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
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Abstract</strong></td>
<td>7</td>
</tr>
<tr>
<td>Overview of Program and Goals</td>
<td>7</td>
</tr>
<tr>
<td>Outcome Research Design</td>
<td>8</td>
</tr>
<tr>
<td>Project Outcome Findings</td>
<td>8</td>
</tr>
<tr>
<td>Conclusions</td>
<td>11</td>
</tr>
<tr>
<td><strong>Overview of the Intervention</strong></td>
<td>12</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>12</td>
</tr>
<tr>
<td>Theoretical Underpinnings Linking</td>
<td>14</td>
</tr>
<tr>
<td>Project Goals, Intervention and Desired Outcome</td>
<td>14</td>
</tr>
<tr>
<td>Brief Description of Intervention</td>
<td>22</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>23</td>
</tr>
<tr>
<td><strong>Implementation Summary</strong></td>
<td>24</td>
</tr>
<tr>
<td>Detailed Description</td>
<td>24</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>35</td>
</tr>
<tr>
<td>Process Research Design</td>
<td>35</td>
</tr>
<tr>
<td>Outcome Research Design</td>
<td>38</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>45</td>
</tr>
<tr>
<td>Process Findings</td>
<td>45</td>
</tr>
<tr>
<td>Fidelity</td>
<td>46</td>
</tr>
<tr>
<td>Case Studies</td>
<td>50</td>
</tr>
<tr>
<td>Fidelity to Curriculum</td>
<td>65</td>
</tr>
<tr>
<td>Discussion of Findings &amp; Limitations on the Data</td>
<td>71</td>
</tr>
<tr>
<td>Outcome Findings</td>
<td>72</td>
</tr>
<tr>
<td>Attrition Analysis</td>
<td>76</td>
</tr>
<tr>
<td>Statistical/Analytic Results</td>
<td>78</td>
</tr>
<tr>
<td>Interplay Between Process &amp; Outcome Findings</td>
<td>107</td>
</tr>
<tr>
<td><strong>Cost Analyses</strong></td>
<td>108</td>
</tr>
<tr>
<td><strong>Conclusion/Recommendations</strong></td>
<td>111</td>
</tr>
</tbody>
</table>
**LIST OF TABLES**

Table 1. Risk Factors Targeted by Current Research Study 14  
Table 2. Logic Model for Team Awareness 17  
Table 3. Results from Pilot Testing of Team Awareness 18  
Table 4. Logic Model for Choices in Health Promotion 20  
Table 5. Choices Trainings: Number of Slides 27  
Table 6. Matrix for Selection of Stress Management Elements into the Customized Health Promotion Program *(Choices in Health Promotion)* 33  
Table 7. Percentage of Employees Retained at Each Time Period 35  
Table 8. Conditions of Proposed Study 36  
Table 9. Employee Self-Report Measures 37  
Table 10. Total Sample at Each Assessment Phase by Condition 40  
Table 11. Businesses Dropped 48  
Table 12. Participant Perceptions of Training Quality 65  
Table 13. Responsiveness to Team Awareness Training 66  
Table 14. Responsiveness to Team Awareness Training *(13 Businesses; N = 543)* 67  
Table 15. Responsiveness to Choices in Health Promotion Training *(k and n vary)* 68  
Table 16. Participant Perceptions of Training Utility and Impact 68  
Table 17. Estimating Differential Impact Using Perceptions of Improved Communication 71  
Table 18. Estimating Differential Impact Using Perceptions of Improved Health 78  
Table 19. Estimating Differential Impact Using Perceptions of Improved Health 83  
Table 20. Number and Percentage by Condition and Industry *(Pre-test)* 72  
Table 21. Demographics of Current Sample by Condition 73  
Table 22. Percent of Employee Substance Use in the Last 30 Days by Condition 74  
Table 23. Number (Percent) by Condition Who Reported Experiencing Co-worker Substance Abuse at Work at Least Once in the Past 6 Months 75  
Table 24. Percent by Condition Who Reported Experiencing Physical Symptoms “Often” or “Almost always” in the Past 6 Months 75  
Table 25. Number (Percent) by Condition Who Work One or More Hours a Day in Safety Sensitive Tasks 76  
Table 26. Six Month Attrition Rates by Demographic Category 76  
Table 27. Six Month Attrition Rates by Substance Use 77  
Table 28. MANOVA of Work Climate Measures by Condition and Time *(Pre – Post)* 78  
Table 29. MANOVA of Individual Health Measures by Condition and Time *(Pre – Post)* 79  
Table 30. MANOVA of Work Climate Measures by Condition and Time *(Pre – 6 mo.)* 80  
Table 31. MANOVA of Individual Health Measures by Condition and Time *(Pre – 6 mo.)* 80  
Table 32. Predicting Pre-Post Change in Work Climate from the Pre-Post Change in Individual Health 83  
Table 33. Predicting Pre-6 mo. Change in Work Climate from the Pre-6 mo. Change in Individual Health 83  
Table 34. Six Month Drinking and Help Seeking Attitude Outcomes 86  
Table 35. ANOVA Assessing Change in Alcohol Use by Condition 87  
Table 36. Pretest Means on Willingness to Seek/Encourage Help 88  
Table 37. MANOVA of Risk Perception by Condition and Time *(Pre – Post)* 90  
Table 38. MANOVA of Risk Perception by Condition and Time *(Pre – 6 mo. Follow-up)* 90  
Table 39. MANOVA of Disapproval by Condition and Time *(Pre – Post Test)* 91  
Table 40. MANOVA of Disapproval by Condition and Time *(Pre – 6 mo. Follow-up)* 91
Table 4.1 Self-reported Counseling and Alcohol-related Behaviors among Alcohol or Drug Users in Three Experimental Conditions: Mean Values within Condition and Independent F Tests

Table 4.2 MANOVA of Work-Family Conflict by Condition and Time (Pre–Post)

Table 4.3 MANOVA of Work-Family Conflict by Condition and Time (Pre–6 month)

Table 4.4 6-month Workplace Climate Outcomes

Table 4.5 6-month Individual Health Outcomes

Table 4.6 MANOVA of Stress Unwinding by Condition (Pre–Post)

Table 4.7 MANOVA of Stress Unwinding by Condition (Pre–6 months)

Table 4.8 Year-to-Date Expenses for Year 2 of the Grant

Table 4.9 Employer Costs for Participation in Small Business Wellness Initiative Training
| Figure 1. | Conceptual Model Used to Inform Program Design | 21 |
| Figure 2. | Customization of Health Promotion Training | 25 |
| Figure 3. | Pretest Alcohol Severity Measure | 85 |
| Figure 4. | Pre-6 mo. Change in Number of Days of Substance Use in the Past 30 Days | 87 |
| Figure 5. | Willingness to Seek Help for Self | 89 |
| Figure 6. | Condition as Predictor, Organizational Wellness as Mediator and Help-seeking as Criteria | 93 |
| Figure 7. | Condition as Predictor, Positive Unwinding as Mediator and Help-seeking as Criteria | 93 |
| Figure 8. | Condition as Predictor, Transfer Climate as Mediator and Organizational Wellness as Criteria | 94 |
| Figure 9. | Condition as Predictor, Transfer Climate as Mediator and Positive Unwinding as Criteria | 94 |
| Figure 10. | Condition as Predictor, Transfer Climate as Mediator and Help-seeking as Criteria | 94 |
| Figure 11. | Condition as Predictor, Understanding of Addiction as Mediator and Organizational Wellness as Criteria | 95 |
| Figure 12. | Condition as Predictor, Understanding of Addiction as Mediator and Positive Unwinding as Criteria | 95 |
| Figure 13. | Condition as Predictor, Understanding of Addiction as Mediator and Help-seeking as Criteria | 95 |
| Figure 14. | Exposure to Eight Coworker Risks: Percent Reporting | 97 |
| Figure 15. | Perceived Coworker Risks (8 items): Business Averages | 97 |
| Figure 16. | Mean Change from Pretest to Six Month Follow-Up On Drinking Climate | 98 |
| Figure 17. | Time * Condition * Perceived Coworker Risk Interaction | 99 |
LIST OF APPENDICES

APPENDIX I
Section 1 – General Information 115
  Staffing Table 115
  Non-participants served 115
  Training/education activities & intergraded linkage 120

Section 2 – Copies & Instruments and Assessments & protocols 121

Section 3 - Presentation Awards and Publication 122

Section 4 - Success Stories 126

Section 5 - Other 127

APPENDIX II – TEAM AWARENESS ACTIVITY CHECKLIST

APPENDIX III – RESEARCH PAPER SUBMITTED FOR PUBLICATION (Targeting Working Adult Users of Alcohol and Drugs: Help-Seeking and an Experimental Assessment in Small Businesses)

APPENDIX IV - RESEARCH PAPER ACCEPTED FOR PUBLICATION (Healthy and Unhealthy Stress Unwinding: Promoting Health in Small Businesses)
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. 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 six-month follow-up; and (3) training engagement effects.

Overall, experimental results suggest that Team Awareness-Small Business (Team AwarenessSB) 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.

---

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\textsuperscript{58} (Team)

1. Organizational Wellness (a positive work climate measure) improved (pre-post and pre-follow-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 at 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).

9. 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 result 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.