Predict, prevent and manage moral injuries in frontline healthcare workers and leaders facing the COVID-19 pandemic

Highlights and recommendations

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The mandate of the research team was to broaden our knowledge of the events occurring in the workplace likely to generate or lessen the impact of ethical conflicts and moral injuries, to improve the prediction of the risk of moral injuries at work and to document the potential of mindful self-compassion in protecting against moral injuries, all in the specific context of the COVID-19 health crisis among frontline healthcare workers.

What is the subject of the study?

Moral injuries can arise from committing, failing to prevent, or witnessing acts that transgress deeply held beliefs and moral expectations of those involved. According to the results of the study, the COVID-19 health crisis increases the risk of moral injuries among frontline healthcare workers. It also increases the risk of being confronted with ethical conflicts (i.e. conflicts that emerge when two values are in opposition) as well as psychosocial stressors at work.

Objectives

1 Understand how events in the workplace are likely to generate or lessen the impact of ethical conflicts and moral injuries and solutions that can be put in place to reduce them.

Interviews with **42 frontline healthcare workers and leaders**

2 Predict the risk of moral injury using a theoretical model integrating various psychosocial stressors at work and mindful self-compassion.

Occupational Health and Well-being Questionnaire (OHWQ+), administered to **572 healthcare workers and leaders in the public system**, including nurses, occupational therapists, psychologists, physicians.

3 Identify a biological signature (biomarkers of inflammation) associated with psychosocial stressors at work, ethical conflicts and moral injuries.

Blood tests from **89 participants**

4 Develop preliminary organizational practice guidelines for frontline leaders (e.g. head-nurses and managers) to reduce the occurrence or lessen the impact of ethical conflicts and moral injuries.

Synthesis of **recommendations from our team of experts** and recently published guidelines from other teams.

Acknowledgements

Results

Events likely to generate or lessen the impact of ethical conflicts and moral injuries

Actions that could not be taken or that the worker witnessed

- Provide appropriate care, even basic ones
- Inability to apply security measures and directives related to COVID-19 or negligence of colleagues with respect to compliance with them
- Ensure personal safety or take care of yourself
- Ensuring patients safety
- Have a good functioning of the work team
- Be adequately supervised

Emotions felt and experienced

- Frustration or anger
- Stress, anxiety, worry or fear
- Guilt, shame or unease
- Helplessness or feelings of worthlessness
- Isolation or de-consolidation of the collective
- Feeling of injustice or betrayal
- Feeling of incompetence
- Sadness
- Lack of recognition or invalidation
- Distress
- Fragile and easily irritated
- Disillusionment or loss of meaning
- Symptoms of post-traumatic shock, depression or somatic symptoms

Clashed values

- Professionalism
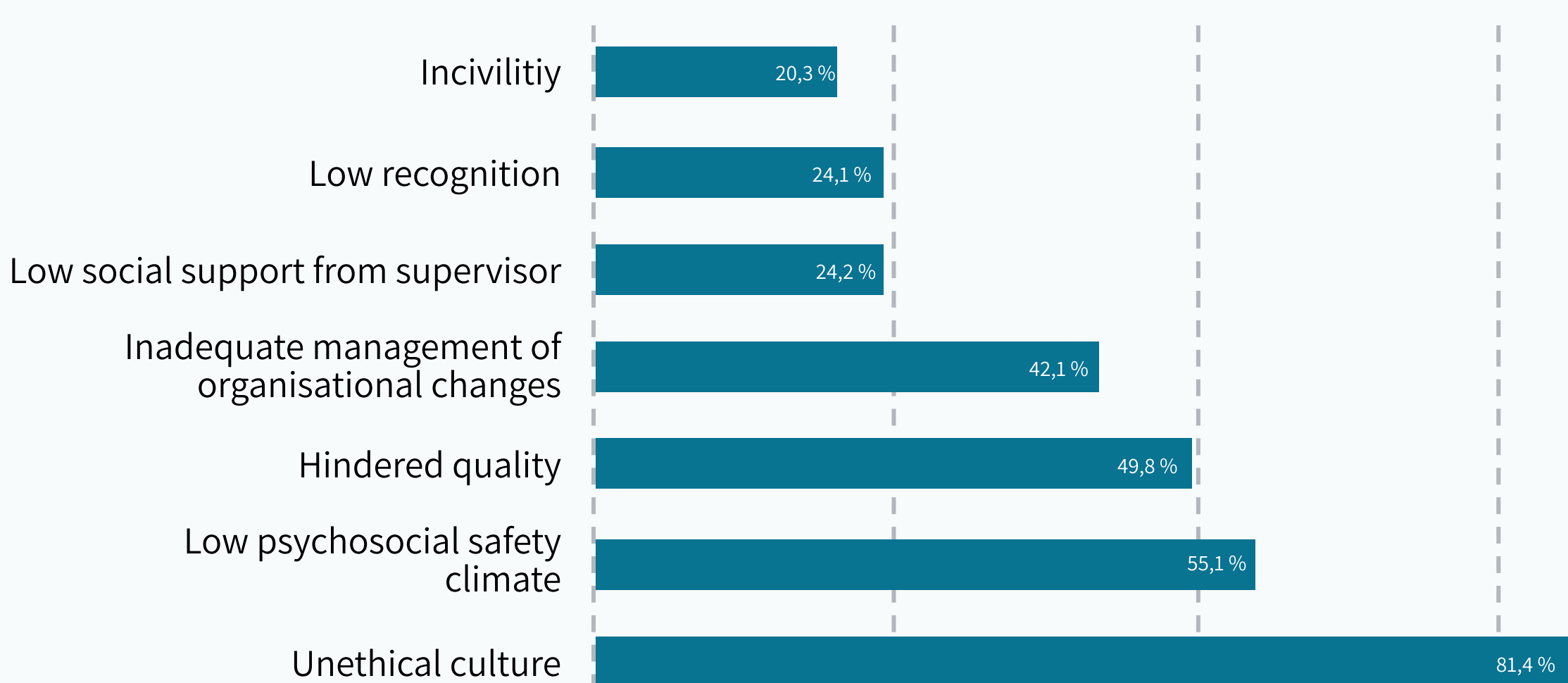- Patient and self-safety
- Compassion
- Kindness
- Humanity

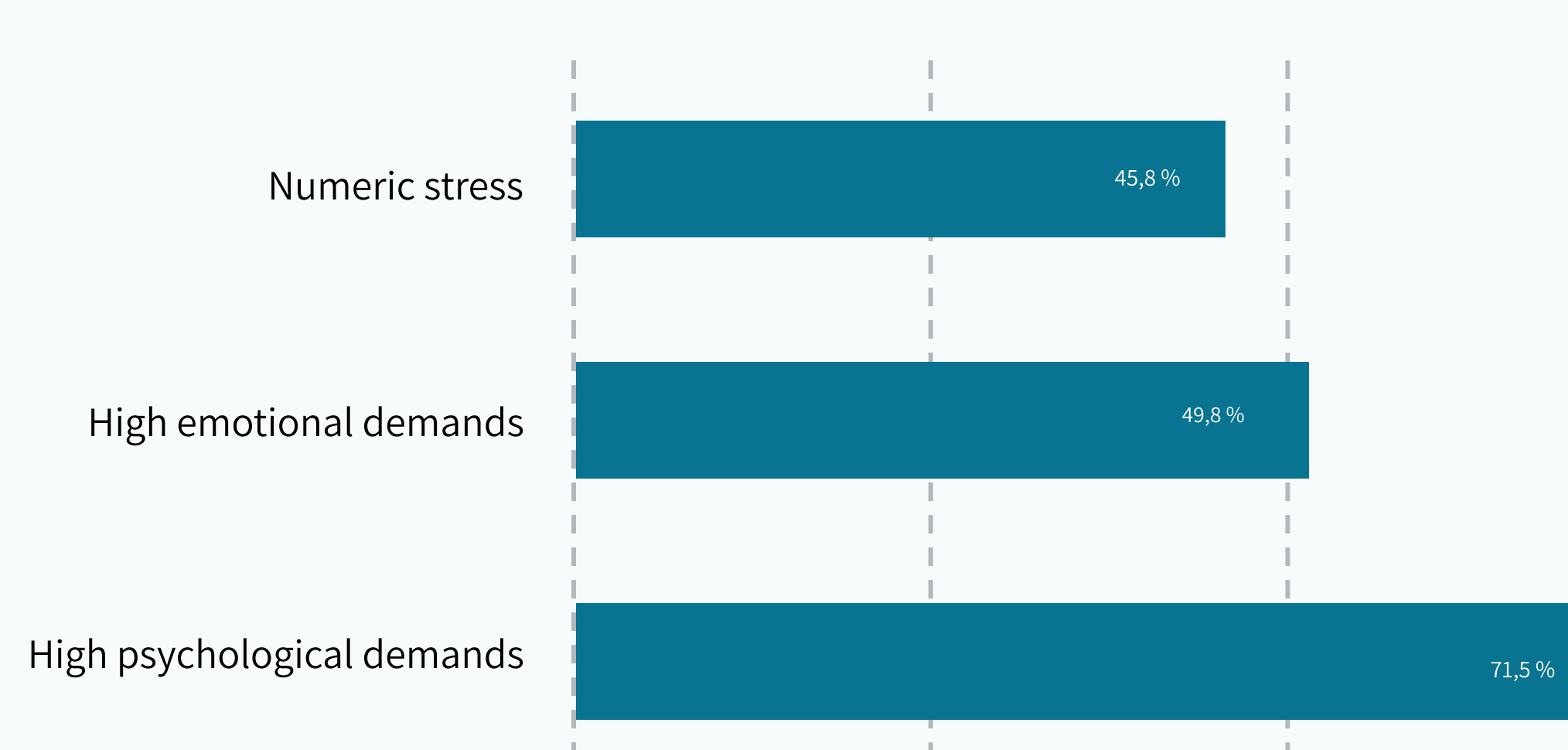## Predict the risk of moral injuries through the work environment and self-compassion

A large percentage of participants who completed our questionnaire are exposed to psychosocial stressors at work.

» Main stressors reported by participants

Lack of job resources

Stressor	Percentage
Incivilitiy	20,3 %
Low recognition	24,1 %
Low social support from supervisor	24,2 %
Inadequate management of organisational changes	42,1 %
Hindered quality	49,8 %
Low psychosocial safety climate	55,1 %
Unethical culture	81,4 %

Job demands

Stressor	Percentage
Numeric stress	45,8 %
High emotional demands	49,8 %
High psychological demands	71,5 %

The well-being and mental health of participants was hit hard. Many reported…

High psychological distress (depressive and anxiety symptoms)	65 %
High burnout	43 %
PTSD	25 %
Moderate to high moral injury	14 %

## Moral injuries: self-compassion as a powerful protective factor
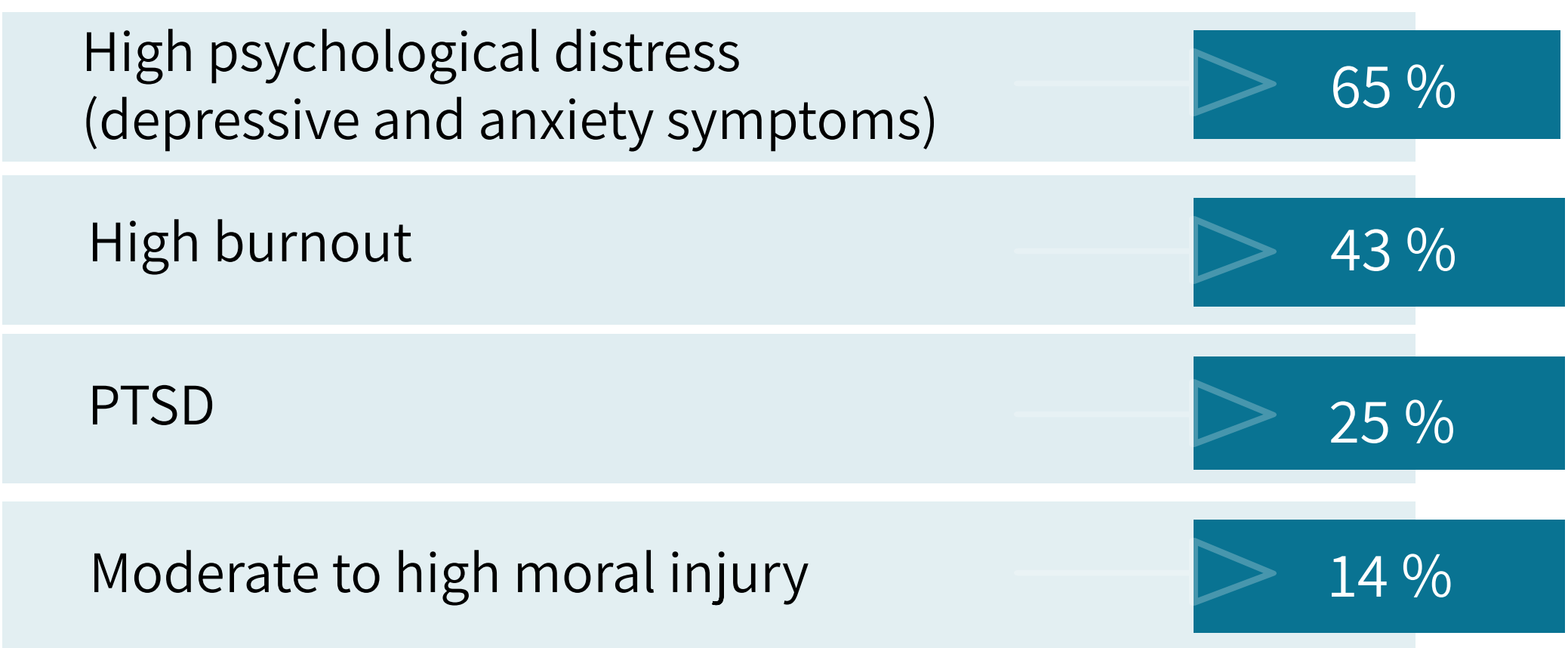
93 % it is the **reduction of the risk of moral injuries** when **self-compassion** is used as coping strategy to face stress and adversity in the context of the COVID-19 health crisis.

Moral injuries: Risk factors

Being exposed to psychosocial stressors at work led to a 2.22- to 5.58-fold increased risk of moral injury.

Unethical culture (5.58-fold increased risk)	
Low recognition (+ 4,43 fold)	
Emotional demands (+ 4,32 fold)	
Incivilities (+ 4 fold)	
Work-life conflict (+ 3,95 fold)	

5 strongest adverse associations

The balance between demands and resources is upset

Moral injuries mainly arised from an imbalance between the job demands (what I have to do) and the resources (what I am able to do in context) allowing them to accomplish their mission of caring.
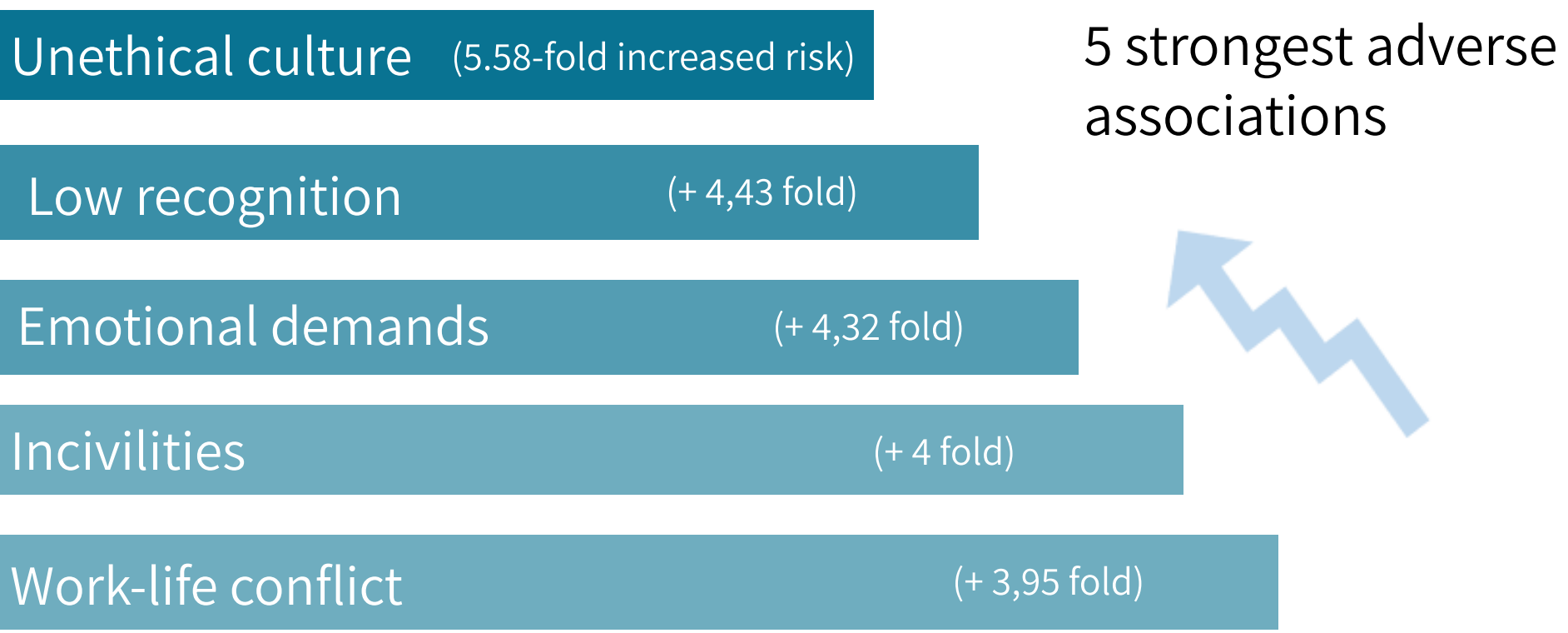
For example, respondents receiving **little recognition** and facing an **unethical culture** and **incivilities** at work were more likely to perceive **high emotional demands** and a **poor work-life balance**.

Resources
Low recognition
Unethical culture
Incivilities

Demands
Poor work-life balance
Emotional demands

13 this is the **number of inflammatory biomarkers** associated with work-related stress and moral injuries that we identified from a set of 38 biomarkers. We were therefore able to successfully identify a biological signature linked to work stressors and related moral injuries.

Indeed, participants simultaneously exposed to high stressors at work and having poorer mental health indicators (moral injuries, psychological distress, burnout, post-traumatic stress disorder) presented with higher concentrations of these biomarkers compared to participants with better psychosocial working conditions and mental health.
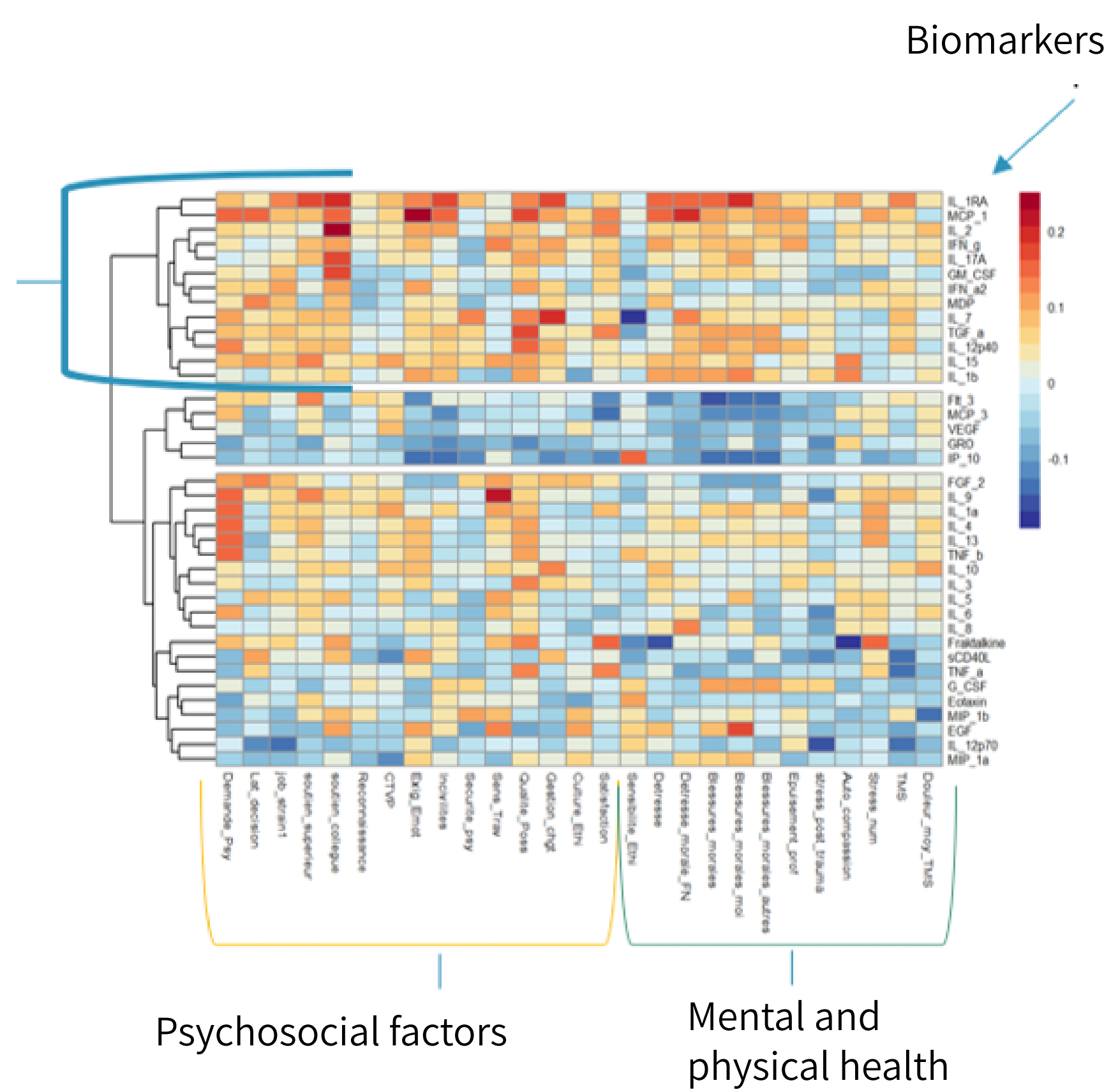
Participants with higher self-compassion had lower concentrations of the inflammatory biomarkers. Mindful self-compassion has been associated in other researches with positive mental health outcomes, e.g. stress, PTSD, anxiety reduction.

Biomarkers

13 biomarkers with higher and stronger adverse associations with psychosocial, mental and physical health variables

Psychosocial factors

Mental and physical health

The study led to a series of preliminary recommendations to reduce the impact of ethical conflicts and prevent or reduce the incidence of moral injuries among frontline health workers and leaders in the context of a health crisis.

17

It is the number of recommendations formulated to improve organizational and individual resilience, that is to say: **the capacity of organizations and individuals who compose it to recognize that they are or will be destabilized and to bounce back in the face of hardship, like those arising from a health crisis.**

Note that this is not a "one size fits all recipe". The recommendations must be adapted according to the needs, priorities, and resources of the workplaces. These recommendations aim to build a climate of kindness and psychosocial safety. This climate refers to the practices, policies and procedures put in place in an organization to prevent and reduce mental health problems (Dollard, Doorman et al. 2019). Our recommendations are aimed at supporting workers, leaders and upper management, in a context of a health crisis, since everyone is likely to feel overloaded and powerless in certain situations.

The recommendations are categorized into five complementary dimensions:

Train

1. Train team leaders in ethical culture and moral injury to promote a positive or resilient narrative about potentially morally injurious events and to learn to take responsibility for decisions and outcomes.

2. Train teams members about situations that can generate moral injuries during a health crisis and provide solutions or means to reduce their occurrence and deleterious effects.

3. Train team leaders to detect the first signs of distress in their employees.

4. Train team leaders to actively listen to and support workers in distress.

5. Train team leaders to be kind to themselves and to be role models for their employees.

6. Implement a mentoring service for employees and leaders.

Communicate

7. Establish frequent open, empathetic, and leader-led team discussions to build awareness and prepare for ethical dilemmas and moral challenges the team may face.

8. Set up effective communication methods (e.g. meetings between leaders and employees, video clips or memos) in order to inform staff of the various strategies and orientations of the organization (communication of stakes, mandates and objectives).

9. Set up regular individual follow-up meetings between a worker and his.her team leader.

10. Decrease the stigmatization of mental health problems by providing regular communications regarding shared responsibility.

11. Set up activities and testimonies to recognize the work and efforts of employees.

12. Encourage all levels of workers to inform their leader via an effective mode of communication of the difficulties encountered in the field and specify their needs and, if possible, relevant and realistic solutions.

Participate

13. Identify the existing infrastructures available that can participate in supporting mental health interventions (committee, policies, practices, procedures that can be adapted).

14. Encourage all levels of workers and leaders to participate in the design of preventive interventions and ongoing training on mental health and organizational and individual resilience.

15. Encourage all levels of workers and leaders to participate in discussion or online support groups on topics related to difficulties in the performance of their duties.

Commit

16. A strong commitment from top management is a condition for success in improving the work environment and the health of workers and leaders.

Prioritize

17. The sustainable health (mental and physical) of workers and leaders should be a top organizational priority.