

Name of Program/Strategy: Coping With Work and Family Stress

Report Contents

1. Overview and description
2. Implementation considerations (if available)
3. Descriptive information
4. Outcomes
5. Cost effectiveness report (Washington State Institute of Public Policy – if available)
6. Washington State results (from Performance Based Prevention System (PBPS) – if available)
7. Who is using this program/strategy
8. Study populations
9. Quality of studies
10. Readiness for Dissemination
11. Costs (if available)
12. Contacts for more information

1. Overview and description

Coping With Work and Family Stress is a workplace preventive intervention designed to teach employees 18 years and older how to deal with stressors at work and at home. The model is derived from Pearlin and Schooler's hierarchy of coping mechanisms as well as Bandura's social learning theory. The 16 90-minute sessions, typically provided weekly to groups of 15-20 employees, teach effective methods for reducing risk factors (stressors and avoidance coping) and enhancing protective factors (active coping and social support) through behavior modification (e.g., methods to modify or eliminate sources of stress), information sharing (e.g., didactic presentations, group discussions), and skill development (e.g., learning effective communication and problem-solving skills, expanding use of social network).

The curriculum emphasizes the role of stress, coping, and social support in relation to substance use and psychological symptoms. The sessions are led by a facilitator who typically has a master's-level education; is experienced in group dynamics, system theory, and cognitive and other behavior interventions; and is able to manage group process. Facilitator training in the program curriculum is required.

2. Implementation considerations (if available)

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

3. Descriptive Information

Areas of Interest	Mental health promotion Substance abuse prevention Co-occurring disorders
Outcomes	1: Perceived stressors 2: Coping strategies 3: Perceived social support 4: Alcohol and other drug use/problem drinking 5: Psychological symptoms of stress
Outcome Categories	Alcohol Drugs Employment Family/Relationships Mental Health Social Functioning Tobacco
Ages	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)
Genders	Male Female
Races/Ethnicities	White Race/ethnicity unspecified
Settings	Workplace
Geographic Locations	Urban Suburban
Implementation History	The program has been implemented in 22 sites across the United States and in Trinidad and Tobago. Approximately 1,500 individuals have participated in the intervention.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: Yes Evaluated in comparative effectiveness research studies: Yes
Adaptations	No population- or culture-specific adaptations were identified by the applicant.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the applicant.

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

IOM Prevention Categories	Universal
---------------------------	-----------

4. Outcomes

Outcome 1: Perceived stressors

<p>Description of Measures</p>	<p>Stressors were assessed using the following self-report instruments:</p> <ul style="list-style-type: none"> • Role Quality Scale--Respondents rated the extent to which their roles as an employee (e.g., "having too much to do"), as a spouse or partner (e.g., "conflict over housework"), and as a parent (e.g., "problems with children's education/school") were a source of concern or demand for them. • Work Environment Scale--Participants indicated whether they perceived selected environmental conditions in their immediate work location as stressors (e.g., noise, temperature, health hazards). • Work-Family Stressors Scale--Participants responded to items that assessed the extent to which demands from work and family were perceived as too extensive, conflictual, or overlapping (e.g., "Considering your different roles, how often do the things you do add up to being just too much?").
<p>Key Findings</p>	<p>Results of one study demonstrated that intervention participants showed a significantly greater decrease in employee role stressors at posttest ($p = .001$) and 6-month follow-up ($p = .003$) and a significant reduction in work/family stressors ($p = .001$) at 6-month follow-up compared with the assessment-only control group. In an analysis of a subsample of working mothers, intervention participants showed a significantly greater reduction in employee role stressors ($p < .05$) at posttest and a significantly greater reduction in work/family stressors and work environment stressors at 6-month follow-up ($p < .05$).</p> <p>In another study, intervention participants showed a significantly greater decrease in spouse/partner role stressors ($p = .039$) at posttest compared with two control groups (a group receiving a self-awareness and education program and an assessment-only group).</p> <p>In an analysis using a subsample of heavy alcohol users who scored above the mean on total number of drinks consumed the</p>

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

	month prior to pretest, intervention participants showed a significantly greater reduction in employee role stressors ($p = .014$) and parent role stressors ($p = .008$) at posttest. No differences in work/family stressors were found for either the overall sample or the subsample of heavy alcohol users.
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental
Quality of Research Rating	2.8 (0.0-4.0 scale)

Outcome 2: Coping strategies

Description of Measures	<p>Coping was measured using the following instruments:</p> <ul style="list-style-type: none"> • Health and Daily Living Form--This 33-item self-report instrument includes three subscales that provide an indication of the extent to which participants use behavioral, cognitive, and avoidant coping strategies. • Coping Strategies Inventory--This self-report instrument comprises six subscales--Problem Solving, Cognitive Restructuring, and Social Support Coping (Active Coping Strategies); and Problem Avoidance, Wishful Thinking, and Social Withdrawal (Avoidance Coping Strategies) -- that together allow a detailed assessment of changes in respondents' coping strategies.
Key Findings	<p>Results of one study demonstrated that intervention participants showed a significantly greater increase in behavioral coping at posttest ($p = .001$) and 6-month follow-up ($p = .033$) and a significantly greater decrease in the use of avoidance coping at 6-month follow-up compared with the assessment-only control group. A significantly greater reduction in avoidance coping ($p < .01$) also was observed for a subsample of working mothers at 6-month follow-up.</p> <p>In another study, intervention participants showed a significantly greater increase in social support coping ($p = .002$) and a significantly greater decrease in social withdrawal coping ($p = .003$) at posttest compared with two control groups (a group receiving a self-awareness and education program and an assessment-only group). In an analysis using a subsample of heavy alcohol users who scored above the mean on total number of drinks consumed the month prior to pretest, intervention participants showed a significantly greater</p>

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

	increase in social support coping ($p = .016$) and total active coping ($p = .026$) at posttest relative to the two control groups. In addition, intervention participants reported a greater decrease in total avoidance coping relative to the control groups at posttest; this difference approached statistical significance ($p = .055$).
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental
Quality of Research Rating	3.0 (0.0-4.0 scale)

Outcome 3: Perceived social support

Description of Measures	This outcome was assessed using an adaptation of House's measure of perceived social support. Participants rated the extent to which their supervisor, coworkers, spouse/partner, family, and friends were supportive regarding difficulties both at home and at work. Ratings pertaining to the supervisor and coworkers were combined to create a measure of social support from work sources; those of the spouse/partner, family, and friends were combined to create a measure of social support from non-work sources.
Key Findings	Results of one study showed that intervention participants reported significantly increased social support from work sources at posttest ($p = .001$) and 6-month follow-up ($p = .001$) compared with an assessment-only control group. No significant differences were found between groups on non-work sources of perceived social support. Similarly, in an analysis of a subsample of working mothers, intervention participants reported higher levels of perceived social support from work sources at posttest ($p < .05$) and 6-month follow-up ($p < .05$), but no differences were observed for non-work sources of social support. No significant differences between groups were found on work and non-work sources of perceived social support in another study that compared the intervention with two control conditions (a self-awareness and education program and an assessment-only group)
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Quality of Research Rating	2.5 (0.0-4.0 scale)
-----------------------------------	---------------------

Outcome 4: Alcohol and other drug use/problem drinking

Description of Measures	<p>Alcohol and other drug use was assessed using the following instruments:</p> <ul style="list-style-type: none"> • National Survey on Drug Abuse--Participants were asked to indicate the frequency and quantity of their alcohol and other drug use in the past 30 days. In addition, participants were asked to rate the extent to which they tried to reduce tension by drinking, smoking, using other drugs, and eating. • Alcohol Use Disorders Identification Test--This 10-item self-report screening instrument is used to detect problem-drinking behavior.
Key Findings	<p>In one study, intervention participants reported a significantly greater reduction in alcohol use at 6-month follow-up ($p = .05$) compared with an assessment-only control group. These participants also showed a significantly greater decrease in their use of alcohol to reduce tension at both posttest ($p = .05$) and 6-month follow-up ($p = .005$) and a significantly greater reduction in tobacco use at posttest ($p < .01$) compared with control participants.</p> <p>In another study, intervention participants reported a significantly greater decrease in their use of alcohol to reduce tension at posttest ($p = .028$) compared with two control groups (a group receiving a self-awareness and education program and an assessment-only group). In an analysis using a subsample of heavy alcohol users who scored above the mean on total number of drinks consumed the month prior to pretest, intervention participants showed a significantly greater reduction in alcohol use at posttest ($p = .038$) compared with the two control groups.</p>
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental
Quality of Research Rating	3.0 (0.0-4.0 scale)

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Outcome 5: Psychological symptoms of stress

<p>Description of Measures</p>	<p>Psychological symptoms of stress were assessed using the following instruments:</p> <ul style="list-style-type: none"> • State-anxiety subscale of the Spielberger State-Trait Anxiety Inventory--This instrument was used as a measure of transitory feelings of tension, apprehension, and heightened autonomic nervous system activity. Participants were asked to rate whether they were currently experiencing any of the 20 anxiety-related mood states. • Center for Epidemiologic Studies Depression Scale (CES-D)--This instrument was used to measure participants' current level of depressive symptoms and depressive affect. Participants rated 20 items indicating the frequency of their occurrence during the past week. • Cohen-Hoberman Inventory of Physical Symptoms--This instrument includes 39 common physical symptoms that are traditionally viewed as psychosomatic (e.g., headache, weight loss), excluding symptoms of an obvious psychological nature. Participants were asked to indicate to what degree each of the physical symptoms had bothered or distressed them during the past 2 weeks.
<p>Key Findings</p>	<p>Results of one study demonstrated that intervention participants reported significantly reduced psychological symptoms of stress compared with the assessment-only control group at posttest ($p = .021$) and 6-month follow-up ($p = .003$). In an analysis using a subsample of working mothers, intervention participants showed significantly greater reductions in psychological symptoms at 6-month follow-up ($p < .05$) compared with the assessment-only control group.</p> <p>In another study, intervention participants showed significantly reduced levels of psychological symptoms at posttest ($p = .02$) compared with two control groups (a group receiving a self-awareness and education program and an assessment-only group).</p>
<p>Studies Measuring Outcome</p>	<p>Study 1, Study 2</p>
<p>Study Designs</p>	<p>Experimental</p>
<p>Quality of Research Rating</p>	<p>3.0 (0.0-4.0 scale)</p>

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

5. **Cost effectiveness report** (Washington State Institute of Public Policy – if available)
6. **Washington State results** (from Performance Based Prevention System (PBPS) – if available)
7. **Where is this program/strategy being used (if available)?**

Washington Counties	Oregon Counties

8. Study Populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

Study	Age	Gender	Race/Ethnicity
Study 1	26-55 (Adult)	100% Female	83% White 17% Race/ethnicity unspecified
Study 2	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	71% Male 29% Female	89% White 11% Race/ethnicity unspecified

9. Quality of Research

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

Study 1

Kline, M. L., & Snow, D. L. (1994). Effects of a worksite coping skills intervention on the stress, social support, and health outcomes of working mothers. *Journal of Primary Prevention*, 15(2), 105-121.

Snow, D. L. (2004, April). Coping With Work and Family Stress: A workplace preventive intervention. Paper presented at the Conference on Workplace Strategies and Interventions for Improving Health and Well-Being sponsored by the National Institute of Child Health and Human Development, Baltimore, MD.

Snow, D. L., & Kline, M. L. (1991). A worksite coping skills intervention: Effects on women's psychological symptomatology and substance use. *The Community Psychologist*, 24, 14-17.

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Snow, D. L., & Kline, M. L. (1995). Preventive interventions in the workplace to reduce negative psychiatric consequences of work and family stress. In C. M. Mazure (Ed.), *Does stress cause psychiatric illness?* (pp. 221-270). Washington, DC: American Psychiatric Press.

Snow, D. L., Swan, S. G., & Wilton, L. (2002). A workplace coping skills intervention to prevent alcohol abuse. In J. Bennett & W. E. K. Lehman (Eds.), *Preventing workplace substance abuse: Beyond drug testing to wellness* (pp. 57-96). Washington, DC: American Psychological Association.

Study 2

Snow, D. L. (2004, April). Coping With Work and Family Stress: A workplace preventive intervention. Paper presented at the Conference on Workplace Strategies and Interventions for Improving Health and Well-Being sponsored by the National Institute of Child Health and Human Development, Baltimore, MD.

Snow, D. L., Swan, S. G., & Wilton, L. (2002). A workplace coping skills intervention to prevent alcohol abuse. In J. Bennett & W. E. K. Lehman (Eds.), *Preventing workplace substance abuse: Beyond drug testing to wellness* (pp. 57-96). Washington, DC: American Psychological Association.

Supplementary Materials

Fidelity Scale--Content

Fidelity Scale--Process

Snow, D. L., Connell, C. M., & Weil, J. (2007). Coping with Work and Family Stress. Test of direct and mediated effects of program impact on psychological symptoms. Manuscript submitted to *Prevention Science*.

Snow, D. L., Swan, S. C., Raghavan, C., Connell, C. M., & Klein, I. (2003). The relationship of work stressors, coping and social support to psychological symptoms among female secretarial employees. *Work and Stress*, 17(3), 241-263.

Snow, D. L., & Zimmerman, S. O. (2005). Coping With Work and Family Stress: Facilitator Training [PowerPoint slides]. Validity Table of Measures Utilized in Coping With Work and Family Stress Studies (with list of references).

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

For more information about these criteria and the meaning of the ratings, see Quality of Research.

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Perceived stressors	3.0	3.0	1.5	2.0	3.5	4.0	2.8
2: Coping strategies	3.0	4.0	1.5	2.0	3.5	4.0	3.0
3: Perceived social support	2.0	2.0	1.5	2.0	3.5	4.0	2.5
4: Alcohol and other drug use/problem drinking	3.0	4.0	1.5	2.0	3.5	4.0	3.0
5: Psychological symptoms of stress	3.0	4.0	1.5	2.0	3.5	4.0	3.0

Study Strengths

Most measures demonstrated acceptable internal consistency and construct and convergent validity. Several potential confounds were well discussed, and analyses appeared appropriate. The individual randomization design of both studies is an additional methodological strength.

Study Weaknesses

A notable weakness is the absence of quantitative data on fidelity. No evidence was presented on actual tests of fidelity of the intervention either across trainers/facilitators or across sessions with one trainer/facilitator. Given that the intervention took place in groups, each meeting for several sessions, the potential for substantial variation in intervention implementation is an important factor. Attrition in one study is also a concern (i.e., long-term follow-up of intervention and attention control conditions had substantial attrition compared with the control group). Simple attrition analyses were undertaken, but greater attention to the possible biasing effects of attrition would have been helpful. The psychometric properties of the subscales adapted to measure social support were not adequately presented.

10. Readiness for Dissemination

The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

Dissemination Materials

Measures and forms:

- Facilitator Training Registration Form
- Fidelity Scale--Content | Fidelity Scale--Process | Health Questionnaire

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Snow, D. L. (2004). Coping With Work and Family Stress: A workplace preventive intervention [Curriculum]. New Haven, CT: Yale University School of Medicine, Department of Psychiatry, and The Consultation Center.

Snow, D. L. (2005). Coping With Work and Family Stress logic model.

Snow, D. L., & Zimmerman, S. O. (2005). Coping With Work and Family Stress: Facilitator Training [PowerPoint slides].

Snow, D. L., & Zimmerman, S. O. (2006). Coping With Work and Family Stress program overview.

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
2.8	2.8	2.8	2.8

Dissemination Strengths

The program curriculum is thorough and well organized. Tailored training is available from the program developer, and technical assistance is available to implementers in person or by phone. Well-developed fidelity and outcome measures are provided to support quality assurance.

Dissemination Weaknesses

Information on program recipient selection or self-selection is not clearly described in the materials provided. Some facilitators may need additional training or supplemental resources, such as a reading list, to attain the assumed level of content knowledge. It is unclear who completes the quality assurance measures and how data are used to improve program implementation.

11. Costs

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

Item Description	Cost	Required by Program Developer
-------------------------	-------------	--------------------------------------

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Intervention curriculum, CDs, and handouts	\$120 per set	Yes
Fact sheet, program overview, session outline, conceptual model, logic model, and evaluation instruments	Free	Yes
2-day intensive training and certification for facilitators, provided at Yale University in New Haven, CT	\$425 per person, or \$400 per person with early registration	Yes (one training option is required)
2-day intensive training and certification for facilitators, provided on site	\$4,800 for up to 20 participants, plus travel expenses	Yes (one training option is required)
3-day intensive training and certification for facilitators, provided on site	\$7,200 for up to 30 participants, or for any grant-funded initiative with an evaluation component, plus travel expenses	Yes (one training option is required)
Phone consultation	\$150 per hour	No

Additional Information

The estimated cost to provide sixteen 2-hour sessions with a group of 20 employees is \$3,200 if using an external provider (at \$100 per hour) or \$1,038 if using an internal provider (at \$32.45 per hour). Materials cost an additional \$400 for each group of 20 participants.

12. Contacts

For information on implementation:

Susan Ottenheimer, LCSW
(203) 789-7645
susan.ottenheimer@yale.edu

For information on implementation and research:

David L. Snow, Ph.D.
(203) 789-7645
david.snow@yale.edu

Learn More by Visiting: <http://www.theconsultationcenter.org/index.php?/coping-with-work-a-family-stress.html>