

Increases in Safety & Health

TWH in Construction led to the statistically significant ($p < .05$) improvements found below in participants' wellbeing through increases in safety compliance and group level safety climate. In research, we use statistical analyses to assess the size of the significant effects we find. While we won't explain the math behind the number, here is a helpful scale you can use to interpret the significant effect sizes presented below:

Effect Size: Cohen's d

Small = $0.2 < d < 0.5$

Medium: $0.5 < d < 0.8$

Large = 0.8 and above

Safety Compliance ($d = 0.50$ or a Medium Effect)

On average, participants self-reported (on a standardized survey) an increase in their agreement with statements about their compliance with safety standards and procedures (e.g., "I use the correct safety procedures for carrying out my job") from their already high pre-program (4.40/5) to post-program levels (4.75/5). This is an 8% increase in agreement.

Group Level Safety Climate ($d = 0.06$ or a Less than Small Effect)

Participants increased their agreement with statements about the safety climate of their workgroups from pre-program (3.95/5) to post-program (4.18/5). This is a 6% increase in Group Level Safety Climate.

Note: These statistically significant results are findings from unpublished internal data ($N = 24$).

Increases in Supervisor Skills and Team Building

TWH in Construction led to the statistically significant ($p < .05$) improvements found below in participants wellbeing through increases in supportive supervisor behaviors and supervisor skills and knowledge. In research, we use statistical analyses to assess the size of the significant effects we find. While we won't explain the math behind the number, here is a helpful scale you can use to interpret the significant effect sizes presented below:

Effect Size: Cohen's d

Small = $0.2 < d < 0.5$

Medium: $0.5 < d < 0.8$

Large = 0.8 and above

Family Supportive Supervisor Behaviors ($d = 0.73$ or a Medium to Large Effect)

Supervisors' self-reported (on a standardized measure) that their supportive behaviors for workers' family and personal lives increased by 11% (from 3.97/5 to 4.44/5 on a scale from 1 to 5).

Supervisor Skills Knowledge ($d = 2.80$ or a Very Very Large Effect)

Supervisors knowledge of effective supervisor skills (e.g., building positive interactions with employees, improving safety and health, team building, and encouraging work-life balance) increased by 26% from a C+ (78%) to a high A (98%) grade on our supervisor skills knowledge test.

Note: These statistically significant results are findings from unpublished internal data ($N = 24$).

Decreases In...

TWH in Construction led to the statistically significant ($p < .05$) improvements found below in participants wellbeing through decreases in pain and decreases in unhealthy food consumption including sugary snacks, sugary drinks, fast food, and caffeine. In research, we use statistical analyses to assess the size of the significant effects we find. While we won't explain the math behind the number, here is a helpful scale you can use to interpret the significant effect sizes presented below:

Effect Size: Cohen's d

Small = $0.2 < d < 0.5$

Medium: $0.5 < d < 0.8$

Large = 0.8 and above

Pain in Wrists/Forearms ($d = 0.16$ or a Less than Small Effect)

Participants self-reported (on a standardized survey) a 13%-point decrease in wrist and forearm pain.

Sugary and Fatty Foods ($d = 0.58$ or a Medium Effect)

Participants self-reported (on a standardized survey) a decrease in their consumption of sugary drink, sugary snacks, and fast food by almost half from an average of 4-5 servings to 2-3 servings a week.

Caffeine Consumption on a Work Day ($d = 0.31$ or a Small Effect)

Participants self-reported (on a standardized survey) a decrease in their work day caffeine consumption by 16% from 9.2 servings to 7.7servings a week.

Note: These statistically significant results are findings from unpublished internal data ($N = 24$).

Wellbeing Increases

TWH in Construction led to the statistically significant ($p < .05$) improvements found below in participants wellbeing in the areas of healthy lifestyle knowledge, social support for a healthy diet, exercise behaviors, strength, and sleep duration. In research, we use statistical analyses to assess the size of the significant effects we find. While the math behind the numbers is a bit cumbersome and an explanation would be misplaced here, what you will want to know before you read about each significant effect we found is the following scale:

Effect Size: Cohen's d

Small = $0.2 < d < 0.5$

Medium: $0.5 < d < 0.8$

Large = 0.8 and above

Healthy Lifestyle Knowledge ($d = 1.70$ or VERY Large Effect)

By participating in our weekly Get Healthier Lifestyle Education sessions and completing take home activities, construction workers learned a lot about healthy eating and living. On average, healthy lifestyle knowledge scores showed a 14.5% improvement. If this were a health class exam, our participants went from scoring a C (76%) to a B+ (87%).

Social Support for a Healthy Diet ($d = 0.73$ or a Medium to Large Effect)

Participants self-reported (on a standardized survey) a 53% increase in the frequency of encouragement they received from their families about eating healthy.

Exercise Behaviors ($d = 0.72 - 0.75$ or a Medium to Large Effect)

Participants self-reported (on a standardized survey) doubling the amount of strength training and muscle toning exercise they did each week (from at least once a week to at least twice a week), and agreed more with the statement that they exercised at least 30 minutes a day by 38%.

Strength ($d = 0.16$ or a very small effect)

Participants increased their left arm grip strength from 52.11kgs to 54.24kgs of force, a 4% increase in strength.

Sleep Duration ($d = 1.12$ or a VERY Large Effect)

Participants self-reported (on a standardized survey) an increase in their average sleep duration by 6% from a deficient (6.94 hours) to a perfectly healthy (7.33 hours) amount of sleep.

Note: These statistically significant results are findings from unpublished internal data ($N = 24$).