Quantitative Research



Availability and Use of Workplace Supports for Health Promotion Among Employees of Small and Large Businesses

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Abstract

Purpose: To explore the availability and utilization of workplace health supports by employees of small and large-sized employers.

Design: Cross-sectional, telephone-based interviews collected on 16 workplace health supports for physical activity and diet.

Setting: Participants selected by random-digit-dialing from 4 metropolitan areas of Missouri employees from 2012 to 2013.

Participants: Two thousand fifteen working adults.

Methods: We explored the availability and use of supports by employer size (<100 employees vs \geq 100 employees), accounting for industry and personal factors.

Analysis: We examined distributions and Poisson regression models of availability for supports by employer size and by industry and use of supports by employer size and personal factors.

Results: One-fifth of the 1796 employees were employed by small-sized employers. Large employers offered more supports than small (mean: 6 vs 3), but a higher proportion of employees of small-sized employers used supports when available (59% vs 47%). The differences in offered supports between industries were not due to size alone. In regard to the determinants of participation, the personal factors of gender, age, weight, and income were associated with participation in 10 of the supports. Employer size was also associated with participation in 10 supports. No associations were found between personal factors or workplace size and participation for 3 supports.

Conclusion: A higher proportion of employees working for smaller businesses use available supports than employees of larger businesses. Supports offered by employers should target the needs and interests of the workforce, particularly for the higher risk low-income employees.

Keywords

health behaviors, small businesses, health disparities, supportive environments, workplace

Purpose

With more than one-third of current US employees' suffering from one or more chronic diseases including heart disease, cancer, diabetes, stroke, and musculoskeletal disorders, ^{1,2} the worksite has been recognized as an appropriate and cost-effective setting for conducting preventive health interventions among large and diverse populations. Working Americans spend much of their time at the workplace, which can provide convenient access to working adults and regular opportunities to communicate through existing channels.³

The majority of small business owners (93%) report that the health of their employees is very important to their bottom line, yet most (78%) offer no health promotion programs^{4,5} or limit

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their programs to "awareness" supports such as web-based resources and wellness newsletters. 6,7 These owners cite lack of program expertise, lack of employee interest, and uncertain return on investment as common barriers to developing more comprehensive programs. In addition, many small companies struggle with their financial security and have limited resources for activities not directly related to their business. Yet, there are advantages to working within a smaller, more intimate work group. The few organizational levels between owner and employee creates a more casual environment, greater familiarity between employees, a more visible senior leadership, and less formality of rules so that changes to policies and the workplace environment can be executed more easily. Program participation could potentially be enhanced by coworker support in a smaller setting.

Many workplace health promotion programs report positive results for improving employee health, 11 increasing physical activity, 3,12 improving weight status, 13 and improving dietary behaviors. 14 These programs also describe benefits for employers through decreased work absences, 15 increased work ability, ¹⁶ and lower turnover rates. ¹⁷ Workplace health promotion programs are common in large businesses⁸ who have the financial means to hire consultants or designate employees to develop and implement health promotion programs.¹⁸ These programs are often described in companies from the education and health-care industry⁸ but less is known about other industries. Although these programs have been growing in popularity in large workplaces, managers of these programs report that awareness and participation by employees is generally low. 19,20 A systematic review of the determinants of participation in health promotion programs showed that the influence of personal factors on participation varied by the type of health support; many of these programs did not account for the effects of work factors on participation of employees.²¹

Although health promotion programs may reduce the health risks for some chronic disorders, little is known about the type of programs offered by different industries, and if programs are offered, to what degree work and personal characteristics influence participation in the programs. The purpose of this study was to examine the availability and use of workplace health promotion supports by employees from various sized employers, across various industries, and across different personal factors. We hypothesized that more employees of larger employers would report having more supports available but that a higher proportion of employees of smaller employers would report use of available supports, regardless of personal factors.

Methods

Design

Cross-sectional, telephone-based interview data on 2015 participants were collected as part of the Supports at Home and Work for Maintaining Energy Balance (SHOW-ME) study. The SHOW-ME study explored associations between workplace environmental and policy influences on individual physical

activity and nutrition behaviors.²² The design and conduct of the SHOW-ME study are described in detail elsewhere.^{7,23}

Study Sample

The SHOW-ME study recruited participants living within 4 metropolitan areas of Missouri (St Louis, Kansas City, Columbia, and Springfield) based on home census tracts. A multistage, stratified sampling procedure was used to sample participants within census tracts from 7 strata: metro size (large vs small), within large metro areas walkability (low, moderate, and high), and percentage of racial/ethnic minority (low vs high).⁷

Participants were recruited through random-digit-dialing of resident landline telephone numbers purchased from a commercial marketing group in Missouri and interviews were conducted between April 2012 and April 2013. The first eligible adult to volunteer from each household was recruited to participate. Eligible participants were between 21 and 65 years of age and employed at least 20 hours per week at a single worksite outside the home by an employer with at least 5 employees. Participants were not pregnant nor had any physical limitations that inhibited walking or bicycling in the past week. Participants provided verbal informed consent and were compensated for their participation. The Institutional Review Board of Washington University School of Medicine in St. Louis approved the study.

Measures

SHOW-ME survey. The survey captured individual, environmental, and organizational items pertaining to diet and physical activity around and within the workplace. The measure covered personal demographics including age, weight, and comorbid conditions; employment information including job title, industry, work hours, breaks, and number of employees at the work location; self-reported diet and physical activity behaviors; and a list of workplace supports. Self-reported height and weight were used to calculate body mass index (BMI) and to determine obesity status as normal (BMI \leq 25), overweight (BMI> 25 to <30), or obese (BMI \geq 30). The survey included 31 workplace supports that addressed physical activity, nutrition, and health behaviors. The support items were either new or adapted from existing instruments that had acceptable reliability. 24,25

Participants were asked to report on the availability of 31 health-related supports at their workplace (yes, no, and don't know/not sure). For 16 of these supports, participants were also asked to report on their use of the support if it was available. The time frame for use differed by support with reference to the "past 2 months" for most supports; "ever" for use of the cafeteria, use of personal services, or participation in a health fair or challenge event; and "at least once a week" for vending machine purchases. The 16 workplace supports assessed for use were categorized into 4 groups: informational, wellness initiatives, environmental, and workplace policy.

Industry and employer size. Using the employer information including self-reported industry, occupation, and employer name and work address, each employer was assigned a standard industry code from the North American Industry Classification System (NAICS) and an employer size. The data were extracted using a publicly available online tool, Reference USA (Ref-USA), which provides business-related data on more than 45 million companies.²⁶ Using Ref-USA, 2 of the authors knowledgeable about job codes (AMD, CE) independently assigned the primary NAICS code and recorded the reported number of employees for both the overall company and the location corresponding to the participant provided work address. For employers not found in Ref-USA, other Webbased resources were used (NAICS code lookup, company website, LinkedIn, Manta).²⁷ Discrepancies between the independent coders were resolved by consensus.

Employer size was dichotomized as <100 employees (small) versus 100 or more employees (large) for the overall size as well as for the employer size at each work location or address. Each participant was assigned a combination employer size category based on overall company size and by size by the work location: large company/large location (LL), large company/small location (LS), and small company/small location (SS).

Analysis

We examined distributions of the availability and use of each workplace health promotion support by employer size using the combination employer size variable (LL, LS, and SS). We also examined the availability of each support by 10 industry groups. Then, we assessed the use of each support in separate Poisson regression models to examine the effects of employer size after adjusting for the individual factors of age, gender, body mass index, and income. All analyses were conducted using SPSS 23.0.²⁸

Results

Of the 2015 participants who completed the SHOW-ME survey, 219 participants were excluded from analysis due to lack of job information, providing 1796 participants for the analytic sample. Most of the participants (n = 1728) were assigned an NAICS code. The sample was predominately female, Caucasian, had a mean age of 48 years (standard deviation [SD] 11), and was evenly distributed across the 3 BMI categories (Table 1). Most participants worked for a large-sized employer (80.5%), and many of these participants worked at locations considered large-sized (LL = 951, 52.95%) with fewer working at locations considered small (LS = 495, 27.5%). The smallest proportion of the sample worked for small companies at small locations (SS = 350, 19.5%). There was no difference in employee's preexisting medical conditions by the size of the business, but there were more current daily smokers employed by small employers (SS = 21.4%) than large (LL = 10.1%; LS = 13.1%). Racial distributions were similar across company size groupings. Approximately 20% of the sample had a high school education or less and/or an annual income of <\$30 000. Lower incomes were most common among employees who worked in the food industry (52%) followed by the service (33%) and trade (26%) industries. Health care and social assistance industry employed the largest portion of the sample (21.5%) followed by educational services (16.4%). The fewest number of employees were employed by blue collar and agricultural jobs (4.8%), manufacturing (4.9%), and food services (5.0%). Most participants in each industry reported working for a large-sized employer at a large location, except for participants in the trade industry (46% employed by large-sized employers), service industry (34% employed by large-sized employers), and accommodation/food service (17% employed by large-sized employers).

Participants reported the *availability* of an average of 6 workplace supports (SD 4) at their work location, with a range from 0 to 31 supports. On average, participants reported *using* 3 of the available supports (SD 2) at their work location, with a range from 0 to 16 supports. The most commonly available supports reported by employees were vending machines (76.1%), area to lock bikes (56.3%), health fairs (50.6%), and cafeterias (50.3%; Table 2). Supports that were reported available at their workplace by the lowest number of participants were incentives to bike or walk (8.2%), to take public transportation (18.1%) to work, availability of maps for walking (18.2%), and policies for physical activity breaks (14.4%).

We explored differences in the availability of workplace health supports by type and size of industry. Employees of small businesses were less likely to report availability of most workplace supports compared to employees of large businesses and were more likely to report having no workplace supports available (14.6% vs 3.2%). Many differences were reported in availability of supports across industries (Table 2), in part associated with employer size, with lower availability among those industries with more small-sized employers. However, there were notable differences in the number of supports offered between industries, even among those industries with more than 20% of workers in small sized employers. For example, supports were more common in manufacturing compared to accommodation/food service for health fairs (51% vs 19%), gym memberships (31% vs 9%), personal services (49% vs 21%), and shower facilities (44% vs 14%).

While employees of small businesses were less likely to report availability of most workplace supports than employees of large businesses, we found that a higher proportion of employees of small businesses reported using available supports than employees of large businesses, as shown in Figure 1. Compared to employees of large businesses, more small business employees used the available supports for exercise programs (54% vs 31%), free/reduced gym membership (49% vs 22%), incentives to bike/walk to work (43% vs 19%), and incentives for public transportation (57% vs 25%). Only 1 support, health fairs, showed a lower participation for small business employees compared to large (65% vs 75%). Most workplace supports for the mixed employer group (large

Table 1. Characteristics of Participants and Employment by Industry and Employer Size.^a

Characteristics	n	%	SS %, $n=350$	LS %, $n = 495$	LL %, $n=951$
Age (years)					
21-34	265	14.8	15.2	18.5	12.7
35-44	363	20.2	18.9	18.7	21.6
45-54	585	32.6	32.1	30.5	34.0
55 +	568	31.6	33.8	32.3	30.5
Gender					
Male	583	32.5	37.4	30.1	31.9
Female	1211	67.4	62.6	69.9	67.9
BMI, kg/cm ²					
Normal (≤25)	576	32.1	39.4	29.7	30.6
Overweight (26-29)	556	31.0	29.7	32.1	30.8
Obese (≥ 30)	579	32.2	27.4	34.1	33.0
Race					
Caucasian	1139	63.4	67.7	62.0	62.6
African American	523	29.1	23.1	29.5	31.1
Other ^b	116	6.5	8.0	7.7	5.3
Education					
High school or less	379	21.1	29.4	24.8	16.1
Some college or graduated	1023	57.0	56.9	52.1	59.5
Postgraduate	389	21.7	14.0	22.6	24.3
Income					
Less than 30 000	333	18.5	25.4	24.2	13.0
30 000-59 000	589	32.8	33.4	30.3	33.9
60 000 or more	773	43.0	36.0	39.0	47.7
NAICS sector ^c			SS % $(n = 308)^d$	LS % $(n = 475)^d$	LL % $(n = 856)^{c}$
Health care and social assistance	387	21.5	23.7	Ì 7 .1	27.2
Educational services	295	16.4	6.5	25.7	17.9
Public administration	98	5.5	1.6	6.1	7.5
Trade	202	11.2	14.3	13.7	10.9
Finance and insurance	101	5.6	3.6	5.9	7.2
Manufacturing	88	4.9	6.2	2.7	6.5
Accommodation and food services	89	5.0	7.8	10.5	1.8
Blue collar and agriculture	87	4.8	8.1	3.6	5.3
Professional	180	10.0	13.3	8.8	11.3
Service	112	6.2	14.9	5.9	4.4

Abbreviations: BMI, body mass index; NAICS, North American Industry Classification System; LL, large company/large location; LS, large company/small location; SS, small company/small location.

sized parent company but small sized by location) were offered nearly twice as often as at small businesses but not as often as LL. Use of the available workplace supports by employees of these large employers at small locations was intermediate between use by employees of small businesses and use by employees' at large work locations.

We evaluated other determinants of employees' use of available workplace supports in separate regression models evaluating the use of supports by the size of employer, adjusted for individual factors (age, gender, BMI, and income) as shown in Table 3. In 7 of the 16 workplace support models, employees of small employers reported

greater likelihood of using available supports compared to employees of larger employers. For example, relative to employees at large locations, employees at small employers and locations are 31% more likely to use challenge events, 75% more likely to use exercise programs, 157% more likely to use free or reduced gym memberships, 86% more likely to use incentives for public transportation, 40% more likely to use indoor exercise equipment, 67% more likely to use available showers, and 19% more likely to use flextime for physical activity for supports that are available. In addition to greater participation related to employer's small-size, use of some supports was also related to employee characteristics.

an = 1796, Supports at Home and Work for Maintaining Energy Balance (SHOW-ME) Study, Missouri, 2012-2013. Small defined as <100 employees.

^bAmerican Indian, Alaskan Native, Native Hawaiian or other Pacific Island, Asian, and others.

^cNAICS: Industry NAICS codes: Healthcare and Social Assistance (62); Educational Services (61); Public Administration (92); Trade (Wholesale (42), Retail (44,45)); Finance and Insurance (52); Manufacturing (31,32,33); Accommodation and Food Services (72), Blue Collar and Agriculture (Agriculture, Forestry, Fishing, and Hunting (11), Mining (21), Utilities (22), Construction (23), Transportation and Warehousing (48,49)); Professional (Information (51), Real Estate Rental and Leasing (53), Professional, Scientific, and Technical Services (54), Management of Companies and Enterprises (55), Arts, Entertainment, and Recreation (71)); Service (Administrative and Support and Waste Management and Remediation Services (56), Other Services (except Public Administration) (81)).

^dMissing values due to incomplete job information for NAICS code assignment.

Table 2. Availability of Workplace Supports Overall and by Industry: Supports at Home and Work for Maintaining Energy Balance (SHOW-ME) Study, Missouri, 2012-2013.^a

	Overall,	Health Care and Social Assistance,	Educational Services,	Public Administration,	Trade,	Finance and Insurance,	Manufacturing,	Accommodation and Food Services,	Blue Collar and Agriculture,	Professional,	Service,
Type of Support	N = 1796	n=387	n=295	n=98	n=202	n = 101	n = 88	n=89	n=87	n=180	n = 112
Informational supports											
Maps for walking %	18.2	24.7	20.6	25.0	17.1	15.5	15.1	20.2	15.1	14.9	12.3
Health fairs %	9.05	65.3	71.1	0.89	29.9	59.8	9.09	19.3	38.6	42.4	26.4
Wellness initiatives											
Challenge events %	47.6	61.2	0.19	67.0	35.2	57.7	44.2	16.9	37.2	39.7	28.2
Exercise programs %	36.6	47.3	54.5	62.8	19.4	37.9	34.5	4.	23.3	29.6	22.5
Free/reduced cost gym	30.5	39.5	35.0	35.6	25.3	47.3	30.9	1.6	32.2	42.2	14.0
membership %											
Incentives to bike/walk to work %	8.2	9.0	8.5	9.5	9.8	6.3	5.8	6.9	12.6	5.6	10.2
Incentives for public transit %	<u>18</u>	29.3	14.9	39.4	F. 1	20.2	7.1	14.9	17.9	20.7	10.3
Personal services for	47.9	62.9	55.7	70.8	36.7	55.7	48.8	21.3	43.5	42.0	27.0
fitness and nutrition %											
Environmental supports											
Indoor exercise facilities %	35.9	47.7	54.1	56.1	12.9	38.6	31.8	12.4	27.6	23.3	18.9
Outdoor exercise	29.1	29.4	66.4	24.0	6.01	27.0	26.1	8.0	18.4	20.6	16.5
facilities %											
Shower facilities %	33.7	38.2	4 4 1.1	50.5	<u>-</u> 8	35.0	44.3	13.6	35.6	30.2	22.3
Area to lock bike %	56.3	58.3	72.7	71.1	25.6	48.9	51.2	54.1	55.3	53.8	52.8
Cafeteria %	50.3	61.5	68.5	46.9	26.7	63.4	42.0	49.4	34.5	44.4	28.8
Vending machines %	76.1	80.2	1.88	88.8	73.8	85.I	87.5	29.2	0.69	75.6	63.1
Policy supports											
Flextime for PA %	36.1	34.2	38.9	48.5	76.6	45.5	33.7	26.1	32.9	44.6	34.5
PA breaks %	4.4 4.4	17.9	12.4	17.0	14.3	11.2	12.8	14.6	1.91	11.2	13.4

andustry NAICS codes: Healthcare and Social Assistance (62); Educational Services (61); Public Administration (92); Trade (Wholesale (42), Retail (44.45)); Finance and Insurance (52); Manufacturing (31,32,33); Accommodation and Food Services (72), Blue Collar and Agriculture (Agriculture, Forestry, Fishing and Hunting (11), Mining (21), Utilities (22), Construction (23), Transportation and Warehousing (48.49)); Professional (Information (51), Real Estate Rental and Leasing (53), Professional, Scientific, and Technical Services (54), Management of Companies and Enterprises (55), Arts, Entertainment, and Recreation (71)); Service (Administrative and Support and Waste Management and Remediation Services (56), Other Services (except Public Administration) (81)). Abbreviations: NAICS, North American Industry Classification System; PA, physical activity.

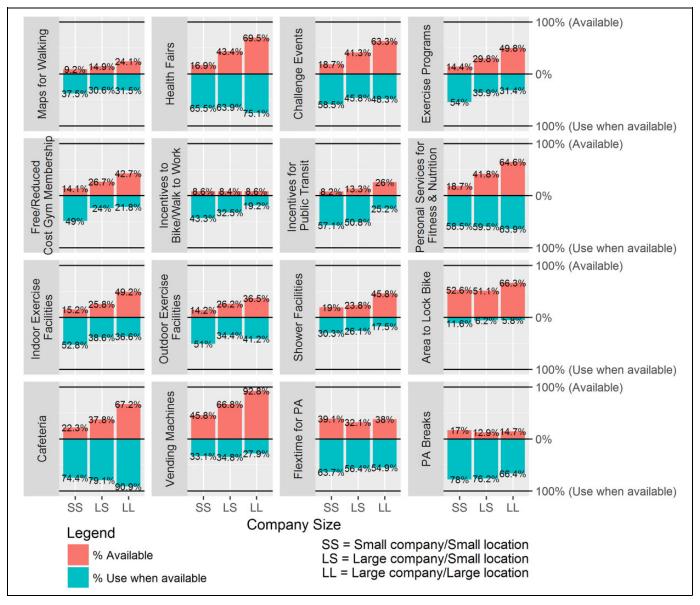


Figure 1. Availability and use of workplace supports based on employer size of the overall company and work location, n = 1796: Supports at Home and Work for Maintaining Energy Balance (SHOW-ME) Study, Missouri, 2012-2013.

For example, challenge events were more commonly used by females, employees of overweight and obese categories, and those with higher income. A higher proportion of lower income workers used incentives for biking/walking to work, use of public transportation, and vending machine purchases than employees with higher incomes. A lower proportion of participants in the oldest age-group (55 years and older) reported using indoor exercise facilities compared to the youngest. Fewer men reported using supports than women (shower facilities, free gym membership, vending machines, and areas to lock bikes). Employer size and individual factors had no effect on the use of 5 supports (maps for walking, personal services for fitness and nutrition, and physical activity breaks).

Discussion

Results from our study corroborate previous findings showing smaller businesses provide fewer workplace supports for their employees than larger businesses; our study also documented variation across industries in the number of workplace supports offered to employees. A new and important finding of this study is that a higher proportion of the employees of small businesses reported use of available supports than did employees of large companies. Employees' reported use of many workplace supports was also associated with demographic factors, while use of some supports showed no association with either employer size or individual factors.

Table 3. Multiple Regression Models of Use of Supports by Employer Size, Adjusting for Personal Factors: Supports at Home and Work for Maintaining Energy Balance (SHOW-ME) Study, Missouri, 2012-2013.^a

Type of Support	Ν	Employer Size ^b	Employer Size, RR (95% CI)	Significant Covariates
Informational supports				
Maps	293	SS	1.13 (0.68-1.88)	N/A
•		LS	0.96 (0.63-1.45)	
Health fairs	819	SS	0.96 (0.80-1.15)	Age, gender, income
		LS	0.87 (0.77-0.97)	3 / 3 /
Wellness initiatives			,	
Challenge events	772	SS	1.31 (1.04-1.65)	Age, BMI, gender, income
0		LS	0.95 (0.79-1.14)	3 / / 3 /
Exercise programs	600	SS	1.75 (1.32-2.32)	Age
		LS	1.09 (0.83-1.43)	6
Free/reduced cost gym membership	494	SS	2.57 (1.80-3.65)	Gender
, , , , , , , , , , , , , , , , , , ,		LS	1.14 (0.78-1.67)	
Incentives to bike/walk to work	130	SS	1.74 (0.88-3.43)	Income
		LS	1.32 (0.69-2.55)	
Incentives for public transit	279	SS	1.86 (1.23-2.80)	Income
•		LS	1.62 (1.12-2.35)	
Personal services for fitness and nutrition	776	SS	0.98 (0.78-1.23)	N/A
		LS	0.96 (0.84-1.10)	
Environmental supports			,	
Indoor exercise facilities	579	SS	1.40 (1.04-1.87)	Age
		LS	1.08 (0.83-1.40)	3
Outdoor exercise facilities	468	SS	1.33 (0.99-1.80)	Income
		LS	0.84 (0.63-1.10)	
Shower facilities	550	SS	1.67 (1.09-2.58)	Gender, income
		LS	1.47 (1.00-2.18)	
Area to lock bike	907	SS	1.51 (0.88-2.61)	Gender
		LS	0.79 (0.386-1.60)	
Cafeteria	814	SS	0.81 (0.696-0.93)	N/A
		LS	0.86 (0.792-0.94)	
Vending machines	1242	SS	1.15 (0.90-1.48)	BMI, gender, income
•		LS	1.20 (1.00-1.45)	J
Policy supports			,	
Flextime for physical activity	591	SS	1.19 (1.01-1.41)	N/A
		LS	1.02 (0.85-1.22)	
Physical activity breaks	239	SS	1.17 (0.97-1.42)	N/A
,		LS	1.10 (0.91-1.32)	

Abbreviations: BMI, body mass index; CI, confidence interval; SS, small employer/small location; LS, large employer/small location; LL, large employer/large location; RR, relative risk.

Our study found that company size was related to the number of health promotion initiatives offered to employees. Supports that require greater time and resources to implement were far less available at small businesses compared to large-sized businesses, similar to results of Hannon and colleagues.²⁰ One novel aspect of the current study was the description of an intermediate employer group: small work locations of a larger parent company. At these companies, events that were linked to a larger parent company such as health fairs and challenge events were more commonly available at small work locations than for small parent companies, perhaps because such programs, benefits, and events can be designed and funded at the corporate level of large companies and delivered at the local level. In contrast, environmental supports that required more equipment and space were less common in these intermediate employers.

Workplace health promotion programs and activities also differed by industry. Similar to past studies, the largest number of supports were offered in education and health care and the lowest number of supports in trade, service, and food industries. While some of these differences between industries are likely driven by employer size, we found differences in the type and availability of supports between similar sized employers across industries.

A unique contribution of this study was the collection of individual-level data on use of available workplace supports in addition to the availability of supports. This allowed us to demonstrate that a higher proportion of employees of small businesses utilize available workplace supports than employees at larger employers. This effect has not previously been described across a range of workplace supports, although a few

^aPoisson regression models to show the prevalence ratio of employer size for each health support. Multivariable models adjusted for gender, BMI, age, and income. ^bEmployer size reference: LL.

previous studies demonstrated an association between participation in a smoking cessation program and employer size and type of industry. ^{30,31} As noted by McCoy et al, ³⁰ it may be the use of available supports is higher at small businesses, since they have a greater ability to customize programs to meet their employee's needs, implementation may be less bureaucratic in the smaller setting, management may be more visibly engaged, and there may be greater teamwork and coworker support in smaller work settings. Understanding the reasons for this observed effect may lead to strategies to increase participation in available workplace health supports; relatively low participation is an issue across programs at most employers.

Similar to other studies, the current study showed the use of supports varied by personal and workplace characteristics. A systematic review on determinants of participation showed personal characteristics were important for participation in only some supports, but many of the studies had small samples sizes and did not account for type nor size of the business.²¹ Our study showed similar findings—personal factors were important for the use of some supports. For example, lower income and obese participants tended to frequent the vending machines and higher use of transportation incentives among participants with lower income. These health supports were used based on a personal need or behavior, but they may be used to promote physical activity and good nutrition.

This study had several limitations. Although recruitment used random selection from a large market sample, the use of landline telephone numbers may have biased the sample. At the time of this study, approximately 22.4\% of the Missouri population solely used cell phones, slightly lower than the US population (27.3%).32 Our study polled metropolitan areas of Missouri and may not represent rural populations. Employees' reports of the availability of workplace health supports may underreport their true availability by their employer, but instead represents workers' knowledge of available benefits. Strengths of this study include the large sample, broad range of industries captured, and information about both the workplace supports that were offered as well as the employees' self-reported use of the supports. This design allowed us to demonstrate the new findings that employees of some smaller businesses and smaller locations of larger employers are more likely to use available workplace supports when offered. In addition, our study was able to evaluate individual participation based on personal factors across a wide range of supports, demonstrating strong associations for some supports and no associations for others.

Future studies should explore how employers of different size, industry, and workplace demographics can tailor workplace-based prevention programs toward the personal factors of their workers and work organization. Smaller businesses may use their flatter organizational structure and informal communication lines to identify the unique needs and preferred supports of their workers and means to implement them throughout the company. There is a public health need to provide greater health supports for employees in small establishments, particularly since other health disparities may be more

prevalent in many small businesses. For larger employers, it is important to recognize that adding more supports does not guarantee successful healthy behaviors—much work remains to be done to understand workplace culture and increase participation rates in workplace-based health promotion offerings. Designing health activities and programs with employee input will likely improve the relevance of the activities to the workgroup and support buy-in for participation.

SO WHAT?

What is already known on this topic?

Many workplace health promotion programs report positive results for improving employee health, yet most small business owners offer no or limited health promotion programs despite expressing concern for their employee's health.

What does this article add?

These results add to the small body of literature describing the disparity in access to comprehensive workplace health promotion programs between small and large employers. Variation in use of available programs also differed by employer size, by industry, and by demographic factors.

What are the implications for health promotion practice or research?

Tailoring programs to meet the needs of different worker groups may improve participation and better promote health.

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