

SMALL BUSINESS WELLNESS INITIATIVE RESEARCH REPORT

Note. This report provides the first 10 pages of the final research report. To access the full report please register on the SBWI web-site. www.sbwi.org

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APPENDIX IV - RESEARCH PAPER ACCEPTED FOR PUBLICATION (Healthy and Unhealthy Stress Unwinding: Promoting Health in Small Businesses)

FINAL RESEARCH REPORT Small Business Wellness Initiative

A. Project Abstract

Overview of Program and Goals

The Small Business Wellness Initiative (SBWI) delivered two health promotion and substance abuse prevention programs to employees from a randomly selected group of small businesses in Dallas, Denton, and Tarrant Counties (North Texas Metroplex). Businesses were selected from three industries identified at risk for substance abuse: Construction, Transportation, and Hospitality/Service. Two classroom based interventions were compared with a no-training control group. The first, Team Awareness (Team), integrates team building exercises with peer referral and stress management skills. Because of business time constraints, Team Awareness (a SAMHSA Model Program), was modified to 4 hours from the original 8-hour training. The second program was a customized health promotion program which combines elements from Team Awareness and The Healthy Workplace (another SAMHSA Model Program).¹ Called Choices in Health Promotion or simply Choices, this program customizes 4-hour trainings by drawing elements that combine messages of health promotion (stress management, healthy eating, active lifestyle, tobacco/smoking control, and parenting skills) with substance abuse prevention. The customization of Choices follows from a needs assessment between SBWI research staff and key business personnel. Participating businesses that received an intervention also received free Employee Assistance Program Services for the six months of participation (training to six-month follow-up).

The original Team Awareness and The Healthy Workplace programs have been previously shown to improve health-related attitudes, increase help-seeking behaviors and EAP utilization, reduce stress and stress-related drinking and problem drinking and, in some instances, illicit drug use. The primary goal of the SBWI was to provide these programs to small businesses, which typically do not have access to such programs, and encounter many barriers to implementation of wellness programs and drug free workplace strategies. A secondary goal was to develop a strategic and aggressive community outreach model by coordinating the efforts of three local organizations: The North Texas Small Business Development Center (NTSBDC), Tarrant Council on Alcoholism and Drug Abuse (Recovery Resources), and Organizational Wellness & Learning Systems (OWLS). Both NTSBDC and Recovery Resources provide services in drug-free workplace. OWLS provides consultation, workshops and training in health promotion. The coordination of these agencies was a deliberate objective of the SBWI. Specifically, we sought to build a replicable model for other communities that have the need for such programs but may lack cross-agency awareness of overlapping public health goals.

The study design originally estimated that 260 employees in 18 businesses will be exposed to either intervention (n = 520; k = 36). As part of the outreach effort to these businesses, the NTSBDC (located in Dallas) helps coordinate programming through the three local Small Business Assistance Centers (SBACs) located in the tri-county area. Thus, a third project goal was to develop a "Path of Assistance" service model that would provide regional SBDCs with resources to deliver programs to small businesses through the local SBACs.

¹ The original technical name for this training was Customized Health Promotion Program, or CHOICES and was referred to as such when discussed as a research construct. As the program evolved, and as we entered the field, the program was named Choices in Health Promotion. This is how it is presented in the field setting.

Outcome Research Design

Businesses were recruited through random sampling from a small-business database (Dun & Bradstreet[™]), with supplementation from local community referrals (e.g., through SBACs). Following an initial call to small business owners, introductory interviews were conducted. The small businesses were randomly assigned to receive the *Team Awareness*, *Choices in Health Promotion*, or a Control-No Training-Condition. There was no dosage variation for the intervention since both training programs are fixed at 4 hours in length. For businesses receiving interventions, a 1 to 2 hour needs assessment was conducted with the small business operator (SBO) or representative. The SBO or representative was asked to announce the project and facilitate recruitment into the study. Outreach personnel also visited on-site to enroll subjects. All businesses were located in the Dallas-Fort Worth-Denton greater metropolitan area (Tarrant, Dallas, and Denton counties).

Businesses were randomly assigned to receive either the interventions or a control condition. Of the 40 participating businesses, 14 were in construction, 10 were in transportation/utilities, and 16 were in hospitality/services). Of these, 13 received *Team Awareness*, 12 received *Choices*, and 15 were assigned to the no-training control group.² Businesses ranged in size from 8 to 360 employees and averaged about 34 workers per businesses. Based on these numbers, 69% (1355) of those eligible actually participated in the study. Initial rates of participation were somewhat lower for the control condition (58%) than either for *Team Awareness* (82%) or *Choices* (63%). Employee retention rate from pre-to-post was 79%. Pre-to-post retention was similar for the *Team* (77%), *Choices* (78%) and Control (80%) conditions. Retention from pre-to-training was 88% for both interventions (88% *Team*, 90% *Choices*). Pre-to-follow-up employee retention rate was 69%. Pre-to-follow-up retention has varied across the *Choices* (77%), *Team* (71%) and Control (58%) conditions.

Project Outcome Findings

Outcome analyses were conducted as pertains to different sets or domains of hypotheses: (1) proximal effects; short-term or pre-to-post changes in a select group of risk and protective factors for substance use; (2) distal effects; that is, any changes in substance use from pre-training to sixmonth follow-up; and (3) training engagement effects.

Overall, experimental results suggest that Team Awareness-Small Business (Team Awareness^{SB}) improved some aspects of workplace climate and help-seeking and Choices in Health Promotion (Choices) reduces alcohol use (including problem drinking). However, findings are somewhat mixed and small to moderate in strength. Listed below, we highlight significant effects of both programs, as well as some other significant findings. Findings within each category are listed in order of appearance in the text.³

² For this report, no business names are used, and each business was assigned a two digit identification number based on order of recruitment. Of the 13 businesses in Team Awareness, one business (a bar and grill) had two locations (#8 and #22 were combined as # 8) under the same management and workers were trained together. Another business had three separate entities (#20, #21, #23 were combined as # 20) under one management and were trained together (two home health care businesses and day spa). Of the 12 businesses in Choices, one business school district cafeterias—was originally assigned as a control group (#27) and completed pre-, post-, and six-month follow-up surveys. Following the six months, the business had expanded and management wanted to offer a training to the new employees. Because we had time remaining, these additional workers were assigned to the Choices condition (#37).

³ This list of findings is not intended to be complete or comprehensive. This report primarily focuses on employee survey analysis. Other data sets include needs assessment data and small business owner 6 month surveys. The current version of this report (March, 2005) only briefly refers to these data sets.

Team Awareness^{SB} (Team)

- 1. Organizational Wellness (a positive work climate measure) improved (pre-post and prefollow-up) for employees receiving *Team;* this difference was significant compared to the control group. (Table 28, p. 78; Table 30, p. 80)
- 2. Drinking Climate (a measure of risk) significantly improved (reduced) for employees receiving *Team* from pre-follow-up. (Table 30, p. 80). These reductions were most apparent among employees who were exposed to higher coworker risks.
- 3. Spiritual Health significantly increased from pre to 6 months while other conditions stayed at the same level. (Table 31, p. 80).
- 4. A measure of alcohol problems (CAGE) decreased significantly more for employees who received either training than for the control group. This difference appears to be due to reductions for *Team* participants. (Table 35, p. 87)
- 5. Participants in the *Team* condition improved their willingness to seek help significantly more than did those in the *Choices* condition. Trends suggest that *Team* improved more than either *Choices* or control and were better able to sustain improvements (Figure 5, p. 89).
- 6. Compared to other groups, *Team* participants significantly increased their pre-posttest perceptions of the risks of substance use particularly of heavy smoking and drinking. (Table 37, p. 90)
- 7. From pretest to follow-up, all participants showed significant increases in risk perceptions for drinking 5 or more drinks once or twice a week. *Team* participants significantly increased their risk perception of smoking a pack or more of cigarettes a day (Table 38, p. 90).
- 8. Team participants showed significant pre-post increases in disapproval of trying marijuana and of having one or two drinks a day. Team participants retained their high disapproval of marijuana use through 6 month follow-up. (Table 39, p. 91; Table 40, p. 91).
- 9. Looking at a sub-sample of only those employees who drink or use drugs, Team showed a 125% increase in their willingness to seek help at six month follow-up (from 20% to 45%). Employees in the Team condition were more likely to have received help across the six months of the study and also reduced their drinking risks (Table 41, p. 96).
- 10. Aggregate (HLM) analyses for work climate and individual health were similar to individual level analyses. The most consistent finding in both sets of analyses is that *Team* showed improvements in Organizational Wellness. (Table 44, p.102; Table 45, p. 103).
- 11. Team participants significantly improved in most areas of positive stress unwinding (time with friends, meditation/prayer/exercise) compared to the Choices and control conditions. These results were sustained at six month follow-up.

Choices in Health Promotion (Choices)

- 1. Choices participants showed significant pre-post improvement in healthy exercise habits and physical health. (Table 29, p. 79).
- 2. Choices participants appeared to have greater reductions in severity of drinking than Team according to HLM analysis. (Table 35, p. 87).
- 3. From pretest to six month follow-up, change in days of alcohol use in the past month were: *Team* reduced by 7%, *Choices* reduced by 16%, and control increased by 8%. This represents a relative reduction of 15% for *Team* and 24% for *Choices*. (Figure 4, p. 87).
- 4. There was a significant (pre-follow-up) condition effect for alcohol use in the past 30 days with Choices showing reductions, *Team* slightly reducing, and the control group slightly increasing. (Table 35, p. 87).

- 5. Trends suggest that Choices may be effective in reducing number of days illegal drugs were used in the past month by 63%. However, this result is non-significant (due to low prevalence of drug use), and should be interpreted with caution. (Figure 4, p. 87).
- 6. Choices participants significantly increased their risk perception of smoking marijuana once a month. (Table 38, p. 90).
- 7. Choices participants showed significant pre-post increases in disapproval of trying marijuana and this improvement was significant compared to the control group (Table 39, p. 91).
- 8. From pre to 6 months, employees with lower perceived risks (at pretest) who received *Choices* showed the most improvement in reducing tobacco use. (Figure 17, p. 99).
- Looking at a sub-sample of only those employees who drink or use drugs, Choices employees demonstrated a 50% increase at two weeks post-training (24% to 36%), but this returned to baseline at six months. Choices employees also reduced their drinking risks (Table 41, p. 96).

Other Findings

- 1. Within the experimental groups—employees who report that their individual health worsened also showed that their work climate worsened (negative scores on all climate measures). Also within experimental groups, those employees who reported that their individual health improved also reported that their work climate improved. Most importantly, there were significant differences in climate change for employees in the worsened, improved, and stayed the same categories while, in contrast, there were no such differences for the corresponding categories in the control condition. These results suggest that the interventions had the effect of aligning both individual and climate measures of health (Table 32, p. 83).
- 2. Transfer of training climate had a mediating effect on change in organizational wellness and positive unwinding. This result suggests that it may be necessary to have a work climate that supports training and employee use of training in order for these changes to fully take place. (Figures 7 & 8, pp. 93-94).
- 3. Employee understanding of addiction had a mediating effect on change in organizational wellness, positive unwinding, and willingness to seek help for self. This results suggests that it may be necessary for workers to improve their understanding of addiction in order for other positive changes to fully take place. (Figures 10-12, pp. 94-95).
- 4. Businesses with workers who perceived higher coworker risks also had higher levels of drinking, drinking climate, tobacco use, hangovers, and CAGE scores as well as more physical symptoms and anxiety and less willingness to get help. (p. 98).
- 5. From pretest to 6 months, employees with greater perceived risks (at pretest) who received either training showed the most improvement in drinking climate. (Figure 16, p. 98).
- 6. Qualitative reports from business owners suggest that either training had effective results. Some examples include: improving alcohol policies, adding counseling/chaplaincy services, positive feedback from employees, improved communication, increased supervisory skills, and better relationships between employees and managers. Several businesses also reported being able to use community resource/referral "Know How to Get Help" brochures for help (and to refer others) with financial issues, grief counseling, and other mental health issues.
- 7. Increases in positive unwinding and decreases in negative unwinding were significantly related to reductions in alcohol use, problem drinking, intoxication, and tobacco use.

Conclusions

Outreach. Regarding outreach, the participant enrollment rate was at 69%, with 88% retention into training and 69% retention into 6 month follow-up (73% for training groups) suggesting that worker enthusiasm for this type of training is strong. These rates have been achieved despite difficulties in outreaching this special population, with only 3% of valid business contacts agreeing to participate (in initial cold calls). Recruitment success is much greater through the use of local and community referral resources (10%), as opposed to cold-calling through business lists (e.g., Dun & Bradstreet) (2%). In the initial year, many of the contacted businesses had, on average, a smaller number of employees than anticipated. Larger businesses were targeted later in the study and we had many moderate sized (50-100 workers) businesses in year 2 and larger businesses in year 3 (> 100 workers).

Outcomes. We found promising intervention effects for both protective factors and major outcomes such as substance use and help-seeking. Generally the 4-hour *Team Awareness* training was effective increasing several protective factors and willingness to seek help through counseling or EAP services. The *Choices in Health* Promotion however was effective in reducing alcohol use and problem drinking. In addition, EAP utilization records showed that over 20 intervention participants have contacted the EAP for assistance since project start-up and at least 17 also received treatment.

Project Management. Regarding project management, the SBWI has developed replicable protocols for community outreach, a small business retreat, SBO marketing interviews, needs assessment, customization of an innovative health promotion program, training-of-trainers, survey administration, and data management. Those wishing to extend prevention efforts to small businesses should pay attention to time requirements and the necessary allocation of outreach staff. Once SBOs agree to participate, every effort is needed to maintain a positive relationship with the owner (or primary contact) as well as with employees. This requires sensitivity to work load and special schedule needs.