A Cluster Randomized Trial of Alcohol Prevention in Small Businesses: A Cascade Model of Help Seeking and Risk Reduction

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Abstract

Purpose. The current study adapted two workplace substance abuse prevention programs and tested a conceptual (cascade) model of workplace training effects on help seeking and alcohol consumption.

Design. Questionnaires were collected 1 month before, 1 month after, and 6 months within a cluster randomized field experiment.

Setting. Texas small businesses in construction, transportation, and service industries.

Subjects. A total of 1510 employees from 45 businesses were randomly assigned to receive no training or one of the interventions.

Intervention. The interventions were 4-hour on-the-job classroom trainings that encouraged healthy lifestyles and seeking professional help (e.g., from the Employee Assistance Program [EAP]). The Team Awareness Program focused on peer referral and team building. The Choices in Health Promotion Program delivered various health topics based on a needs assessment.

Measures. Questionnaires measured help-seeking attitudes and behavior, frequency of drinking alcohol, and job-related incidents.

Analysis. Mixed-model repeated-measures analyses of covariance were computed.

Results. Relative to the control group, training was associated with significantly greater reductions in drinking frequency, willingness to seek help, and seeking help from the EAP. After including help-seeking attitudes as a covariate, the correlation between training and help seeking becomes nonsignificant. Help-seeking behavior was not correlated with drinking frequency.

Conclusion. Training improved help-seeking attitudes and behaviors and decreased alcohol risks. The reductions in drinking alcohol were directly correlated with training and independent from help seeking.

Key Words: Workplace, Worksite, Alcohol, Drug, Prevention, Help-Seeking, Evidence-Based, Employee Assistance Program, Prevention Research, Manuscript format: research, Research purpose: intervention evaluation, impact/relationship testing, Study design: cluster randomized trial, Outcome measures: attitude, behavior, motivation; Setting: small business, workplace; Health focus: alcohol control, social health, mental health, stress management, lifestyle education, and healthy behavior change; Culture: change; Target population age: adult; Target population: adult target population; Circumstances: Versus; Received: December 12, 2012; Revised: July 26, 2013; Accepted: September 23, 2013; Published Online: January 24, 2014

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INTRODUCTION & CONDENSED DISCUSSION ONLY

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Alcohol-related problems cost society billions of dollars annually (1-2) and employers bare a proportion of this cost due to reduced productivity from alcohol abuse/dependence (3-4). Fortunately, alcohol or drug (AOD) prevention strategies can be integrated with health promotion (5-7). The need to reach small firms is important as they represent 99% of employers (8), have higher rates of AOD use than larger firms (9), and less capability to absorb costs of AOD (10-11). Only about 29 percent of small businesses with 50-99 employees offer alcohol screening and support, whereas about 71 percent of large firms (more than 750 employees) have a screening program (12).

Prevention Programs in the Workplace

Employers can sponsor preventive services ranging from posters, pamphlets, social health training, and websites to screening, brief assessment, and referral to treatment programs (7). The current study provided two types of health promotion training programs along with access to mental health counseling services to workers via an Employee Assistance Program (EAP). Both programs seek to directly reduce alcohol use by addressing work climate risks (e.g., enabling) or teaching personal health skills (e.g., reduce alcohol intake with dinner).

The first approach, “Team Awareness,” promotes openness to help-seeking, and addresses stress, ways of getting help, peer referral, work climate and social factors associated with AOD use (13). Team Awareness has been shown to improve workplace social health, peer referrals, EAP utilization, and to reduce problem drinking (14-15). Team Awareness has also been adapted into restaurant settings where young workers receiving the program showed reductions in heavy drinking (16) and stress reduction (17).

The second approach called the “Healthy Workplace” focuses on individual health skills in areas such as diet, exercise, and stress (18). This program addresses AOD use within a health promotion framework, and includes knowing the limits of self-help and getting professional help as needed (19-20). This adapted approach combines elements from Healthy Workplace, Team Awareness, and training in time management and spiritual health into a program that is customized to the business.

A Cascade Model of Alcohol Risk Prevention

Figure 1 outlines a cascade model that served as a framework for hypotheses. The term “cascade” refers to a logic framework for delineating possible paths to risk reduction. The model follows from research on the temporal sequencing of help-seeking among alcohol dependents (21) suggesting that at-risk drinkers may become abstinent either before or after they seek help (professional or AA).

While the current study pertains to alcohol and help-seeking, the model is derived from theories of health behavior change (e.g., 22-23) and may be seen as a general heuristic for scientific study of other areas of behavioral health (e.g., fitness, nutrition).
and how health promotion impacts attitudes, behaviors, and outcomes and the mediating relationships between these factors.

The first hypothesis is that both programs will impact directly three outcomes: willingness to seek help, help-seeking, and decreased use of alcohol. The current study distinguishes help-seeking for alcohol or drugs as well as for other concerns (depression and stress). Because of stigma, workers may be more willing to admit, and seek counseling for stress, than for the more stigmatized problem of alcoholism (24). The study also distinguishes two types of drinking outcomes: frequency and job-related incidents (e.g., working with a hangover, missing work due to alcohol use). While reductions in drinking frequency may signify an important health outcome, business owners will be most interested in a training that reduces job impairment (25). Hypothesis 1: Compared to those not receiving training, trained workers will: H1a: increase willingness to seek help; H1b: receive more counseling; H1c: decrease frequency of alcohol use and job-related incidents.

The second hypothesis focuses on the help-seeking attitude-behavior relationship and tests whether the effects of training on received counseling depends on attitudes toward seeking help. Attitudes correlate with behaviors when social norms facilitate behavior expression (26). Trained employees with more positive attitudes toward help-seeking will be more likely to seek help than those with less positive attitudes. Hypothesis 2: The effect of training on receiving counseling will be mediated by post-training attitudes toward seeking help.

The third hypothesis suggests that reductions in alcohol outcomes will be greater for those receiving counseling than for those not receiving counseling. While individuals may drink less because of learning new skills, alcohol reduction may occur via seeking help. Hypothesis 3: The intervention effects on alcohol behavior will be mediated by receiving counseling.

### Discussion

**Training Impact on Attitudes, Help-Seeking, and Alcohol Use**

Results provide mixed support for hypotheses. Team Awareness (Small Business) [TASB] participants increased in their willingness to seek help at six month follow-up. Choices participants demonstrated significant increase at two weeks post-training, with a return to baseline at six months. While both programs provided information and resources on how to get help for problems (including EAP), TASB included components on alcohol risk and on peer referral skills for encouraging help-seeking. The extra exercise in encouraging help-seeking may have helped to crystallize positive help-seeking attitudes. Participants in both programs reduced monthly alcohol intake across the six months of the study. This change, although slight, has applied significance given that 1 in 5 of all participants report that alcohol affected their work.

**The Effect of Training on Help-Seeking is Mediated by Attitudes**

As predicted, help-seeking was correlated with post-training help-seeking attitudes. Willingness to seek help at post-test was associated with higher help-seeking after training, and the effect of the prevention interventions on help-seeking was completely mediated by employee attitudes to seek help. The change in attitudes from before to after training was a significant factor in employee decisions to use the EAP. These results support worksite prevention strategies that seek to change negative attitudes toward seeking support. Both programs effectively helped workers form more positive attitudes toward seeking help, which led to significant increases in help seeking. This finding echoes previous research on mental health help-seeking (33), extends such research to the work setting, and also applies a conceptual framework that is often missing in help-seeking research (34).
The information provided in both programs may also have encouraged those who already had positive help-seeking attitudes to actually seek help. When workers are faced with a work climate that is congruent with their own dispositions, they may feel safer or freer to express themselves than when their attitudes and the work climate are not aligned (35-36).

Receiving Counseling and Post-training Alcohol Use

The cascade model suggests two paths to reduction of alcohol risk: (1) a direct route, whereby training independently impacts each outcome: help-seeking attitudes, help-seeking behavior, and alcohol risks, and (2) a cascade route, whereby changes in help-seeking attitudes lead to changes in help-seeking behaviors which subsequently lead to alcohol reduction. The results offer more support for the direct route, where training (especially TASB) led directly to reduced drinking. Changes in attitudes impacted decisions to seek counseling, but reductions in alcohol drinking were not dependent on receiving counseling.

The direct effects of the short programs in this study on alcohol reduction are like those observed after brief advice delivered by primary care physicians (37). Presenting information about the deleterious consequences of drinking alcohol, as well as skills training in healthy ways to relieve stress, likely contributed to the reductions in drinking levels among the trained employees.

The cascade model suggests different points for targeting prevention interventions and health promotion in general. The findings show that help-seeking increased, drinking frequency decreased, and there was no correlation between these two behaviors. Both help-seekers and non-help-seekers made significant reductions in drinking. Businesses that provide EAP services should provide training and campaigns that encourage help-seeking, or periodically remind workers where to seek help.

TASB participants also showed reductions in productivity-related outcomes related to drinking (working under the influence, missing worker due to drinking). These reductions did not differ from the control group, but they suggest that training interventions can restrain unsafe drinking. General reductions in frequent drinking will lead to fewer hangovers and problems from drinking, which should lead to less absenteeism and greater employee mental health and productivity. These reductions may have most practical significance among the occupations included here (transportation, construction, and service), which tend to have higher rates of alcohol impairment at work and where such impairment may impact safety and customer service (20).

So What?

Business leaders associate EAPs as a benefit when treatment helps those employees suffering the worst from substance abuse and addiction. The current findings show that only 4-hours of prevention training can cause reductions in the frequency of alcohol use among the whole workforce without necessarily increasing rates of treatment seeking.

Because so many alcohol and drug users (as well as others with various health risks) may never seek formal treatment or coaching, or may live in resource poor areas where services are limited, the workplace can become a critical venue to provide prevention intervention services. Whether through wellness professionals, EAP providers, or some human resource function, current findings suggest added value in proactively offering targeted education beyond those services that may passively wait for employees to seek help.