplace physical activity interventions. That study included 38,231 participants from 138 reports and indicated a mean overall effect size of d = 0.57 for poststudy oxygen consumption levels (VO_2max) in favor of treatment group participants over controls.[18] This translated into a VO_2max mean of 37.7 mL·kg·min for treatment subjects relative to 34.2 mL·kg·min for control subjects, or about a 10% advantage in physical fitness for those exposed to worksite physical activity programs. Similarly, findings from this meta-analysis also indicated that participants in worksite physical activity programs were nearly 8% more physically active (eg, higher pedometer step counts, higher physical activity questionnaire scores) than control participants (effect size d = 0.21). Narrative reviews on this topic have arrived at similar, though slightly more optimistic, conclusions that physical activity interventions based at the worksite increase overall activity.[19,20]

Worksite physical activity programs seem to improve physical activity levels for the employees they reach, but little is known about what influences participation in them. Many researchers intimate that physical activity programs, and health promotion programs in general, are biased toward attracting individuals who need them least (as they are already healthy and sufficiently active).[21,22] A recent systematic literature review cited mixed findings on baseline physical activity/fitness levels as predictors of program participation.[23] In a prospective cohort study of 2290 employees at a petrochemical company, Lewis and colleagues[24] found that participants at higher fitness levels (unspecified) per a worksite health risk assessment had 45% higher odds of signing up for a multicomponent health promotion program that included a major focus on physical activity. These same participants also had 2.5 times higher odds of using the company fitness center relative to employees at lower fitness levels (unspecified). In contrast, a small study by Heaney et al[25] found that new female employees of an insurance company that reported being physically active less than 1 day per week at baseline had 2.43 times higher odds of joining the company fitness center over their first year of employment relative to new female employees who reported being physically active more than 2 days per week at baseline.

It remains unclear to which degree baseline physical activity level influences participation in physical activity programs. In particular, there are no known studies to date that have examined the determinants of participation in worksite walking programs, the most preferred form of physical activity among working age adults.[26] There remains a need to establish the relationship between baseline physical activity level and walking program participation to help improve recruitment and/or retention efforts for these programs. The purpose of this analysis was to examine the degree to which baseline physical activity level was a determinant of participation in worksite walking club events.

Methods

This analysis was conducted with data from a larger randomized-controlled trial, HealthWorks. The purpose of the HealthWorks trial was to evaluate the effectiveness of a multicomponent package of environmental interventions on physical activity, eating behavior, and body weight change over 2 years among working adults. HealthWorks used a group randomized design, consisting of 6 worksites in the Minneapolis–St. Paul metropolitan area. Three worksites were randomized to a weight gain prevention arm and 3

to a no-treatment control arm. Measures were taken at baseline and again at 24-month follow-up. Study procedures were approved in advance by the University of Minnesota Institutional Review Board and all participants signed informed consents.

Participants

Study eligibility requirements for participating worksites were ≥250 employees, willingness to provide a worksite liaison and advisory group to help coordinate activities, onsite food services, onsite stairways and elevators, willingness to allow for intervention and measurement procedures, and willingness to be randomized to the treatment or control condition. Participating companies represented a mix of industries including finance/insurance, healthcare, lifestyle/beauty, higher education, and energy. Within each participating worksite, study eligibility requirements for individual participants were at least 50% full-time equivalent position, dayshift, present onsite at least half of position, and willingness to complete study assessments. Individual employee recruitment was conducted over a 4-week period and included sending a site-wide announcement inviting participation and up to 9 proactive telephone calls from study staff further inviting study participation (based on an a priori list of eligible employees obtained from the employer). Across all 6 participating worksites, the estimated total available workforce was 2700 individual employees, of which 2428 met the inclusion criteria. Of these, 1747 enrolled in the HealthWorks trial and completed baseline assessments, and 1407 completed the 24-month follow-up assessment. For analytical purposes, only study participants assigned to the intervention arm, with complete baseline and 24-month follow-up data, not pregnant, and not having given birth during the trial or within 1 year before enrollment were considered eligible.

Intervention Overview

Briefly, the HealthWorks intervention focused on changes to the work environment designed to support regular physical activity, reduced caloric consumption, and weight control behaviors. These included healthy food/beverage price and access modifications, aesthetic stairwell enhancements, free pedometers and website step tracking tool access, improved scale access for self-weighing, worksite advisory groups, site-wide publicity of nutrition and physical activity programs (announcements and signage), and monthly healthy living newsletters. Of particular relevance to this analysis were the walking clubs. These were offered at each intervention worksite and were site-wide clubs that promoted regular walking among employees through a series of club events. Research staff and worksite leads served as club organizers. Recruited floor/department tenants then served as department organizers, liaisons, and promotional point-persons. Walking club participants completed a basic membership form. Membership was free and the only requirement was being employed at the worksite. Group walking events were held in the form of a seasonal challenge program, typically lasting 6 to 8 weeks, and included a daily organized group walk at work during the walking club challenge timeframe, along with feedback on group performance (eg, participation, miles accumulated). Employees who enrolled in the walking club events received free t-shirts, visors, and walking logbooks to assist with tracking. Team competitions and charity walks were organized for some events, with small incentives for teams that logged the most miles within a specified time period. At each worksite, there were 6 or 7 total walking club events offered over the course of the 2-year study.

Measures

Independent Variable—The independent variable was overall physical activity level at baseline. Physical activity was assessed using a slightly modified version of the International Physical Activity Questionnaire (IPAQ),[27] as was done by French and colleagues in a

comparable worksite-based study.[28] Specifically, it included 10 items asking questions about walking, sitting, and vigorous and moderate physical activities performed at home, work, and leisure time settings. Participants responded with how many days per week they typically did such activities (frequency) and for how long per day (duration). Per the IPAQ scoring guidelines,[29] overall physical activity level is calculated and reported in metabolic unit equivalent minutes per week (MET-min·wk). The MET-min·wk can be roughly translated as the rate of energy consumption of all physical activities performed during a given week relative to the rate of energy consumption if no physical activities were performed during that given week (ie, at rest). In the IPAQ, this measure is calculated by summing the MET-min·wk for all reported walking, moderate, and vigorous physical activities. The IPAQ has well established test-retest reliability in several settings (median Spearman's rho = 0.80) and acceptable criterion validity (median Spearman's rho = 0.30) as a self-reported physical activity measure.[30] Note that physical activity was expected to have a large range and standard deviation, thus for analytical purposes, it was modeled in units of 10 MET-min·wk (vs the standard 1 MET-min·wk) to improve interpretability of parameter estimates. It was then back-transformed to standard units for discussion purposes.

Dependent Variable—The dependent variable was participation in worksite walking club events offered as part of HealthWorks. For the purposes of analysis, HealthWorks subjects were dichotomized into 1 of 2 categories: 1) enrollee: enrolled in ≥1 walking club events, and 2) nonenrollee: enrolled in 0 walking club events. Note that each participating worksite had 6 to 7 walking club events offered over the course of the 2-year study.

Covariates—Covariates considered for inclusion were baseline: age, sex, race/ethnicity, education, marital status, worksite, smoking, diabetes, high blood pressure, depression, perceived pounds needed to gain before attempting weight loss, social support for physical activity, and BMI. Social support for physical activity was measured with a single item that asked participants to rate on a 6-point scale (ranging from 0 = not supportive, to 5 = very supportive) how supportive their coworkers are of efforts to be more physically active. For BMI, weight was measured using a calibrated digital scale (participants wore light street clothes and no shoes) and height was measured using a wall-mounted ruler. There was little direct empirical guidance to inform the selection of covariates. Only the Heaney, et al[25] study used a multivariate model, and found sex, education, high blood pressure, and BMI to be significant predictors of workplace fitness facility use. Other covariates considered for this analysis were selected based on the clinical suspicion that they may be related to baseline physical activity level and/or peer walking club participation. Each covariate was initially considered by examining its univariate associations with the independent and dependent variables. Because these univariate analyses were only needed to initially identify covariates that would be tested in final models, less protection against a type I error was deemed necessary. Any covariate that was found to have $P < .10$ in its association with the dependent variable (ie, potential independent predictor) or both the independent and dependent variable (ie, potential confounder) was considered for inclusion.

Statistical Analyses

All analytical procedures were conducted using SAS Version 9.2 (Cary, NC). No imputations were made for missing variables and a complete-case framework was used in that participants with missing values for any variable were listwise deleted. A multivariate logistic regression model (PROC LOGISTIC) was used to examine the association between baseline physical activity and walking club event participation. The outcome in this analysis, walking club participation, was modeled as a dichotomous variable [ie, enrollee vs. nonenrollee (reference category)]. Baseline physical activity level, was modeled continuously. First, a basic model was created to examine the crude relationship between

baseline physical activity and walking club event participation. Next, effect modification was examined by creating a 2-way interaction term between baseline physical activity and each covariate (separately), and entering it into the crude model. In addition, a quadratic interaction term for baseline physical activity was tested. Any interaction term with a *P*-value less than 0.05 was retained in subsequent models. Remaining covariates that were not found to be effect modifiers were then entered separately into the reduced model to check for their utility as an independent predictor or a confounder. Specifically, any covariate term with a *P*-value less than 0.05 or that that changed the reduced modeled baseline physical activity parameter estimate by more than 10% (ie, was a confounder) was retained in the final model.

Results

Of the 752 study enrollees assigned to the intervention arm, 642 (85%) met all eligibility criteria for inclusion in this analysis. Table 1 outlines the descriptive characteristics of the included and excluded analytical samples, as well as the entire HealthWorks intervention arm. HealthWorks participants were primarily non-Hispanic White, middle-aged females. Missing follow-up data were primarily due to participants leaving employment at the study site. Differences in baseline characteristics were statistically indistinguishable between the 642 participants from the intervention arm that were included in the analytical dataset relative to the remaining 110 participants that left the workforce or declined study follow-up. Three exceptions were age, marital status, and worksite (see Table 1). Participants who were younger at baseline, married, or were employed at worksite #1 were significantly more likely to be excluded. In regard to the primary dependent and independent variables in the analytical sample, 322 (50%) participants enrolled in ≥1 walking club events and median overall physical activity level was 2635 MET-min·week. As outlined in Table 2, initial crude examinations of the considered baseline covariates found that age, sex, worksite, and coworker social support were suitable to be tested for inclusion in the final model.

The initial crude model indicated that baseline physical activity level ($\beta \pm SE < -0.001 \pm < 0.001$, $\chi^2 = 0.27$, $P = .607$) was not significantly associated with participation in walking club events. The direction of this relationship was essentially “flat,” indicating no discernible relationship between these 2 variables. Further modeling for effect modification revealed no significant interactions between any of the considered covariates. However, age, sex, worksite, and coworker social support were found to be independent predictors of participation in walking club events (none met the analytical definition of confounders). The final multivariate regression model with all included beta terms and directions of association for this analysis is summarized in Table 3. Participants who were older, female, and/or had more coworker social support had a significantly higher odds of participation in walking club events relative to participants who were younger, males, and/or had less coworker social support, respectively. In addition, participants who were employed at worksite #2 had significantly lower odds of participation in walking club events relative to participants who were employed at worksite #1 or worksite #3. The strongest single covariate in the final multivariate model seemed to be male sex. After covariate adjustment, men had 75% lower odds of participation in walking club events relative to women.

In addition, 2 sensitivity analyses were performed that used the same analytical procedures outlined above. The first sensitivity analysis excluded participants that had a BMI <25.0 kg/m^2 and reported ≥ 3000 MET-min·week of physical activity (ie, “high” per the IPAQ scoring guidelines[29]). This was done to control for the possible influence of highly fit participants that would (presumably) have little motivation to participate in the walking program due to an already well established physical activity routine with limited concerns over weight gain. A total of 87 participants were excluded based on this definition.

Parameter estimates from this sensitivity analysis were very similar to those in the main findings, with the exception that coworker social support was dropped from this model because its associated *P*-value was no longer significant (results not shown). The second sensitivity analysis used a more stringent dichotomized definition of walking club participation that included enrollment in ≥2 events (instead of just ≥1 events). This was done to account for the possible influence of participants with fleeting motivation that signed up for a single program but otherwise failed to sustain their involvement with the walking club. The walking club participation rate was reduced to 25% using this definition. The final model from this sensitivity analysis is outlined in Table 4. Though the included terms were identical to those in the main findings, regression coefficients were generally more tempered in this sensitivity analysis. Again the exception was coworker social support, which was actually stronger in this model.

Discussion

The main findings and 2 sensitivity analyses indicated that there was essentially no relationship between baseline physical activity level and worksite walking club participation. These results differed from 2 previous studies in this area, with one indicating higher levels of baseline activity increased program participation[24] and the other indicating that higher levels of activity decreased participation.[25] This may be partially explained by what constituted program participation in other studies. For example, 1 study defined participation as use of the company fitness center,[25] which may be a relatively narrow option if it appeals only to employees who prefer structured exercises involving an apparatus (eg, stationary bike, lifting weights).

The null relationship between baseline physical activity and walking club participation in this study may be considered in a positive light. Previous research has indicated that health promotion programs tend to attract only a small, specific fraction of the population. Population reach rates are rarely known or published.[31] In HealthWorks, one-half of the enrollees who had access to the walking clubs participated in at least 1 of them. This 50% reach rate seems to be higher than those reported in other recent worksite physical activity programs[32,33] and may serve as a reasonable benchmark for the recruitment success of future programs. The key question, however, is in regard to who “shows up”? Physical activity research trials mainly attract individuals with higher income and education,[22] and program participants are generally believed to be healthier than nonparticipants.[21] There may be a difference between enrolling in a trial versus enrolling in a wellness program, but education was also unrelated to walking club participation in HealthWorks and income was not measured. It may be that walking club events are more broadly appealing to a given workforce.

However, there were clear limits to the appeal of the HealthWorks walking clubs. Males were least apt to enroll, which seems to be well established in programmatic and trial research.[21,22] Also, employees who reported low coworker social support for physical activity had lower odds of enrolling compared with those with high levels of social support. This seems to be a novel finding, though others have identified social support in general as being associated with exercise adherence and wellness program retention.[34,35] Of note, social support was not a strong covariate in the first sensitivity analysis where highly fit participants were excluded, but was much stronger in the second sensitivity analysis where the definition of walking club participation was more stringent. This suggests that social support is more reinforcing for people who are already active or otherwise remain committed to a walking club beyond the initial sign-up.

Though it was more locally relevant from a feasibility standpoint rather than of broad scientific interest, worksite was also examined in this analysis and it was discovered that 1 worksite had a participation rate that was one-third lower than the other 2. It was unclear why this was the case, but the low participating worksite was a private insurance company, whereas the other 2 provided public education and nonprofit healthcare services. The degree to which industry culture may play a role in program participation may be an important consideration for future program evaluations where multiple worksites are involved.

There were several methodological strengths in this analysis. Participation in the walking club events was a directly observed outcome. Because it involved a subprogram of the full intervention cohort, this analysis permitted evaluating how the subprogram participants differed from nonparticipants. After accounting for study enrollment and eligibility criteria, the final analytical sample included 62% of the entire workforce across all 3 combined intervention worksites. Having access to multiple independent variables from both participants and nonparticipants is uncommon in prospective intervention studies, therefore this analysis helps researchers understand some commonly suspected, but understudied, forms of volunteer bias.

The most significant limitation to internal validity was the reliance on self-reported physical activity. The IPAQ is commonly used in the published scientific literature and has validity statistics comparable to other self-reported instruments, but it provides estimates with a high degree of variability, which may make it less sensitive as compared with more objective measures of physical activity (eg, accelerometers). In addition, social support was assessed with a single-item instrument. Walking club participation was dichotomized for analytical purposes. Because the available number of walking club events was small and somewhat variable across the worksites, no attempts were made to model walking club participation as a continuous variable. Even though a sensitivity analysis was used with a more stringent definition of participation, an analysis using a dose-response oriented approach could be a useful avenue of future research and provide more insights into the relationship between baseline activity and program participation over time. Other limitations involved the exclusion of participants with missing data and the sample size was limited to detect all possible interactions.

Researchers are well aware that the American public is not active enough to slow the rising prevalence of obesity. If worksite walking programs can indeed attract a sizeable fraction of a given workforce to become more active, regardless of their physical activity level from the start, this is an encouraging finding because these sorts of programs are a feasible option to start up at other work-sites. Yet there remain significant challenges to attract the “other half” of employees who do not participate, particularly young males with limited social support. Future research should focus on how to improve aspects of physical activity program design and marketing so that participation among these harder to reach groups can be increased.

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Table 1

Descriptive Baseline Characteristics of the Entire Healthworks Study Intervention Arm, as Well as Those Included and Excluded From the Analytical Sample

Baseline measure	Intervention arm (all) (n = 752)	Included in analytical sample (n = 642)	Excluded from analytical sample (n = 110)	*P*
Age (y)	42.7 ±10.8	43.1 ±10.8	39.7 ±10.6	0.004
Sex				0.061
Male	272 (36%)	242 (38%)	30 (27%)	
Female	478 (64%)	400 (62%)	78 (71%)	
Not reported	2 (0%)	0 (0%)	2 (2%)	
Race/ethnicity				0.296
White, non-Hispanic	645 (86%)	565 (88%)	80 (73%)	
Not White or Hispanic	92 (12%)	77 (12%)	15 (14%)	
Not reported	15 (2%)	0 (0%)	15 (14%)	
Education level				0.961
No college degree	288 (38%)	251 (39%)	37 (34%)	
College degree or higher	448 (60%)	391 (61%)	57 (52%)	
Not reported	16 (2%)	0 (0%)	16 (15%)	
Marital status				0.027
Married or living with partner	510 (68%)	433 (67%)	77 (70%)	
Not married or living with partner	230 (31%)	209 (33%)	21 (19%)	
Not reported	12 (2%)	0 (0%)	12 (11%)	
Worksite				0.004
#1	168 (22%)	130 (20%)	38 (35%)	
#2	259 (34%)	227 (35%)	32 (29%)	
#3	325 (43%)	285 (44%)	40 (36%)	
Current cigarette smoker				0.554
Yes	89 (12%)	76 (12%)	13 (12%)	
No	646 (86%)	566 (88%)	80 (73%)	
Not reported	17 (2%)	0 (0%)	17 (15%)	
Medical conditions*				
Diabetes	24 (3%)	21 (3%)	3 (3%)	0.975
High blood pressure	154 (20%)	140 (22%)	14 (13%)	0.147
Depression	162 (22%)	138 (21%)	24 (22%)	0.268
Required weight gain for action (lb)	7.8 ±10.3	7.6 ±9.2	9.4 ±16.8	0.133
Coworker social support (0 = low, to 5 = high)	2.3 ±1.7	2.4 ±1.7	2.2 ±1.7	0.458
Body mass index (kg/m^2)	28.8 ±6.6	28.8 ±6.6	28.8 ±6.7	0.932

Note. All values are reported as mean ± standard deviation or frequency (% of sample total). *P* = probability value, and corresponds to difference between included and excluded groups.

*Variable does not sum to 100% of sample because participants could select multiple responses.

Table 2

Univariate, Unadjusted Association Matrices Between Each Considered Covariate and the Primary Determinant, as Well as the Outcome Variable (n = 642)

	Determinant variable	Outcome variable
Covariates	**Physical activity (MET-min·wk)**	**Walking club (enrollee vs. nonenrollee)**
Age* (y)	−3.586 (*P* < .001)	1.026 (*P* = .001)
Sex* (male vs. female)	197.965 (*P* = .388)	0.246 (*P* < .001)
Race/ethnicity (non-White or Hisp vs. White non-Hisp)	−261.038 (*P* = .446)	1.151 (*P* = .654)
Education (no college degree vs. college degree)	356.517 (*P* = .117)	1.303 (*P* = .102)
Marital status (married/partner vs. not married/partner)	−398.110 (*P* = .093)	1.083 (*P* = .634)
Worksite (#3 vs. #1)	−901.136 (*P* = .002)	0.925 (*P* = .717)
Worksite* (#2 vs. #1)	−425.049 (*P* = .168)	0.464 (*P* = .001)
Current cigarette smoker (yes vs. no)	−161.768 (*P* = .638)	0.736 (*P* = .212)
Diabetes (yes vs. no)	−1,033.781 (*P* = .098)	0.738 (*P* = .498)
High blood pressure (yes vs. no)	−254.630 (*P* = .344)	1.067 (*P* = .734)
Depression (yes vs. no)	−584.909 (*P* = .030)	0.888 (*P* = .537)
Required weight gain for action (lb)	16.546 (*P* = .170)	0.988 (*P* = .169)
Coworker social support* (0 = low, to 5 = high)	38.592 (*P* = .555)	1.144 (*P* = .004)
Body mass index (kg/m^2)	−57.390 (*P* = .001)	0.994 (*P* = .602)

Note. Values for physical activity are reported in MET-min·wk (*P*-value). Negative values indicate that as the covariate increases (or relative to the reference category for categorical covariates), physical activity decreases. Values for walking club participation are reported as odds ratio (*P*-value) of being an enrollee relative to a nonenrollee. Values less than 1 indicate that as the covariate increases (or relative to the reference category for categorical covariates), the odds of being an enrollee decrease relative to a nonenrollee. All covariates were collected at the baseline assessment.

*Covariate considered for entry into the final multivariate models because *P* < .10 for physical activity or walking club participation.

Table 3

Final Multivariate Logistic Regression Model Depicting the Association Between Participation in Walking Club Events and Baseline Physical Activity, With Significant Covariates

	Enrollee in walking club (vs. nonenrollee)				
Model terms (n = 642)	**β**	**SE**	**OR**	**95% CI**	***P***
Intercept	−0.514	0.480	—	—	0.284
Physical activity (MET-min·wk) *	< −0.001	<0.001	1.00	0.99–1.01	0.808
Age (y)	0.027	0.008	1.03	1.01–1.04	0.001
Sex					
Male	−1.376	0.183	0.25	0.18–0.36	<0.001
Female (ref)	—	—	—	—	—
Coworker social support (0 = low, to 5 = high)	0.121	0.052	1.13	1.02–1.25	0.020
Worksite					
#3	−0.227	0.244	0.79	0.49–1.29	0.352
#2	−0.889	0.247	0.41	0.25–0.67	<0.001
#1 (ref)	—	—	—	—	—

Note. β values are equal to (natural) logarithmic odds ratio of being an enrollee in ≥1 walking club event relative to the reference category. Positive values indicate that as the independent variable increases (relative to the reference category for categorical variables or a 1-unit increase for continuous variables), the odds of being an enrollee increases. Negative values indicate that as the independent variable increases (relative to the reference category for categorical variables or a 1-unit increase for continuous variables), the odds of being an enrollee decreases.

Abbreviations: SE, standard error; OR, adjusted odds ratio; 95% CI, 95% confidence interval; *P*, probability value.

* To aid in interpretation, the OR and CI for physical activity is per 10 MET-min·wk (versus 1 MET-min·wk).

Table 4

Final Multivariate Logistic Regression Model Depicting the Association Between Participation in Walking Club Events and Baseline Physical Activity, With Significant Covariates, From a Sensitivity Analysis With a More Stringent Definition of Participation

	Enrollee in walking club (vs. nonenrollee)				
Model terms (n = 642)	**β**	**SE**	**OR**	**95% CI**	***P***
Intercept	−1.912	0.548	—	—	<0.001
Physical activity (MET-min·wk) *	< −0.001	<0.001	1.00	0.99–1.01	0.476
Age (y)	0.019	0.009	1.02	1.00–1.04	0.044
Sex					
Male	−1.259	0.233	0.28	0.18–0.45	<0.001
Female (ref)	—	—	—	—	—
Coworker social support (0 = low, to 5 = high)	0.204	0.059	1.23	1.09–1.38	0.001
Worksite					
#3	−0.060	0.266	0.94	0.56–1.59	0.823
#2	−0.635	0.282	0.53	0.31–0.92	0.024
#1 (ref)	—	—	—	—	—

Note. β values are equal to (natural) logarithmic odds ratio of being an enrollee in ≥ 2 walking club event relative to the reference category. Positive values indicate that as the independent variable increases (relative to the reference category for categorical variables or a 1-unit increase for continuous variables), the odds of being an enrollee increases. Negative values indicate that as the independent variable increases (relative to the reference category for categorical variables or a 1-unit increase for continuous variables), the odds of being an enrollee decreases.

Abbreviations: SE, standard error; OR, adjusted odds ratio; 95% CI, 95% confidence interval; *P*, probability value.

* To aid in interpretation, the OR and CI for physical activity is per 10 MET-min·wk (versus 1 MET-min·wk).