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

Ann Marie Dale, PhD, OTR/L; Chris Enke, OTDs; Skye Buckner-Petty, MPH; Aaron Hipp, PhD; Christine Marx, MA; Jaime Strickland, MA; and Bradley Evanoff, MD, MPH
Acknowledgments

Funding for the conference made possible by the Centers for Disease Control and Prevention/National Institute for Occupational Safety and Health, Conference Grant U13 OH011296 and Training Grant T42 OH009229

The views expressed in the presentation and materials do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.
Introduction:

• The work environment has a strong influence on employee health
  – Majority of small business owners (93%) believe their employees health is important to their bottom line
  – Most (78%) don’t offer any health promotion programs or only provide “awareness” resources (Mattke et al., 2013; NSBA, 2012; Claxton et al., 2013; Hipp et al., 2015)

• Small employers struggle with financial security and have limited resources, creating barriers to providing workplace programs (Legg et al., 2015)
Introduction:

• Workplace health programs often report improvements in employee health (physical activity, weight control, diet)

• Programs are commonly available, but participation is generally low (Spence, 2015; Hannon et al., 2012)

• Little is known about programs offered by different industries

• Little is known about work and personal characteristics influence on participation in programs
Purpose:

• To examine the *availability* and *use* of workplace health promotion supports by employees from small and large employers

• To examine the *availability* of supports across various industries

• To examine the *use* of supports based on employer size and personal factors
Methods:

• Secondary data from SHOW-ME study of 2,015 employees

• Survey
  – personal demographics
  – job information
  – self-reported diet and physical activity
  – workplace supports
    • Availability of 31 supports at their workplace
    • Personal use of 16 supports

• Types of supports: informational, wellness initiatives, environmental, and workplace policy
Methods: Industry and Employer Size

• Standard industry code and size (number of employees) from online tool (Ref USA)

• Employer size listed for the parent company (overall) and for the work address (location)

• Size defined as small (<100) or large (≥100) employees
  • large company/large location (LL)
  • large company/small location (LS)
  • small company/small location (SS)
Analysis:

- Distributions of availability and use of supports by employer size: (LL), (LS), (SS)

- Explore availability of supports across 10 industry groups

- Assess use of supports by employer size, adjusting for personal factors (age, gender, BMI, income) using Poisson regression models
Results:

- Analysis on 1,796 participants
- Female (67%), mean age (48 years), mean income ($56,700/year)
- Body mass index:
  - normal (32%), overweight (31%), obese (32%)
- Employer size:
  - Large sized overall 81%
    - Large size by location 53% (LL)
    - Small size by location 28% (LS)
  - Small sized overall (and location) 20% (SS)
Results: Availability and Use of supports

Legend

<table>
<thead>
<tr>
<th>% Available</th>
<th>% Use when available</th>
</tr>
</thead>
</table>

Informational

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>LS</th>
<th>LL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maps for Walking</td>
<td>9.2%</td>
<td>14.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Health Fairs</td>
<td>16.9%</td>
<td>43.4%</td>
<td>69.5%</td>
</tr>
</tbody>
</table>

Wellness Initiatives

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>LS</th>
<th>LL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Events</td>
<td>18.7%</td>
<td>41.3%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Exercise Programs</td>
<td>14.4%</td>
<td>29.8%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Free/Reduced Cost Gym Membership</td>
<td>49%</td>
<td>24%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Incentives to Bike/Walk to Work</td>
<td>43.3%</td>
<td>32.5%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Incentives for Public Transit</td>
<td>8.2%</td>
<td>13.3%</td>
<td>28%</td>
</tr>
<tr>
<td>Personal Services for Fitness &amp; Nutrition</td>
<td>18.7%</td>
<td>41.8%</td>
<td>64.6%</td>
</tr>
</tbody>
</table>
Results: Availability and Use of supports

Legend
- % Available
- % Use when available

Policy
- Indoor Exercise Facilities
  - SS: 49.2%
  - LS: 36.6%
  - LL: 36.6%
  - SS: 52.8%
  - LS: 36.6%
  - LL: 36.6%
- Outdoor Exercise Facilities
  - SS: 36.5%
  - LS: 41.2%
  - LL: 41.2%
- Shower Facilities
  - SS: 45.8%
  - LS: 52.6%
  - LL: 45.8%
  - SS: 19%
  - LS: 23.8%
  - LL: 17.5%
  - SS: 30.3%
  - LS: 26.1%
  - LL: 17.5%
  - SS: 11.5%
  - LS: 6.2%
  - LL: 5.8%
- Area to Lock Bike
  - SS: 65.3%
  - LS: 65.3%
  - LL: 65.3%
  - SS: 52.6%
  - LS: 51.1%
  - LL: 5.8%
- Cafeteria
  - SS: 92.2%
  - LS: 92.2%
  - LL: 92.2%
  - SS: 22.3%
  - LS: 37.8%
  - LL: 67.2%
  - SS: 74.4%
  - LS: 79.1%
  - LL: 80.9%
  - SS: 45.8%
  - LS: 66.6%
  - LL: 27.6%
  - SS: 33.1%
  - LS: 34.9%
  - LL: 27.6%
Sample distribution by industry and within small sized employers

<table>
<thead>
<tr>
<th>NAICS Sector</th>
<th>% in Total sample</th>
<th>% SS in sample</th>
<th>% in US small business</th>
<th>% in MO small business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>24</td>
<td>24</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Service</td>
<td>7</td>
<td>15</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Trade</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Professional</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Blue collar and Agriculture</td>
<td>5</td>
<td>8</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>6</td>
<td>8</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Educational Services</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Public Administration</td>
<td>6</td>
<td>2</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Compared to US and MO statistics, the sample has a higher proportion employed in Health Care and Social Assistance and lower proportion for Food Services and Blue Collar.
### Supports available by industry

<table>
<thead>
<tr>
<th>NAICS Sector</th>
<th>SS %</th>
<th>Health Fair (%)</th>
<th>Challenge Events (%)</th>
<th>Personal services (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>23.7</td>
<td>65</td>
<td>61</td>
<td>63</td>
</tr>
<tr>
<td>Service</td>
<td>14.9</td>
<td>26</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Trade</td>
<td>14.3</td>
<td>30</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Professional</td>
<td>13.3</td>
<td>42</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Blue collar and Agriculture</td>
<td>8.1</td>
<td>39</td>
<td>37</td>
<td>44</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>7.8</td>
<td>19</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Educational Services</td>
<td>6.5</td>
<td>71</td>
<td>61</td>
<td>56</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.2</td>
<td>51</td>
<td>44</td>
<td>49</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>3.6</td>
<td>60</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1.6</td>
<td>68</td>
<td>67</td>
<td>71</td>
</tr>
</tbody>
</table>

Greater proportion of supports among industries with fewer sized employers
Supports used by employer size: Comparing small employers to large employers

<table>
<thead>
<tr>
<th>More likely to participate</th>
<th>Less likely to participate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge events</td>
<td>Health Fairs</td>
</tr>
<tr>
<td>Exercise programs</td>
<td>Cafeteria</td>
</tr>
<tr>
<td>Free/reduced gym membership</td>
<td></td>
</tr>
<tr>
<td>Incentives for public transit</td>
<td></td>
</tr>
<tr>
<td>Indoor exercise facilities</td>
<td></td>
</tr>
<tr>
<td>Shower facilities</td>
<td></td>
</tr>
<tr>
<td>Vending machines</td>
<td></td>
</tr>
<tr>
<td>Flex time for physical activity</td>
<td></td>
</tr>
</tbody>
</table>
Supports used by personal factors:

More likely to participate:

Males
- Free gym membership
- Shower facilities
- Area to lock bike
- Vending machines

Females
- Health fairs
- Challenge events

Obese participants
- Challenge events
- Vending machines
- Normal weight participants
- Area to lock bike
Supports used by personal factors:

**More likely to participate:**

Lower income
- Incentives for public transit
- Incentives to bike/walk
- Outdoor ex. facilities
- Shower facilities
- Vending machines

Higher income
- Health fairs
- Challenge events

**Older participants**
- Health fairs

**Younger participants**
- Exercise programs
- Indoor ex. facilities
Discussion:

- More supports offered by large employers
- More supports used by employees of small employers
- Employees of large employers at small-sized locations (LS) were offered more supports (like large employers) and used more supports (like small employers)
- Available supports differed by industry; in part due to employer size
- Use of supports varied by employer size
- Lower income employees used different supports than higher income employees
- Participation preferences differed by demographic factors
Conclusion:

• Small employers may lack resources but may benefit from fewer employees, few organizational layers, and informal culture to implement supports quickly

• For large employers, having more supports does not guarantee better worker health

• Low income employees prefer some healthy supports

• Employers may promote better health by designing workplace health programs with employee input that meet the needs of the workforce and of the organizational structure (overall size and size by location)
Thank you!

Ann Marie Dale PhD, OTR/L
Office: (314) 454-8470
e-mail: amdale@wustl.edu
Website: https://oshr.wustl.edu/
References