

Healthy and safe workplaces within the construction industry

Submission date 02/01/2020	Recruitment status No longer recruiting	☐ Prospectively registered
		☒ Protocol
Registration date 12/02/2020	Overall study status Completed	☐ Statistical analysis plan
		☒ Results
Last Edited 11/10/2022	Condition category Mental and Behavioural Disorders	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Poor mental health is the dominant cause of sick leave in Sweden today and we have strong reasons to believe that certain work environment conditions is one contributing factor. We know which these conditions are, however, we don't know how to change them. This means that we lack knowledge on what methods are effective in improving organisational and social work conditions and stress in the workplace.

Interventions to address work-related stress are increasing but are mainly secondary or tertiary. Secondary interventions are directed at individuals at risk of developing stress responses. Tertiary interventions focus on treating existing diagnosed conditions. Primary interventions, on the other hand, are preventive and aim to deal with organisational factors as causal stress agents. The aim of the study is to evaluate an organisational primary intervention with the aim to improve organisational and social work conditions and reduce stress within the construction industry.

Who can participate?

Managers and employees within the two studied regions in the construction company.

What does the study involve?

The study involves one intervention and one matched control group. For the intervention group, the project contains three phases. In the first phase we conducted a needs assessment using a formative evaluation. Interviews were carried out and a survey in order to answer the questions: What works well and what needs to be improved regarding the organizational and social work environment?

In the second phase researchers and representatives from different levels and districts worked together to prioritize outcomes and define essential intervention elements. We also discussed and formulated suggestions for how the intervention could be implemented in a good way. In the third phase implementation and evaluation take place.

The control group participates through answering the baseline and follow-up survey.

What are the possible benefits and risks of participating?

Benefits: Reduced stress and improved work conditions.

Risks: Lack of improvements may cause disappointment among participants which in turn may lead to a more negative perception of work.

Where is the study run from?

Institute of Environmental Medicine, Karolinska Institute, Stockholm, Sweden

When is the study starting and how long is it expected to run for?

May 2019 to December 2021

Who is funding the study?

AFA Insurance, Sweden

Who is the main contact?

Dr Gun Johansson

gun.johansson@ki.se

Contact information

Type(s)

Scientific

Contact name

Dr Gun Johansson

ORCID ID

<https://orcid.org/0000-0003-1877-8569>

Contact details

Solnavägen 4

Stockholm

Sweden

11365

+46 (0)733 628362

gun.johansson@ki.se

Additional identifiers

Study information

Scientific Title

Evaluation of a primary organisational co-created intervention with the aim to improve organisational and social work conditions and decrease stress within the construction industry

Study objectives

Given that the managers adhere to the intervention we expect to see a greater improvement in work conditions (role clarity, influence, work pace, quantitative job demands), team effectiveness and stress in the intervention group compared to the control group.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 21/05/2019, Swedish Ethical Review Authority (Etikprövningsmyndigheten, Box 2110, 750 02, Uppsala, Sweden; +46 10-475 08 00; registrator@etikprovning.se), ref: 2019-02662

Primary study design

Interventional

Study design

This is a controlled trial with one intervention and one control group with a 12 month follow-up

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Work related stress

Interventions

Current interventions as of 14/02/2020:

The core intervention components are:

1. Assessment for first line managers

Assessment = making structured and collective (involving blue-collar workers) planning for all elements of the production (planning for blue-collar workers)

2. Duties clarification for project managers

Duties clarification and staffing plan = making clear role descriptions for all members of the production teams (white-collar workers), visualizing the plan and revising it continuously throughout the project. The staffing plan is closely related to the duties clarification and should also be scrutinized and revised.

3. For the support function team ("operational support") the highest manager will give feedback on the results of the survey and together with the team conduct a tailored action plan. Hence, the intervention activities will not be assessment and duties clarification for this group.

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In the second phase researchers and representatives from different levels and districts worked together to prioritize outcomes and define essential intervention elements. We also discussed and formulated suggestions for how the intervention could be implemented in a good way. In the third phase implementation and evaluation take place.

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Previous interventions:

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elements of the production (planning for blue-collar workers)

2. Duties clarification for project managers

Duties clarification and staffing plan = making clear role descriptions for all members of the production teams (white-collar workers), visualizing the plan and revising it continuously throughout the project. The staffing plan is closely related to the duties clarification and should also be scrutinized and revised.

3. For the two support function teams (employees not dedicated to a project) the highest manager will give feedback on the results of the survey and together with the team conduct a tailored action plan. Hence, the intervention activities will not be assessment and duties clarification.

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Intervention Type

Behavioural

Primary outcome(s)

Current primary outcome measure as of 26/04/2021:

Stress, measured with the COPSOQ III questionnaire at baseline, 12, and 24 months

Previous primary outcome measure:

Stress, measured with the COPSOQ III questionnaire at baseline and 12 months

Key secondary outcome(s)

Current secondary outcome measures as of 26/04/2021:

1. Quantitative demands, measured with the COPSOQ III questionnaire at baseline, 12, and 24 months
2. Role clarity, measured with the COPSOQ III questionnaire at baseline, 12, and 24 months
3. Psychosocial safety climate, measured with questionnaire at baseline, 12, and 24 months
4. Team effectiveness, measured with questionnaire at baseline, 12, and 24 months
5. Staffing, measured with questionnaire at baseline, 12, and 24 months
6. Planning, measured with questionnaire at baseline, 12, and 24 months

Previous secondary outcome measures as of 14/02/2020:

1. Quantitative demands, measured with the COPSOQ III questionnaire at baseline and 12 months
2. Role clarity, measured with the COPSOQ III questionnaire at baseline and 12 months
3. Psychosocial safety climate, measured with questionnaire at baseline and 12 months

4. Team effectiveness, measured with questionnaire at baseline and 12 months
5. Staffing, measured with questionnaire at baseline and 12 months
6. Planning, measured with questionnaire at baseline and 12 months

Previous secondary outcome measures:

1. Quantitative demands, measured with the COPSOQ III questionnaire at baseline and 12 months
2. Work pace, measured with the COPSOQ III questionnaire at baseline and 12 months
3. Role clarity, measured with the COPSOQ III questionnaire at baseline and 12 months
4. Influence, measured with the COPSOQ III questionnaire at baseline and 12 months
5. Psychosocial safety climate, questionnaire at baseline and 12 months
6. Team effectiveness, questionnaire at baseline and 12 months

Completion date

31/12/2021

Eligibility

Key inclusion criteria

1. Working in the recruited organisation at the time of recruitment and the follow-up endpoint
2. Age 18-65

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

All

Total final enrolment

634

Key exclusion criteria

1. Regional manager
2. District managers

Date of first enrolment

31/05/2019

Date of final enrolment

31/12/2021

Locations

Countries of recruitment

Sweden

Study participating centre

Institute of environmental medicine Karolinska Institutet

Gothenburg

Sweden

41250

Sponsor information

Organisation

Karolinska Institute

ROR

<https://ror.org/056d84691>

Funder(s)

Funder type

Industry

Funder Name

AFA Försäkring

Alternative Name(s)

AFA Insurance, AFA Insurance (Sweden)

Funding Body Type

Private sector organisation

Funding Body Subtype

For-profit companies (industry)

Location

Sweden

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	protocol	23/09/2022	11/10/2022	Yes	No
Protocol article		30/03/2020	02/04/2020	Yes	No