6-Month Follow-Up: Comparison of Sit-to-Stand and Stand-Biased Desks in a Call Center

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For
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How do we get people to sit less?
# Study Design

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>3 months</th>
<th>6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 1</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Column 2</td>
<td>X</td>
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<tr>
<td>Column 3</td>
<td>X</td>
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</tr>
</tbody>
</table>
Data Collection

Accelerometers

Online survey
**STAND-TO-STAND GROUP**

- 48 employees contacted
- 45 enrolled in the study
- 13 lost to follow-up
- 32 measured at 3 months
- 3 lost to follow-up
- 29 measured at 6 months

**STAND-BIASED GROUP**

- 50 employees contacted
- 46 enrolled in the study
- 13 lost to follow-up
- 33 measured at 3 months
- 10 lost to follow-up
- 23 measured at 6 months
Study Population

- 67% female
- Average age 29-35
- 59% achieving moderate or high PA
- 43% normal weight BMI
- 22% African American, 70% white
## Baseline Data

<table>
<thead>
<tr>
<th></th>
<th>Sit-to-stand group (n=45)</th>
<th>Stand-biased group (n=46)</th>
<th>Seated control group (n=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% time Sedentary</strong></td>
<td>79%</td>
<td>72%</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Steps per minute</strong></td>
<td>3.7</td>
<td>5.0</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Calories per minute</strong></td>
<td>1.8</td>
<td>1.9</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>% time self reported sitting</strong></td>
<td>75%</td>
<td>65%</td>
<td>91%</td>
</tr>
</tbody>
</table>
Generalized Linear Mixed Models

- Statistically significant:
  - Age
  - Race
  - BMI

- Not statistically significant:
  - Workstation
  - Gender
  - Time

% Time sedentary

- Statistically significant:
  - Age
  - Race
  - BMI

- Not statistically significant:
  - Workstation
  - Gender
  - Time

% Time seated

- Statistically significant:
  - Workstation
  - BMI

- Not statistically significant:
  - Gender
  - Time
  - Age
  - Race
Reported proportion of workday spent seated by workstation type and BMI category

s2s: sit-to-stand
SB: stand-biased
After 6 Months

- 76% of time sedentary
- 4.2 steps per minute
- 78% of time sitting
  - 1 hour 2 minutes less than seated users

- 75% of time sedentary
- 5.2 steps per minute
- 67% of time sitting
  - 1 hour 55 minutes less than seated users
### Standing habits at 6 months for all stand-capable desk users (n=52)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Population that reported standing at all</td>
<td>88%</td>
</tr>
<tr>
<td>Average % of time reported standing</td>
<td>29%</td>
</tr>
<tr>
<td>(range 0-100%)</td>
<td></td>
</tr>
<tr>
<td>Average transitions reported from seated to standing</td>
<td>3.1</td>
</tr>
<tr>
<td>per day (range 1-10)</td>
<td></td>
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</tbody>
</table>

* Combined sit-stand and stand-biased participants
Subjective Feedback

Reasons to stand
1) Increased body comfort (74%)
2) To stay alert (64%)
3) To burn more calories (52%)

Reasons not to stand
1) None (49%)
2) Decreased body comfort (26%)
3) Energy required (9%)
Subjective Feedback

- 91% would make the switch again
- 49% experienced increased focus and alertness
- 40% experienced increased levels of energy
- 29% experienced increased productivity
Discomfort

- Statistically significant differences in pain prevalence between standing participants and seated controls
Initial Productivity Data

AVG Monthly Successful Encounters per Hour by Health Coach Type

- Standing HC
- Sitting HC
Questions?
Thank you!

Please feel free to contact:
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