Exploring Individual and Organizational Stress-reducing Interventions Across Industries

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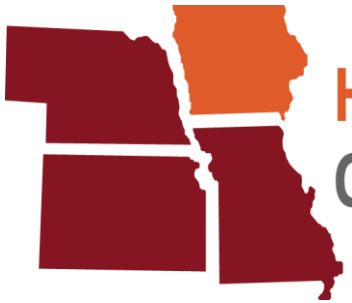

HEALTHIER WORKFORCE CENTER of the MIDWEST

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Introduction:

- Work often causes mental and physical job stress.
- Short-term impact of stress is higher absenteeism, turnover, loss of productivity.
- Long-term impact of stress contributes to chronic health conditions (cardiovascular disease, obesity).
- Employers face rising costs as a result of stress: healthcare expenditures, absenteeism, productivity loss
- Strategies to address *stress in the workplace and delivered at the workplace* may improve health

Introduction:

- Many stress reducing strategies have been tested.
- Workplace health promotion programs use i*ndividual-level* strategies to increase ability to cope with stress (e.g. cognitive behavioral therapy, meditation, exercise, massage)
- *Organizational-level* interventions target the source of the workplace stress (e.g. change in policies, procedures, work environment, schedules)
- Combined strategies may have the greatest impact and sustainability on reducing stress, if fully implemented

Purpose

Study goal: conduct a scoping review to describe the effectiveness and feasibility of delivering stress-reducing strategies at the workplace within the past 10 years.

Hypothesis:

1) organizational strategies will have strong impact on reducing stress and greater sustainability if fully implemented in the work group

2) combination strategies (organizational and individual) will have stronger effects than individual strategies alone.

Methods: scoping review

- Selected keywords from PICO categories (population, intervention, and outcome)
- Extracted information: a) intervention study b) workplace, c) stress outcome d) longitudinal design e) control group
- Reviewed quality of study using CONSORT checklist
- Independent review and consensus by two researchers
- Computed effect size if not reported
- Results summarized: industry, intervention type, targeted stress level (individual versus organizational), fidelity of program delivered, effect size (cohen's d)

Results

Selected 37 articles from the 11,358 selected

Industry/population	n	%
Healthcare	15	(40%)
General workers	4	(11%)
Education	4	(11%)

Others- Emergency responders, food service, corporate, multiple industry

White collar job	27	(73%)

Employee time required	n
None	2
1-11 hours	13
12 hours +	20
Self paced	2

Results: types

Individual only (33)	n
Cognitive behavioral	4
Coaching	1
Communication skills	1
Coping strategies	4
Meditation	1
Mindfulness	6
Music	1
Physical activity	2
Team resilience training	1
Team support group	2

Organizational only (2)	n
Flexible scheduling	1
Workplace modification	1

Combined (I and O) (2)	n
Participatory program	2

Individual- increase ability to cope
Organizational-change cause of workplace stressor

Results: Effect size

Studies with large effect (d=0.8), all individual-level

Cognitive behavioral therapy	(1 of 4)
Coping strategy	(2 of 4)
Meditation	(1 of 1)
Multicomponent	(2 of 7)

Work organization interventions (n=4)

- all conducted in healthcare
- small effect size
- inadequate power/attrition from turnover
- no follow-up measurement after intervention

Intervention effects of Healthcare studies

Primary Author	Intervention Category	**Type**	Effect size	Retention	Attendance
Bragard	Multi-component	**I**	H	L	M
Poulsen	Multi-component	**I**	H	M	.
Asuero	Mindfulness	**I**	M	H	H
Gaggioli	CBT	**I**	M	H	.
Gaggioli	Coping	**I**	M	H	.
Hersch	Coping	**I**	M	M	H
Peterson	Team Support Groups	**I**	M	H	.
Wacker	Communication Skills	**I**	M	L	.
Alenius	Workplace Modifications*	**O**	S	H	H
Bourbonnais	Workplace Modifications*	**O-I**	S	L	H
Brooks	Music	**I**	S	M	M
Duijts	Coaching	**I**	S	M	L
Mache	Multi-component	**I**	S	H	.
Nabe-Nielsen	Flexible scheduling (type I)*	**O**	S	L	H
Nabe-Nielsen	Flexible scheduling (type II)*	**O**	S	.	H
Saadat	Coping (Wellness intervention)	**I**	S	H	M
Barbosa	Multi-component	**I**	VS	H	.
Bernburg	Multi-component	**I**	VS	H	.
Linzer	Workplace: communication*	**O-I**	VS	M	.
Linzer	Workplace: workflow*	**O-I**	VS	M	.
Nabe-Nielsen	Flexible scheduling (type III)*	**O**	VS	.	H
Saadat	Coping (Release time)	**I**	VS	H	M

Conclusions

Coping strategies

- Large effect for general workers
- Small effect for healthcare workers

Physical activity

- Effect varied widely by work group with a tendency toward drop out/attrition

Multi-component strategies

- Large effect in some studies; others showed high attrition and low participation.

Conclusions

Most workplace stress reducing strategies focus on increasing individual tolerance rather than reducing the stress source created by the job and organization.

Organizational interventions require longer term assessment to determine effectiveness.

Rigorous studies must control attrition and assess participation in the program to determine generalizability and feasibility.

Multi-component strategies offer better health outcomes.

Some interventions are more challenging to deliver at the workplace, particularly service oriented industries (healthcare).

Questions?

Thank you!

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