

CONFIDENTIAL
Project Report to:
XXX Construction Company
Portland Oregon



Dear XXX,

Several of your employees have recently completed the first 15 weeks of the Supervisor and Get Healthier Team Training Research Study, a project of the Oregon Healthy Workforce Center at Oregon Health & Science University. Congratulations! We will return to collect additional survey information at 6 and 12 months after the initial data collection. This confidential report provides summary information about the overall group that participated in the project. There are no personal or individual data in the report that could be linked to your employees. This report is for your information and WILL NOT BE SHOWN OR DISTRIBUTED ELSEWHERE by us.

As part of the Supervisor Training, your team completed computer-based training where they learned the importance of tracking their behavior, setting goals, effective supervision skills and workplace applications. They then put into practice the knowledge they learned and used our supportive supervisor behavior tracking app, *HabiTrak*, to set 2-week goals for themselves over a total period of 14 weeks.

Simultaneously, through the Get Healthier team training your team attended 12 weekly meetings, each addressing a specific health topic.

Attached is a report summarizing health and safety measures our research staff collected from your team, some of which are compared to public sector utility department construction and field workers based in Oregon (Bodner et al., 2014). It includes:

- Physical health measures
- Self-reported: demographics; injury, pain, discomfort; lifestyle behaviors such as diet, exercise and sleep; workplace safety, stressors, supports and satisfaction
- Supervisor Training pre and post-test scores
- Supportive supervisor behavior counts over time (job, family, safety, health)
- Get Healthier pre and post test scores (weekly)
- Get Healthier card reaction ratings (weekly)

We report *selected* findings of interest here. These include changes between the surveys and measures collected at the start of the program (pre) and at the end (post) that may have been affected by our program.

It was a pleasure working with your team! We will be in touch to schedule your 6-month follow-up.

We hope this report is a useful tool for your company. If you have any questions regarding any of the information presented here, please don't hesitate to contact us.

Sincerely,

W. Kent Anger, PhD
Principal Investigator
anger@ohsu.edu
(503) 494-2512

SELECTED FINDINGS OF INTEREST (positive changes are listed in green)

Demographics

Your team members were:

- zz% male, zz white
- Average tenure zz years; participants reported working almost zz hours per week

Injury, Pain and Discomfort (self report)

- zz injuries, zz caused them to miss work or file a worker's compensation claim.
- zz reports of moderate to extreme body pain or discomfort.
- Forearm or wrist pain was/was not reported at the end of the program.
- Pain or discomfort while performing daily activities was reported zz.

Physical Health Assessments (pre-program to post-program average)

- Average Basal Metabolic Index (BMI) was zz. This falls in the normal/overweight/obese category based on national norms.
- Average heart rate: zz beats a minute (zz by national norms).
- Average blood pressure: zzz/zz mmHg (zz by national norms).

Exercise (our program included training to increase exercise)

- Percent of participants doing 3 or more days of hard physical activity (exercise) outside work increased/decreased from zz% (at pre) to zz% (at post).
- Exercising hard enough to work up a sweat changed from zz% to zz% (at post).
- Strength or tone changed from zz% to zz%.

Tobacco (our program included training to reduce tobacco use)

- Percent of participants using tobacco products other than cigarettes changed from zz% to zz%.

Sleep (our program included training to increase sleep)

- Typical sleep duration changed from z.zz hours to z.zz hours, a trend in a good/bad direction.
- % who felt tired during their wake time changed from zz% to zz%
- Snoring changed from zz% to zz%.

Workplace Safety, Stressors, and Supports (our program focused on improving this)

- Group level safety climate was xxx (3.7/5).
- Work-to-family conflict was xxx before and after the program.
- Family-to-work conflict was zzz before and after the program.
- Team cohesion was xxx before the program (5.8/7) and changed by the program's end (x.x/y.y).

Supportive Supervisor Behaviors: Training and Self-Tracking (our program focused on improving this)

- Knowledge scores significantly changed from xx% (pre-training test) to xx% (post-training test).
- Supportive supervisor behaviors relating to family changed over a 2-week period from xx to zz.
- Supportive supervisor behaviors relating to safety and health xxxx.
- Supervisors more than zzz the types of family supports.
- Supervisors increased the types of job supports they provided.
- On average, supervisors felt zzzz about the usefulness and their reaction to HabiTrak, the behavior tracking app used in this program.

Get Healthier Team Wellness Training *(our program focused on improving this)*

- Health quizzes given before and after each weekly topic indicate zzz in knowledge for xx of the 12 topics.
- On average, participants rated weekly health cards as zzz.
- xxx% of participants submitted optional take-home activities related to that week's health topic, showing high participation and an interest in the program. Note: returning activity sheets were incentivized.

Eating Habits *(our program focused on improving this)*

- Fast food consumption changed from about xx times per week to zz times per month.
- The number of caffeinated product servings changed significantly from z to x servings.

Pedometer *(our program encouraged an active lifestyle)*

- Average step count increased from almost x,xxx steps on week 2 (xxx lifestyle) to almost z,zzz steps on week 12 (xxx lifestyle).

Additional Areas of Safety and Health *(our program measured many different outcomes)*

- Job satisfaction was zzz.
- Life satisfaction was xxx.
- Safety compliance and participation behaviors changed along with the amount of family support they reported giving.

While these changes are accurate, reports of statistical significance have NOT been verified by a statistician. When published with the data from other companies in the project, the results will be analyzed by a professional statistician. *OHSU and Dr. Anger have a significant financial interest in Northwest Education Training and Assessment [or NwETA], a company that may have a commercial interest in the results of this research and technology. This potential individual and institutional conflict of interest has been reviewed and managed by OHSU.*

Comparisons with the public sector construction group are listed at the bottom of the following tables and each has a summary statement about the differences. Your group generally compares favorably with that public sector comparison group, but your sample is much smaller (N=X vs. N=349 in the public sector group) and may not be at all representative of your company or private sector construction.

TABLE 1. Participant Demographic Characteristics Across Organizations

Domain	Variable	Pub.Org. N= 341 Mean or %	Your Organization N=X, Mean or %	
			Pre- Intervention	Post- Intervention
Individual characteristics	Male	90%	xx%	xx%
	Age, yrs	44	xx	xx
	Race/ethnicity			
	White	77%	xx%	xx%
	Black or African American	7%	xx%	xx%
	Multiple	9%	xx%	xx%
	Other	6%	xx%	xx%
	Educational attainment			
	Did not finish high school	2%	xx%	xx%
	Finished high school (or GED)	34%	xx%	xx%
	College/technical school (1–3 yrs)	49%	xx%	xx%
	College/technical school (≥4 yrs)	16%	xx%	xx%
Family relationships	Marital status			
	Married or living as married	79%	xx%	xx%
	Divorced, separated, or widowed	12%	xx%	xx%
	Never married	10%	xx%	xx%
	Has children at home	58%	xx%	xx%
Work characteristics	Job tenure, yrs	10.4	xx	xx
	Hours worked per week	40.9	xx	xx

Overall, your sample was xxxx to the comparison organization x (a public sector construction unit; Bodner et al. reference at end of report). Your sample worked xx hours per week and had been on the job a xx, based on self-reports.

TABLE 2. Self-Reported Injury, Pain, and Discomfort Variables Across Organizations

Domain	Variable	Pub.Org. N= 341 Mean or %	Your Organization N=xx, Mean or %		P Value*
			Pre- Intervention	Post- intervention	
Injury	In the last 6 months Had minor injuries with no missed work	40%	xx%	xx%	
	Missed ≥1 d work for work- related injury	14%	xx%	xx%	
	Filled one or more worker’s compensation claim	12%	xx%	xx%	
Pain and discomfort	In the last 3 mo, pain/discomfort in _____ resulted in moderate to extreme interference with work/home activities				
	Low back	39%	xx%	xx%	
	Neck/shoulders	34%	xx%	xx%	
	Lower extremities	26%	xx%	xx%	
	Forearms/wrists	18%	xx%	xx%	
	In the last 7 d, pain/discomfort created at least some difficulty in				
	Kneeling/squatting	46%	xx%	xx%	
	Stooping/bending to floor	44%	xx%	xx%	
	Doing heavy household chores	38%	xx%	xx%	
	Recreational activities using arm, shoulder, and hand	38%	xx%	xx%	
	Standing for ≥1 hr	37%	xx%	xx%	
	Getting in/out of car	35%	xx%	xx%	
Putting on shoes/socks	33%	xx%	xx%		
Using hand-held tool	34%	xx%	xx%		
Reaching an object on high shelf	27%	xx%	xx%		

*P Value ≤ 0.10 indicates a trend, while ≤ 0.05 indicates statistical significance between Pre-Program and Post-Program Values

Overall, the xxx sample missed xx work and had xx pain and discomfort that affected their work and home life than the comparison public sector construction unit (Bodner et al.)

TABLE 3. Health Assessment Variables Across Organizations

Domain	Variable	Pub.Org. N= 341 Mean or %	Your Organization (N=xx) Mean or %		P Value
			Pre- Intervention	Post- Intervention	
Body composition	BMI	30.9	xx	xx	
	Fat mass percentage	30.3%	xx%	xx%	
Blood circulatory system	Heart rate (per minute)	71.5	xx	xx	
	Systolic blood pressure	127.9	xx	xx	
	Diastolic blood pressure	79.4	xx	xx	
	On blood pressure medication	22%	xx%	xx%	

Overall, the xxx sample had a xxx BMI and blood/circulatory challenges than the comparison public sector construction unit, though it would benefit your sample to continue following our program to become healthier.

TABLE 4. Self-Reported Health-Related Behaviors Across Organizations

Domain	Variable	Pub.Org. N= 341 Mean or %	Your Organization (N=xx) Mean or %		P Value
			Pre- Intervention	Post- Intervention	
Lifestyle	Do ≥3 d/wk				
	Hard physical activity	53%	0%	29%	0.02
	Moderate physical activity	61%	29%	57%	
	Exercise to strengthen or tone	36%	43%	29%	0.09
	Exercise and work up a sweat	67%	43%	100%	0.09
	Use tobacco product(s) in the last week				
	Smoke cigarettes	20%	14%	14%	
	Use other tobacco product	20%	0%	29%	0.09
	Use alcohol daily	17%	29%	29%	0.09
	Drank five alcohol drinks or more in 1 d (last 6 mos)	30%	29%	43%	
Sleep	Typical sleep duration (in hrs)	7.06	6.86	7.25	0.08
	At least once per week				
	Feels tired during wake time	76%	100%	43%	0.01
	Snores	50%	71%	43%	

Overall, the xx sample reports a xx active lifestyle but xx sleep and xx feelings of tiredness during the day than the public sector construction unit.

TABLE 5. Workplace Safety, Stressors, and Supports Across Organizations

Domain	Variable	Pub.Org. N= 341 Mean or %	Your Organization (N=xx) Mean or %		
			Pre- Intervention	Post- INtervetnion	P Value
Safety climate	Group level safety climate, 1-5, Higher = Better climate	3.2	xx	xx	
Workplace Stressors	Work-to-family conflict 1-5, Higher = Greater conflict	2.6	xx	xx	
	Family-to-work conflict 1-5, Higher = Greater conflict	2.0	xx	xx	
Workplace supports	Team cohesion 1-7, Higher = Stronger	3.6	xx	xx	

Overall, the xxx sample rates their safety climate and team cohesion as xx than the public sector construction unit.

TABLE 6. Supportive Supervisor Behaviors: Training and Self-Tracking

Domain	Variable	Pre-Test	Post-Test	P Value
Supervisor Training	Behavior Tracking, Goal Setting, Effective Supervision Skills, Workplace Applications	xx%	xx%	0.xxx
HabiTrak	Supportive Supervisor Behavior Counts	Wk 1-2	Wk 3-4	P Value
	Job	xx	xx	
	Family	xx	xx	
		Wk 5-6	Wk 13-14	P Value
	Safety*	xx	xx	0.xx
	Health	xx	xx	
	App Reaction	Avg		
	Useful			
	1-5, strongly disagree to strongly agree	xx		
	Liked			
	1-5, strongly disagree to Strongly agree	xx		
	I became more aware of the support I provided,			
	1-5, strongly disagree to strongly agree	xx		
	I increased or provided new kinds of support			
	1-5, strongly disagree to strongly agree	xx		
	Number of family supports increased or improved, 1-4	xx		
	Number of job supports increased or improved, 1-4	xx		

*xx counts at the end of the program maybe due to less frequent app use

TABLE 7. Get Healthier Team Wellness Training

		Pre-Test	Post-Test	Pre-Post P Value	12 Wk	Pre-12Wk P Value
Weekly	Sleep	xx%	xx%		xx%	
Get	Calories	xx%	xx%	xxx	xx%	
Healthier	Liquids & Calories	xx%	xx%	xxx	xx%	
Meetings	Basic Nutrition	xx%	xx%	xxx	xx%	
	Snacks	xx%	xx%		xx%	
	Sugar	xx%	xx%	xx	xx%	
	Cardiovascular Exercise	xx%	xx%	xxx	xx%	
	Strength Training	xx%	xx%	xxx	x%	xx
	Flexibility	xx%	xx%	xxx	xx%	
	Stress	xx%	xx%	xxx	xx%	
Average Card Reaction Rating, 0-3, Excellent to Poor		xx				
Weekly Take-Home Activity Submissions		xx%				
		Wk 2*	Wk 12	Average		
Step Count		x,xxx	x,xxx	x,xxx		

TABLE 8. Your Organization: Additional Areas of Safety & Health

Variable	Pre- Interv	Post- interv	P Value
Number of Pain Responses	xx	xx	
Job Satisfaction 3-15, Higher = Greater	xx	xx	
Depression Symptoms 0-3, Higher=Greater	xx	xx	
Life Satisfaction 5-17=Low, 18-29=Moderate, 30-35=High	xx	xx	
Sugary Drink Consumption 1=Never, 2=1-3x last mo, 3=1-2x/wk, 4=3-4x/wk	xx	xx	
Fast Food Consumption 1=Never, 2=1-3x last mo, 3=1-2x/wk, 4=3-4x/wk	xx	xx	xxx
Meals From Home 1=Never, 2=1-3x last mo, 3=1-2x/wk, 4=3-4x/wk	xx	xx	
Caffeinated Product Servings During a Work Day 0-10, none to 6+ servings	xx	xx	xxx
Safety Compliance and Participation 3-15, Strgly Disagr to Strgly Agr	xx	xx	xx
Safety and Motivation 1-5, Higher=Greater	xx	xx	
Family Supportive Behaviors, <i>Given by Supervisors</i> 1-5, Higher=Greater	xx	xx	xx
Family Supportive Behaviors, <i>Perceived by Employees</i> 1-5, Higher=Greater	xx	xx	

Reference to Public Sector Construction Unit

Bodner, T., Kraner, M., Bradford, B., Hammer, L., & Truxillo, D. (2014). Safety, Health, and Well-Being of Municipal Utility and Construction Workers. *Journal of Occupational and Environmental Medicine*, 56(7), 771-778.