Silvaggi, F., & Miraglia, M. (2017). Mental health at work: A review of interventions in organizations. *E-Journal of International and Comparative Labour Studies, 6*, 34-58.

'This article may not exactly replicate the final version published in the journal. It is not the copy of record.'

Mental health at work: A review of interventions in organizations*

Fabiola Silvaggi*
Mariella Miraglia*

Abstract. The purpose of the review was to identify and critically analyse the organizational interventions aimed at improving employees' mental health, in order to detect best practices across organizations and to uncover possible gaps. Through electronic and manual searches, 7,995 articles were initially found. Inclusion criteria were set to select those studies describing interventions conducted in the organizational context and focused on employee mental health. By examining titles, abstracts and full texts, 14 papers were included. These studies covered a variety of interventions and approaches, such as group therapy, work-life balance programs, and manager-level interventions. Additionally, three studies assessed the effectiveness of Employee Assistance Programs (EAPs) aimed at enhancing individuals' mental health via counselling. Overall, two different intervention types emerged, namely individual-level interventions, focusing on the single employee, and organizational-level interventions, targeting organizational or work conditions. The interventions are described in details and, drawing upon the realist evaluation approach, the mechanisms responsible for their success (or failure) are identified. The main mechanisms pertain to changes in

* We thank David Shoesmith, Business Development Manager at The Work Foundation Alliance Ltd for his precious help with proofreading the paper
* PhD Student, University of Bergamo, fabiola.silvaggi@gmail.com
* Lecturer in Organisational Behaviour, Norwich Business School, University of East Anglia m.miraglia@uea.ac.uk

employee cognitive models, job attitudes or lifestyle habits, modifications in working conditions, and the active involvement and participation of employees and management in the intervention. Best practices for the design of future initiatives are offered, and some of the main limitations and gaps in the literature are discussed, such as the predominant focus on the results of the intervention rather than on the process, and the prevalence of short-term individualistic approaches that minimizing the role of organizations in creating or exacerbating employees' mental health conditions.

Keywords: *Mental Health, Workplace, EAP, Organizational Interventions*

1. Introduction

The nature of modern work is changing continuously and quickly, mainly due to factors related to globalization of markets and development of information technology (IT), with important implications for employees' wellbeing and health, including mental health conditions[1]. For instance, the new IT systems have favoured more flexible working arrangements, such as telecommuting[2], affecting the traditional relationship between workers and the workplace. If some individuals may enjoy the freedom and higher control associated with working from home, to others the isolation and related loss of social support may cause stress and increase the risk of developing mental health conditions.
Epidemiological reviews and clinical studies across Europe indicate that employment and work play a central role in sustaining mental health[3]. Although it is difficult to estimate the exact number of employees struggling with mental health problems in the workplace, their spread seems to be high and sizable. For example, the 18.2% of people employed in the United States experiment mental disorders, which have been reported to decrease their work performance[4]. A German study found that the 5.9% of lost workdays is ascribable to the inability to work due to mental health problems, and it appears to be an increase[5]. The Sainsbury

---

[1] «The term mental health problem is used to describe symptoms associated with a mental disorder, but which are not of sufficient severity to be diagnosed as a mental disorder. For example, stress results in a number of symptoms associated with mental disorders, including distress and feelings of not coping». World Health Organization, *Mental Health Policies and programmes in the workplace*, 2005.
[2] R. S. Grajendan, D. A. Harrison, *The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences*, in Journal of Applied Psychology, 2007, Vol. 92, 1524-1541.
[3] M. Liimatainen, P. Gabriel, *Mental health in the workplace. Situation analysis: United Kingdom*, in International Labour Office, 2000.
[4] R. C. Kessler, R. G. Frank, *The impact of psychiatric disorders on work loss days*, in Psychological medicine, 1997, Vol. 27, n. 4, 861-873.
[5] M. Liimatainen, P. Gabriel, , *op. cit.*, 2000.

Centre for Mental Health documented an even more alarming situation[6], with 1 in 6 of British employees affected by depression, anxiety or other mental health conditions, and about 1 in 5 when dependency on alcohol and drug is included as well.
The workplace can negatively affect workers' mental health by intensifying an existing problem or contributing to the development of mental health issues via the exposure to excessive work stressors. From an individual perspective, the costs of mental health illness are obviously elevated; it can lead to a reduced quality of life, have significant economic and social impacts, and expose the employee to stigma and discrimination[7].
However, the pivotal role of workplaces in employees' mental health is not completely understood nor carefully considered to protect and promote positive mental health. As an example, despite the high diffusion of mental illness in UK organizations, nearly half of the employers surveyed by the Sainsbury Centre that their employees do not suffer from a mental health disorder, and nearly 70% estimate that the prevalence ranges between the 0 and 4 per cent[8]. Unfortunately, the organizational costs of such underestimation are higher than expected, since undiagnosed mental illness in the workplace can cause increased absenteeism and turnover, reduced production, and thus decreased profits[9]. For instance, in many developed countries, 35–45% of absenteeism from work is due to mental health problems[10], account for between 5 and 6 million lost working days annually[11]. Moreover, mental illness in the workplace is frequently associated to a quite new-studied phenomenon, continuing to work even when sick[12]. Working while ill has been repeatedly found to account, in the aggregate, more productivity loss than absenteeism. The Sainsbury Centre reports that presenteeism for mental illness cost organization around £605 for every employee in the workforce, or £15.1 billion at the national level per year. Presentees, in fact, are not able perform at the usual standards, can make more

---

[6] Sainsbury Centre for Mental Health, *Mental Health at Work: Developing the Business Case*, Sainsbury Institute for Mental Health, London, 2007, Policy Paper 8.
[7] World Health Organization, *The World Health Report 2001*, Geneva, 2001.
[8] Sainsbury Centre for Mental Health, *op. cit.*, 2007.
[9] T. Cox et al., *Work, employment and mental health in Europe*, in Work & Stress, 2004, Vol. 18, n. 2, 1-7.
[10] World Health Organization, *Investing in mental health*, 2003.
[11] M. Liimatainen, P. Gabriel, *op. cit.*, 2000.
[12] G. Johns, *Presenteeism in the workplace: A review and research agenda*, in Journal of Organizational Behavior, 2010, Vol. 31, 519-542.

numerous and serious errors, and in safety violations and accidents[13]. Moreover, working while ill can aggravate the effects of the initial illness, intensify exhaustion and worsen mental health conditions, especially anxiety and depression[14].

How to change this negative scenario? Of course, the first step is promoting top management's awareness of the diffusion of mental illness in the workplace and of the benefit of better mental wellbeing. According to the Sainsbury Centre report, simple efforts to improve the management of mental health at work should enable employers to save 30% or more of the costs (at least £300 per employee). In response to this, employers have started to implement various types of actions, by using multiple methods, such as group therapy, work-life balance programs, or manager-level interventions. Some organizations have set up Employee Assistance Programs (EAPs) as initiatives to facilitate employee wellbeing in stressful times. EAPs employee counselling to help them to deal with specific difficulties in the work or life domains with the aim to increase positive work adjustment and productivity. Similar interventions that target the individual with the goal of promoting or acting on his/her mental wellbeing include mentoring, coaching, clinical therapy, and clinical screening. As the focus is on single individual, these can be defined as individual-level interventions. Unfortunately, even for experienced researchers and mental health clinicians, individual-level interventions are often difficult to understand and lack direct, clear, easily-made conclusions about recommended best-evidence interventions.

Alternatively, interventions may involve the entire organization. Organizational-level interventions are «planned, behavioural, science-based actions to remove or modify the causes of job stress»[15]; they focus on the sources that may impair individual mental wellbeing rather than on

---

13 K. Niven, N. Ciborowska, *The hidden dangers of attending work while unwell: A survey study of presenteeism among pharmacists*, in International Journal of Stress Management, 2015, Vol. 22, 207–221.

14 E. Demerouti, P.M. Le Blanc, A.B. Bakker, W.B. Schaufeli, J. Hox, *Present but sick: A three-wave study on job demands, presenteeism and burnout,* in Career Development International, 2009, Vol. 14, 50–68.; L. Lu, S. Q. Peng, H. Yen Lin, C. L. Cooper, *Presenteeism and health over time among Chinese employees: The moderating role of self- efficacy*, in Work and Stress, 2014, Vol. 28, 165-178; K. Skagen, A. M. Collins, *The consequences of sickness presenteeism on health and wellbeing over time: A systematic review*, in Social Science & Medicine, 2016, Vol. 161, 169-177.

15 A. Mikkelsen, *Methodological challenges in the study of organizational interventions in flexible organizations*, in A. M. Fuglseth, I. A. Kleppe (Eds.), *Anthology for Kjell Grønhaug in celebration of his 70th birthday*, Bergen, 2005, 150–178.

the best "cure" for the single worker[16]. However, also for organizational-level interventions, the evidence of the impact on employee positive mental health is limited[17]. Indeed, recent meta-analyses have failed to demonstrate a significant effect of organizational-level interventions[18] on psychological, physiological and organizational outcomes, when comparing intervention and control groups. More recently, an increasing interest is moving towards a realist evaluation perspective for the assessment of the effectiveness of organizational interventions[19]. Such approach aims not only to evaluate the final outcomes of the intervention, but also to understand whether and why an intervention worked or failed, and how it brought about certain outcomes. According to realist evaluation, the focus should be on which factors "work for whom in which circumstances", adopting the Context + Mechanism = Outcome (CMO)-configuration. Briefly, the formula states that the intervention outcomes depend on the interplay between the specific organizational context and the mechanisms responsible for such outcomes. Mechanisms refers to the set of perceptions, reactions, interpretations, decisions and behaviours of the individuals involved in the intervention that emerge during the intervention and can be at the individual, group or organizational levels[20]. These mechanisms are essential to understand the features of the context that can enable (or disenable) the expected intervention outcomes.
In summary, a understanding of the interventions that are effective to sustain employee positive mental health is still missing. This makes more difficult to assist organizations by offering guidance on existing

[16] A. D. LaMontagne, T. Keegel, A. M. Louie, A. Ostry, A., P. A. Landsbergis, *A systematic review of the jobstress intervention evaluation literature, 1990–2005*, in International Journal of Occupational and Environmental Medicine, 2007, Vol. 13, 268–280.

[17] M. Richardson, H. R. Rothstein, *Effects of occupational stress management intervention programs: a meta- analysis*, Journal Occupational Health Psychology, 2008, Vol. 13, n.1, 69-93; J. Ruotsalainen, C. Serra, A. Marine, J. Verbeek, *Systematic review of interventions for reducing occupational stress in health care workers*, Scandivian Journal Work Environment Health, 2008, Vol. 34, n. 3, 169–178; J. J. van der Klink, R. W. Blonk, A. H. Schene, F. J. van Dijk, *The benefits of interventions for work-related stress*, American Journal Public Health, 2001, Vol. 91, n. 2, 270-276.

[18] K. M. Richardson, H. R. Rothstein, *op. cit.*, 2008; J. J. van der Klink, R. W. Blonk, A. H. Schene, F. J. van Dijk, *op. cit.*, 2001.

[19] K. Nielsen, J. S. Abildgaard, *Organizational interventions: A research-based framework for the evaluation of both process and effects*, in Work & Stress, 2013, Vol. 27, 278-297.

[20] A. Lacouture, E. Breton, A. Guichard, V. Ridde, *The concept of mechanism from a realist approach: a scoping review to facilitate its operationalization in public health program evaluation*, in Implementation Science, Vol. 10, 153- 163; R. Pawson, Op. Cit., 2013.

interventions, either at the individual level or at organizational level, and providing them with best practices to orientate future actions.
Through a best-evidence synthesis of previous studies, the purpose of our review is to provide an evaluation and summary of evidence of the overall value of workplace interventions targeting mental health. We will present a description of the different types of interventions that can be used when employees experience or develop mental health conditions. Moreover, drawing upon realist evaluation, a narrative analysis of the mechanisms underlying the effectiveness of an intervention will be performed, to uncover the hindering or facilitating factors for its success (or failure). In doing so, we aim at identifying and summarizing some best practices that organization may follow to address employee mental health problems or, in a prevention perspective, to foster mental wellbeing in the workplace. Finally, the limitations of the interventions and the gaps emerged in the literature will be discussed, opening room for future research directions.

2. Materials and Methods

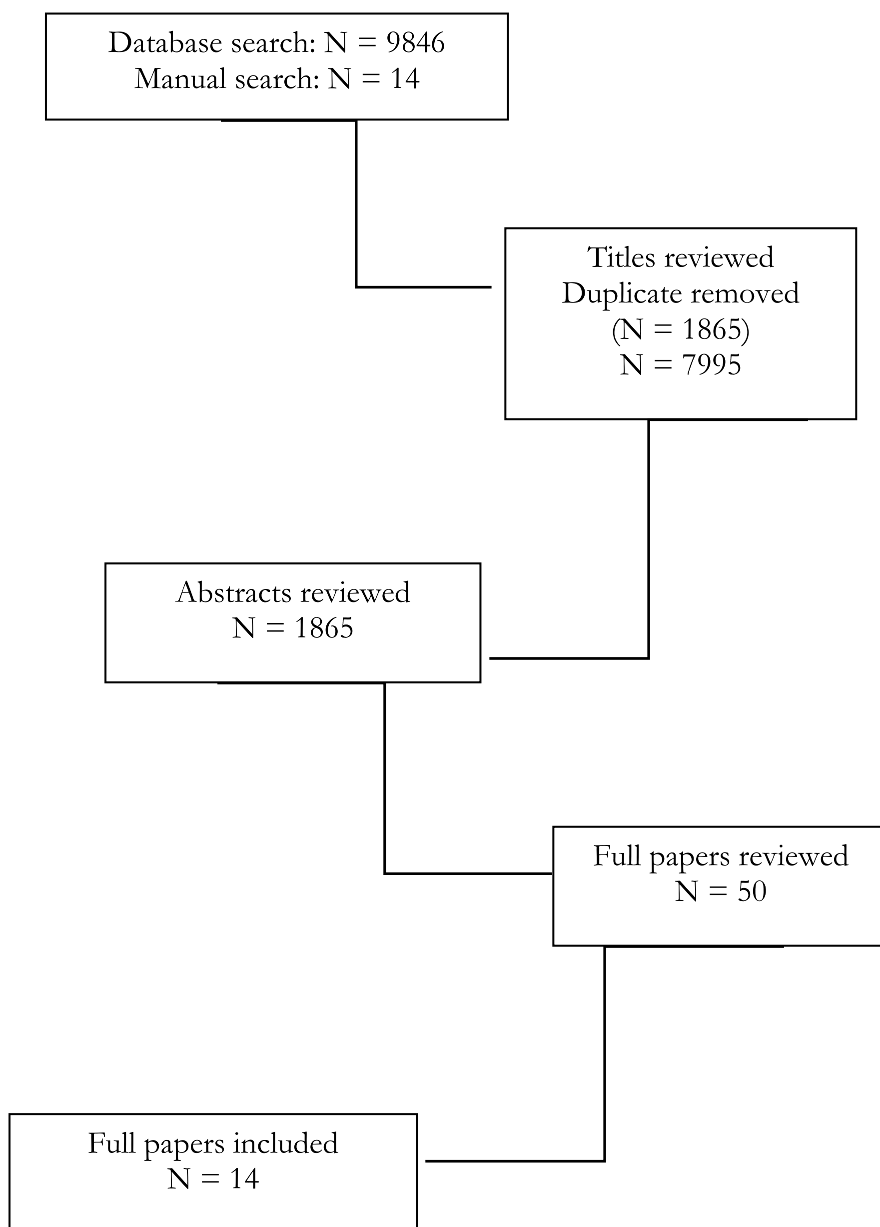
To identify the studies for our review, we searched the following databases: Google Scholar, PsychInfo, MedLine, ProQuest Business, and Business Source Complete. Different combinations of keywords were used, including: mental health, and interventions or programs or HR practices or policy, and job satisfaction or burnout or strain or stress or work engagement or absenteeism or presenteeism. Moreover, a manual search of the reference lists of relevant articles was conducted. In total, 7,995 studies were identified (1,865 duplicates were eliminated) and their appropriateness for the review was assessed by title, abstract, and full text (see Figure 1).
At each stage of the sifting process, studies were retained only if certain inclusion criteria were satisfied. Overall, papers had to report an intervention, a program or HR practices or policies to address mental health problems or to improve employees' mental health conditions in the workplace. More specifically, studies were considered only if the research design included an intervention related to mental health or if they presented a detailed description of organizational programs, practices, and policies to support individual mental wellbeing. Moreover, they were required to target mental health outcomes directly; thus, research focused on broad stress management initiatives was not incorporated. Furthermore, it was a requirement that studies were conducted within an organizational context; therefore, papers regarding other populations (e.g.,

students) or describing the evaluation of an intervention within a general working population were excluded. A final inclusion criterion was that papers were published in peer-reviewed journals and in English. Although this could foster publication bias[21], it is impractical to obtain unpublished documents or to gain sufficient information from abstracts (e.g., from conference proceedings) to evaluate the complexity of an organizational intervention. Thus, conference proceedings were excluded.
Figure 1 shows the details of the screening process that led to the retention of 14 independent studies. For these studies, the following information coded: sample size, country, type of organization, type of intervention, intervention description (i.e., aims, hypotheses, action plan), outcome measures, intervention results. Moreover, drawing upon Nielsen and Randal[22] model to evaluate organizational intervention, for each study we extracted the mechanisms responsible for the success or failure of the intervention and the possible hindering or facilitating contextual factors that could have impacted the intervention outcomes. The articles to code were divided between the two authors, but both authors coded sample size, country, and type of intervention, in order to assess inter-coder reliability. Inter-rata reliability was .71 for sample size; Cohen's κ for the inter- rata agreement was 1.00 for country and .72 for type of intervention. Disagreements were resolved through discussion.

---

[21] M. D. Egger, G. Smith, *Principles of and procedures for systematic reviews*, in M. Egger, G. Smith, D. G. Altman (Eds.), *Systematic reviews in health care: Meta-analysis in context*, in BMJ Publishing Group, 2001, 23-42.
[22] K. Nielsen, R. Randall, *Opening the black box: Presenting a model for evaluating organizational-level interventions*, in European Journal of Work and Organizational Psychology, 2013, Vol. 22, n.5, pp. 601-617.

Figure 1 Flow chart of the sifting process



3. Results

The review examined multiple types of interventions that can be used to deal with employees' mental health problems in the workplace. Overall, two different intervention types emerged from the analysis of the 14 retrieved studies, distinguished on the basis of the intervention target: individual interventions, focusing on the single employee or small groups of employees, and organizational interventions, targeting organizational or work conditions. Moreover, Employee Assistance Programs (EAPs) were included into the individual category.

3.1 Individual Interventions

Individual interventions refer to those studies conducted at the individual level, focusing on the behaviours of the employee and on his/her personal characteristics, such as the individual skills, abilities, and competencies useful to cope with stress or to manage mental health related issues. Four studies (out of the 14 examined papers) were included into the individual intervention type. Two of these studies describe fitness programs introduced by the organization with the aim to improve the employee's physical health conditions and, in turn, to promote positive mental health. The remaining two studies focus on relaxation and cognitive techniques to increase the individual's ability to manage stressors and, thus, enhance mental wellbeing. The four studies are described below.

Atlantis et al.[23] and De Zeeuw et al.[24] present two interventions oriented at introducing active life styles. The first study investigates the effectiveness

---

[23] E. Atlantis E, C. M. Chow, A. Kirby, M. F. Singh, *An effective exercise-based intervention for improving mental health and quality of life measures: a randomized controlled trial*, in Preventive Medicine Journal., 2004, Vol. 39, n.2, 424-434.

[24] E. de Zeeuw, E. Tak, E. Dusseldorp, I. Hendriksen, *Workplace exercise intervention to prevent depression: A pilot randomized controlled trial*, in Mental Health and Physical Activity, 2010, Vol. 3, n. 2, 72-77.

of a 24-week aerobic and weight-training exercise program on mental health and perceived quality of life. Three thousand and eight hundred employees participated in the program, following a regime of multi-modal moderate- to high- intensity aerobic exercise such as treadmill, bicycle, stepper, or rowing machines. Moreover, five health education seminars were run to modify employees' perceptions on the costs and benefits of exercise, good nutrition, and ergonomics. Participants were randomized into either treatment or wait-list control groups, and data regarding their mental health and quality of life were collected through the Depression Anxiety and Stress Scales and SF-36 Health Status Survey[25]. The results indicated that the exercise program was effective in the treatment of depressive symptoms as well as in improving stress symptoms and overall quality of life. The success of the intervention was due to the use of combined exercise modalities (versus single modality exercise), which enable individuals to choose the exercise regime that best fit his/her health conditions. Indeed, some individuals may experience limitations to perform physical, work, and social activities due to lack of musculoskeletal fitness (e.g., strength), whereas others may experience these limitations due to low aerobic fitness.
The second study evaluates the feasibility of an exercise program for inactive employees with minimal symptoms of depression, and it tests the size of the effects on participants' mental and physical health. One thousand and seventy-five employees were randomly assigned to a 10-week in- company fitness program with two supervised training sessions per week, or to a control group. Participants' self-reported depression scores, exercise behaviours, and physical health as well as record-based sickness were measured at baseline and 10 weeks after (post-test). The findings indicated that the 86% of participants in the exercise group no longer experienced minimal symptoms of depression, compared to 31% of the participants in the control group. Hence, the intervention was successful in reducing the risk of developing depression in the near future. However, no significant effects on sickness were found.
The study by Krajewski and colleagues[26] provides an example of individual-level interventions that employ relaxation techniques to improve employees' mental health. The paper investigated the impact of diverse forms of spending lunch breaks on the reduction of emotional,

---

[25] J. E. Ware, K. K. Snow, M. Kosinski, *SF-36 health survey: Manual and interpretation guide*, Quality Metric Incorporated, Lincoln, RI, 2000.
[26] J. Krajewski, R. Wieland, M. Sauerland, *Regulating strain states by using the recovery potential of lunch breaks*, in Journal of Occupational Health Psychology, 2010, Vol.15, n. 2, 131-139

mental, motivational, and physical strain. To this purpose, 14 call-center agents were assigned to two types of activities over lunch breaks, specifically to a 20-minute progressive muscle relaxation (PMR) task or to small-talk break groups with colleagues. The PMR technique consisted exercises to tense and release muscle groups, and it was implemented in specific cabins called "silent rooms" in order to maintain participants' intimacy, offer a stressor-free, and protect their privacy. Employees used their allocated break forms during every working day for 6 months. The results showed that PMR during lunch breaks sustainably reduced strain states, and better than should be hyphenated as previously mentioned in this paragraph. The authors explain this finding in the light of the favourable conditions generated by PMR that creates a low demands (low emotional, mental, motivational, and physical requirements) and low stressor environment. Furthermore, physical distance from the workstation (i.e., being in the "silent rooms") guarantees more detachment and distraction from work-related ruminative thoughts, enhancing effective recovery processes. Differently, small talk breaks can still cause some demands and stressors for the employee, due to social pressure from colleagues or the maintenance of ongoing role behaviour, damaging the recovery process.
Finally, the last study demonstrates how individual-level interventions can act on employee skills to cope with the stressors that can create or exacerbate mental illness.
The intervention, conducted by Bond and Bunce[27], randomly allocated 90 volunteers from a media organization to a) an Acceptance and Commitment Therapy (ACT) group that sought to enhance people's ability to cope with work-related strain through the acceptance of uncomfortable thoughts and emotions; b) an Innovation Promotion Program (IPP) that helped individuals to identify and then innovatively change the causes of occupational strain; or c) a wait-list control group. The results highlighted that both methods (i.e., ACT and IPP) significantly improved general mental health, depression symptoms, and a work-related variable, i.e. propensity to innovate. However, a positive general mental health status was more strongly supported through the ACT, indicating that employees' mental health benefit more from the acceptance of undesirable thoughts and feelings than from a change in the

[27] F. W. Bond e D. Bunce, *Mediators of change in emotion-focused and problem-focused worksite stress management interventions*, in Journal of Occupational Health Psychology, 2000, Vol. 5, n.1, 156–163.

presence of those thoughts or from innovatively modifying work stressors.

3.2 Employee Assistance Programs

Employee Assistance Programs (EAPs) are organizational initiatives to help employees to deal with personal problems, including mental health, substance abuse, various addictions, or family issues. To note EAPs are often contracted out to specialist providers rather than conducted in house by organisations to the employees to create peaceful work environments and enhance the employees' skills in meeting all the challenges that they might face in their personal or professional life. Employee counselling that increase job retention and productivity while reducing turnover, burnout, absenteeism, accident-related disability, and the associated costs. In a special committee appointed by the National Business Group on Health, EAPs were defined as "the human behaviour/psychological experts that provide strategic analysis, guidance, and consultation throughout the organization to [apply] the principles of human behaviour to enhance organizational performance, culture and business success"[28].

The focus is then on the single individual to support. Therefore, they can be considered as a type of individual-level interventions. Below, we describe three studies that address the role of EAPs in promoting mental health at work.

The first study, by Macdonald et al.[29], examines the impact of counselling through EAPs on some work performance indicators, such as absenteeism, worker's compensation claims, and incomplete workdays. The authors analyse the answers to a questionnaire administrated to over 2000 employees of a Canadian company at the end of EAP interventions that provided assistance for a broad range of personal problems, including stress, anxiety, depression, abuse of alcohol and drugs, bereavement, and trauma or critical incident. No significant reductions were found in the records (i.e., absenteeism, incomplete work days, and compensation) of those employees using the EAP counselling program. Moreover, two negative factors related to EAP were highlighted. First, the term

---

[28] National Business Group on Health, National Comprehensive Cancer Network, *An Employer's Guide to Cancer Treatment & Prevention*, Supporting Document, 2013.

[29] S. Macdonald, S. Wells, S. Lothian, M. Shain, *Absenteeism and Other Workplace Indicators of Employee Assistance Program Clients and Matched Controls*, in Employee Assistance Quarterly, 2000, Vol. 15, n. 3, 41-57.

"counselling" tended to communicate a negative view, since employees may associate it with a therapy for "mentally sick" individuals. The second aspect was related to the physical setting. In order to not seriously interfere with the counselling process, the physical setting must be carefully arranged. It has to be free from outside disturbances, simple, comfortable, and transmits feeling of warmth and protection.
Kirk and Brown[30] provide a more optimist analysis of EAPs. They examine the history and development of EAPs in Australia and posit that a quantitative demonstration of the effectiveness of such programs cannot be the only criteria to judge the merits of assistance interventions, particularly in the light of the obvious difficulties involved in implementing rigorous evaluations in the workplace. Their analysis suggests that these programs have a positive impact on employees' mental health, and are perceived by them as a desirable workplace resource.
Similarly, the third article by Nair and Xavier[31] sheds positive light of EAPs. The study evaluates a program, entitled "The Employee Assistance Cell", oriented to create awareness about mental health and to provide help to cope with stressful situations at work. Attitudes towards counselling, mentoring and coaching were assessed via a short semi-structured questionnaire to over 300 employees that participated the launch of the program. The results indicated that participants were positively oriented towards the concept, need, relevance and use of counselling in the workplace, since it helped them to deal with problems at work, as well as personal, interpersonal and family issues. Participants declared that they particularly benefit from the program in relations to work-related concerns, such as interpersonal relations, job design, work pressure and managing their emotions at work.

3.3 Organizational interventions

Organizational-level interventions target the characteristics of the job or the organization that are able to trigger mental health problems or to aggravate existent mental health conditions. They can be defined as proactive interventions in the sense that they are focused on reducing or

---

[30] A. K. Kirk, D. F. Brown, *Employee Assistance Programs: A Review of the Management of Stress and Wellbeing Through Workplace Counselling and Consulting*, in Australian Psychologist, 2003, Vol. 38, n.2, 138–143.
[31] Nair, M. Xavier, *Initiating Employee Assistance Program (EAP) for a Corporate: An Experiential Learning*, in IUP Journal of Organizational Behavior, 2012, Vol. 11, n. 2, 67-76.

eliminating the sources of job stress. We selected seven articles that describe organizational interventions for people with mental health conditions.
A first typology of organizational-level interventions focuses on improving the leadership function, aiming at educating senior and middle management in order to enhance the mental wellbeing of their co-workers. Two studies, conducted by Stanfeld et al.[32] and Martin et al.[33], illustrate this typology.
The first investigates the feasibility of recruitment, adherence and likely effectiveness of an e-learning intervention for managers to improve employees' wellbeing and reduce sickness absence. The intervention involved 41 managers coordinating 424 employees within NHS (National Health System) Mental Health Trust in the UK. It used an established e-learning health promotion program for managers, called "Managing Employee Pressure at Work", which focuses on the six management standards domains of change, control, demands, relationship, role and support. The intervention involved further guidance via introductory and follow-up face-to-face sessions with a study facilitator, and support by telephone or email. The managers in the control cluster received no intervention. The study findings indicated that the managerial e-learning intervention carried a small benefit for the mental wellbeing of employees. Indeed, the overall difference in mental health improvement between the intervention and control groups after adjusting for clustering and baseline value was of 0.5 points. The scarce effect of the intervention could be explained in multiple ways. First, there was low participation to the full intervention among managers. More important, the interval between the intervention end and the follow-up of employees was probably too short to allow managers to implement the work and organizational changes necessary to provoke any significant modifications in employee mental health. Finally, the organization in question was undergoing several structural changes during the study that likely interfered with the intervention implementation.

---

[32] S. A. Stansfeld, S. Kerry, T. Chandola, J. Russell, L. Berney, N. Hounsome, D. Lanz, C. Costelloe, M. Smuk, K. Bhui, *Pilot study of a cluster randomised trial of a guided e-learning health promotion intervention for managers based on management standards for the improvement of employee well-being and reduction of sickness absence*, in Occupational and environmental medicine, 2015, Vo.l 5, n. 10.
[33] A. Martin, K. Sanderson, J. Scott, P. Brough, *Promoting mental health in small-medium enterprises: an evaluation of the "Business in Mind" program*, in BMC Public Health, 2009, Vol. 9, 239.

The second study[34] describes the design of a promotional intervention to enhance the mental health of small and medium enterprise (SME) managers. This in turn should positively affects co-workers' mental wellbeing via the creation of a positive workplace psychosocial environment. The intervention consists of a DVD program (called "Business in Mind") and the accompanying guidebook, and it builds on the cognitive behaviour therapy framework to stimulate skills development. Specifically, it contains four modules. The first one intends to develop managers' understanding of stress and coping processes, introducing the relationships among thoughts, feelings and behaviours. The second module is designed to enhance their level of psychological capital. Module three focus on overcoming barriers to living a healthy lifestyle, covering topics such as physical activity, nutrition, substance abuse and effective work-life balance. The final module aims at assisting managers to create a positive work environment and overcome interpersonal stressors by developing their emotional intelligence and communication skills. The intervention has not been tested yet, and it is in the process of being disseminated to reach a large population in the business community. With particular regard to mental health outcomes, the authors anticipate improvements in depression and anxiety scores for both employees and managers.

The study by Oude Hengel et al.[35] illustrates how organizational-level interventions try to change the sources of stress at work, such as elevated physical workload, time pressure, and reduced job control, to support positive mental health. The study presents a prevention program that aimed to improve mental health and work ability among construction workers. Fifteen departments from six construction companies participated, for a total of 293 individuals that were randomized to the intervention or control clusters. The six-month intervention consisted of two individual training sessions with a physical therapist to identify and reduce physical workload, an instrument to raise awareness of the importance of rest breaks to reduce fatigue, and two empowerment training sessions to improve the range of control on the job. Specifically,

---

[34] A. Tsutsumi, M. Nagami, T. Yoshikawa, K. Kogi, N. Kawakami, *Participatory intervention for workplace improvements on mental health and job performance among blue-collar workers: a cluster randomized controlled trial*, in Journal Occupational Environment Medicine, 2009, Vol. 51, n. 5, 554-563.

[35] K.M. Oude Hengel, J.E. Bosmans, J.M. Van Dongen, P.M. Bongers, A.J. Van der Beek, B.M. Blatter, *Prevention program at construction worksites aimed at improving health and work ability is cost-saving to the employer: Results from an RCT*, in American Journal of industrial medicine, 2014, Vol. 57, n. 1, 56-68.

these sessions were aimed at extending workers' influence at the worksite by increasing the commitment of responsibility for their own health through discussion and communication with their colleagues and supervisors (e.g., taking rest breaks, asking for assistance). The results of the study did not report significant differences between the intervention and control groups with respect to the individuals' mental health status. However, the analysis of the cost-effectiveness and financial return of the program for the employers highlighted that absenteeism costs after 12 months were significantly lower in the intervention group than in the control group.
Among organizational interventions, we also considered those studies describing organizational policies to sustain employees' mental health. An example is the study conducted by Jang et al.[36], which examines the effect of a work-life balance program on mental wellbeing. More specifically, the study investigates the multi-level relationships among the availability of work–life balance policies, employees' authority to arrange their own work hours (i.e., job control), job satisfaction, and mental health among 1,293 employees of 50 companies in South Korea. The results speak for the positive links between the availability of scheduling control and work–life balance programs on the one hand, and between job satisfaction and mental health, on the other. Indeed, work–life balance policies were positively associated with self-reported job satisfaction and mental health, and job satisfaction played a mediating role between the accessibility to such policies and positive mental wellbeing. Moreover, the effects of job control on job satisfaction and mental health were stronger when organizational work–life balance programs were available. In other words, companies that sponsor work-life balance programs are perceived as more supportive and family friendly; this, in conjunction with other employer practices (e.g., job control), is able to positively affect job satisfaction, which in turn promotes mental wellbeing.
Finally, three articles demonstrate the advantages of participatory approaches in setting organizational interventions. Drawing upon employees' needs in a specific organization, Munn-Giddings et al.[37] develops a collaborative, context-specific strategy to promote mental

---

[36] S. J. Jang, R. Park, A. Zippay, *The interaction effects of scheduling control and work–life balance programs on job satisfaction and mental health*, in International Journal of Social Welfare, 2011, Vol. 20, n.2, 135–143.
[37] C. Munn-Giddings, C. Hart, S. Ramon, *A participatory approach to the promotion of well-being in the workplace: lessons from empirical research*, in International Review of Psychiatry, 2005, Vol. 17, n.5, 409-417.

wellbeing in the workplace. They involved two large British organizations, namely a Healthcare Trust and a Social Services Organization, and employed a participatory action research (PAR) approach, where a university team worked with the organizations to facilitate and coordinate the identification and development of tailor-made mental wellbeing strategies. The university project team was multi- disciplinary, including ten members from various backgrounds such as social work, mental health, health psychology, social policy and business. The team collaborated with frontline practitioners and the middle and senior management of the two organizations to involve staff in five participatory workshops. These workshops were structured around some key exercises, such as vignettes, small group exercises, discussions, presentations and role-plays. The aim was to recognize the core issues causing or aggravating mental distress at work and suggest short, medium and long-term actions to solve these issues. Staff perspectives and suggestions were then formalized in a final strategy document containing the principal action areas and presented to senior managers. The article describes the implementation and results of a pilot project, designed on the basis of one of these action plans. The goal of the pilot project was to facilitate the return to work of employees on sick leave through a returnee support group, accompanied by a self-management pack. More specifically, the main aims were to support returnees in facing the more sensitive issues awaiting them when returned to work (e.g., presenting themselves to new colleagues), to develop effective methods for handling potential stress in the workplace, and to sustain their self-esteem. Only a small group of four people were recruited for the project. The group met six times over a three- month period, and a mixture of short presentations, small group exercises and discussion were used. Of the four people, two fully returned to work, one left the organization, and one decided to retire due to physical ill health. Overall, the four participants viewed the group experience as a positive support towards making their personal decisions.
A further study that investigates the consequences of participatory organizational interventions on employees' mental health and wellbeing by Kobayashi et al.[38]. The researchers recruited 9 departments of a manufacturing enterprise in Japan to participate to a work environment improvement program, using the Mental Health Action Checklist for a

[38] Y. Kobayashi, A. Kaneyoshi, A. Yokota, N. Kawakami, *Effects of a worker participatory program for improving work environments on job stressors and mental health among workers: A controlled trial*, in Journal Of Occupational Health, 2008, Vol. 50, n. 6, 455–470.

better Workplace Environment (MHACL)[39]. The MHACL consists in a list of 30 action items used to improve both the psychological (e.g., support) and non-psychological (e.g., physical environment, ergonomics) work environments. The departments were invited to planning workshops where, with the help of the checklist, employees discussed what actions could have been useful to improve the work environment. The majority of the proposed actions (90%) were then implemented. The study results show that skill underutilization, supervisor and co-worker support, psychological distress (i.e., vigour, anger-irritability, anxiety, depression, fatigue), and job satisfaction changed more favourably in the intervention group, but only among women. Moreover, improvements in the outcomes were more prominent among departments with a 50% or higher rate of worker participation in the planning workshops, stressing the importance of the participatory approach for the success of the intervention.

Finally, Tsutsumi et al.[40] conducted a participatory intervention for workplace improvement with blue-collar workers in manufacturing electronic equipment in a medium-size company. The main goal was to investigate the intervention on employees' job performance and mental health, including anxiety, depression, sleep disturbance, and cognitive function. A randomized control trial was designed, with 11 assembly lines randomly allocated to intervention and control lines. The intervention consisted of team-based, problem-solving sessions requiring the employees' involvement for the identification of possible action plans to improve work conditions. The sessions focused on problems in existing practices and on ways to re-design such practices in a joint work between the session facilitators and participants. At the end of the sessions, each group proposed an action plan to improve the workplace, and its feasibility, effectiveness, costs, and priority were discussed. At the same time, a supervisory education program on stress reduction was provided to inform supervisors of the importance of positive mental health and of its relationship with the work environment, and to give examples of good

---

[39] N. Kawakami, K. Kogi, T. Yoshikawa, A. Tsutsumu, M. Nagami, M. Shimazu, A. Shimazu, *Mental Health Action Checklist for a Better Workplace Environment*, in T. Yoshikawa et al. (eds.), *The second workshop of occupational safety and health for health care workers in Asia*, in Occupational Health Training Center, The University of Occupational and Environmental Health, Japan, 2006.

[40] A. Tsutsumi, M. Nagami, T. Yoshikawa, K. Kogi, N. Kawakami, *Participatory intervention for workplace improvements on mental health and job performance among blue-collar workers: a cluster randomized controlled trial*, in Journal Occupational Environment Medicine, 2009, Vol. 51, n. 5, 554-563.

practices to recognize and address occupational stressors. The proposed action plans were then implemented by workers, with the support of the facilitators. Follow-up meetings were held to discuss any problems related to the implementation and to evaluate both the outcomes and process of the intervention. The results from a post- intervention questionnaire, to participants, indicated that the intervention was effective against deterioration in mental health and for improving job performance.

4. Discussion

Study intended to summarize some of the existent workplace interventions to address employee mental health problems. More specifically, it aimed at identifying the most common types of interventions and programs used by organizations, at understanding which mechanisms are responsible for the success (or failure) of such interventions, and at offering best practices for the design of future initiatives.

Two principal categories of interventions, namely individual and organizational, emerged from our review. First, individual interventions focus on single employees, and adopts a wide range of practices, programs and techniques aimed at improving healthy habits, physical capabilities, cognitive processes, and coping abilities to manage mental illness at work. The range of activities varies from in-company fitness exercises and informative sessions on the benefits of a healthy lifestyle, including nutrition, ergonomic and fitness advice, to the teaching and application of relaxation and emotional techniques to release tension and manage uncomfortable emotional states, as well as brainstorming and creativity techniques to act on workplace stressors. EAPs can also be included within the individual-level interventions, since they are counselling programs designed by the organization to help the employee to overcome personal difficulties, also related to mental health or addiction problems, in order to support employee retention and performance.

The second category of interventions (i.e., organizational interventions) targets the entire organization with the objectives of altering the nature of work, of detecting and decreasing the potential stressors able to create mental health problems, harm mental wellbeing, or exacerbate existent conditions. With the same aim of reducing the sources of mental ill-being at work, these interventions adopt various strategies. Some of them resemble an individual approach, providing training sessions to groups of employees to lower, for example, physical workload for physically active job (e.g., construction sector) or empowering sessions to increase control

at work. Others target the management of the organization, with the idea that senior and middle managers are responsible for creating a positive psychological environment that can enhance mental wellbeing. These interventions involve leaders in skill-development sessions, aiming at increasing their "soft" skills, such as communication and relational competencies, and emotional intelligence. Organizational policies, such as work-life balance policies, to enhance the recovery of the individual and avoid the rise or exacerbation of mental health problems, as well as participatory approach research can also be included within organizational-level interventions. In particular, the latter approach involves employees collectively in a series of workshops to discuss and identify the workplace causes of mental ill-being and develop action plans to address them.

But how do these sets of activities work? Are the mechanisms underlying the operation of an intervention? To answer these questions, we realist evaluation[41] to assess organizational interventions. This kind of assessment is not limited to the evaluation of the results of an intervention or program (i.e., its success or failure), but examines the mechanisms responsible for the intervention's outcomes and the possible contextual characteristics that might have influenced them. The changes in the mental models of the employees involved in the intervention are among such mechanisms[42]. Mental models refer to the schemes used by individuals to make sense of the world, of what happens. They drive the reactions to the situation and to any modifications in the environment, and thus they guide behaviors[43]. Since interventions alter the situation, they act on people' mental models and consequent behaviours; thus, the changes in these models lead the intervention outcomes.

Building on this framework, we identified and systematized the principal mechanisms in the retrieved studies, describing them in terms of changes in employees' mental models.

First, the cognitive models of the person can change through a learning process. Indeed, some studies[44] demonstrated that mental health may

---

[41] R. Pawson, G. Wong, P*ublic Opinion and Policy-making*, in Social Policy Administration, 2013, Vol. 47, n. 4, pp. 434–450.

[42] K. Nielsen, M. Miraglia, *What works for whom in which circumstances? On the need to move beyond the "what works?" question in organizational intervention research*, in Human Relations, in press; K. Nielsen, R. Randall, op.cit., 2013.

[43] K.E. Weick, K.M. Sufcliffe, D. Obstfeld, D., *Organizing and the process of sensemaking*, in Organization Science, 2005, Vol. 16, 409–421.

[44] F. W. Bond e D. Bunce, op.cit., 2000; J. Krajewski, R. Wieland, M. Sauerland, op.cit., 2010.

benefit from learning to accept undesirable emotions, deal with unpleasant feelings and sensations, detach from work, interrupt work-related ruminative thoughts, and acquire coping strategies against the workplace stressors that can trigger or increment mental illness, at the same time boosting employee resilience. The success of programs targeting individual's cognitive models is also supported by meta-analyses and systematic reviews that show that cognitive-behavioural individual intervention are the most effective in reducing work-related stress[45].
Furthermore, the individual-level programs aimed at developing healthy lifestyle habits, such us implementing in-company fitness courses, prompt a change in the health and wellbeing schemes of employees[46]. They represent a way to enhance health directly.
Not surprisingly, the pivotal mechanism that sustains mental wellbeing in organizational-level intervention pertains to changes in employees' working conditions, particularly in the demands and resources associated to their job[47]. Specifically, job demands refers to all those physical, social, and organizational features of work requiring some sort of physical or mental effort and provoking physiological or psychological costs. Contrarily, job resources are the aspects of work that support goal achievement, enhance personal and professional growth, and aid coping with job demands. Increasing job resources, through assuring high levels of coworker and supervisory support or job control[48] and diminishing hindering job demands, such as skill underutilization[49], are mechanisms to enhance employee mental health.
This is particularly true when changes in working conditions are detected and implemented through a participatory process, that is involving workers. In fact, participation is a key means to ensure the effectiveness of a program. Three of the analysed studies[50] involved employees in

---

[45] Richardson & Rothstein, *op. cit.*, 2008; J. Ruotsalainen, C. Serra, A. Marine, J. Verbeek, *op.cit.*, 2008; J. J. van der Klink, R. W. Blonk, A. H. Schene, F. J. van Dijk, *op.cit.*, 2001.
[46] E. Atlantis E, C. M. Chow, A. Kirby, M. F. Singh, *op.cit.*, 2004; E. de Zeeuw, E. Tak, E. Dusseldorp, I. Hendriksen, *op. cit*, 2005.
[47] A. B. Bakker, E. Demerouti, A.I. Sanz-Vergel, *Burnout and work engagement: The JD-R approach*, in Annual Review of Organizational Psychology and Organizational Behavior, 2014, Vol. 1, 389–411.
[48] Y. Kobayashi, A. Kaneyoshi, A. Yokota, N. Kawakami, *op.cit.* 2008; A. Tsutsumi, M. Nagami, T. Yoshikawa, K. Kogi, N. Kawakami, *op. cit.*, 2009.
[49] Y. Kobayashi, A. Kaneyoshi, A. Yokota, N. Kawakami, *op. cit.*, 2007.
[50] Y. Kobayashi, A. Kaneyoshi, A. Yokota, N. Kawakami, *op.cit.* 2007; C. Munn-Giddings, C. Hart, S. Ramon, op. cit. 2005; A. Tsutsumi, M. Nagami, T. Yoshikawa, K. Kogi, N. Kawakami, *op.cit.*, 2009.

planning workshops with the objective to improve the work environment, by engaging them in all the intervention stages from its organization to the implementation of the identified strategies to sustain mental wellbeing at work. Participation empowers employees, making them more aware of what the problems are and how to solve them. It reinforces individuals' beliefs and ability to proactively improve working conditions, it allows them to gain assets, creating a more supportive and resourceful work environment. Moreover, it increases the sense of ownership of the intervention among participants, assuring their involvement and engagement. As a consequence, changes are more likely perceived as less anxious and more firmly embedded in people actions and behaviours, again securing the intervention success (i.e., positive results on participants' mental health). Supporting evidence have been provided for the negative relationship between participation and resistance to change on the one hand, and the positive association between participation and the achievement of the intervention goals on the other hand[51]. Finally, a participatory process may enhance worker's job crafting, a relatively new concept that defines the self-started proactive behaviours undertaken by employees to alter the level of job demands and job resources in order to adapt them to their needs and skills[52]. Job crafting has been shown to improve mental wellbeing, in the light of its positive association with positive affect, work engagement, job satisfaction, decreased burnout over time, and flourishing, that is an overall positive perception of one's life and functioning[53]. Job crafting, thus, may represent a mechanism activated by participatory approaches to improve mental health conditions in the workplace.
A positive change in employee's attitudes toward the job, such as job satisfaction or organizational commitment, represents a further means to support mental health interventions. Indeed, the study by Jang and colleagues (2011) reported that job satisfaction played a moderating role in the relationship of job control and work-life balance programs with

---

[51] R. Lines, *Influence of participation in strategy change: resistance, organizational commitment and change goal achievement*, in Journal of Change Management, 2004, Vol. 4, 193–21.
[52] A. B. Bakker, M. Tims, D. Derks, *Proactive personality and job performance: The role of job crafting and work engagement*, in Human Relations, 2012, Vol. 65, 1359-1378.
[53] E. Demerouti, A. B. Bakker, J. R. B. Halbesleben, *Productive and counterproductive job crafting: A daily diary study*, in Journal of Occupational Health Psychology, 2015, Vol. 20, pp. 457 – 469; A. B. Bakker, M. Tims, D. Derks, *op. cit.*, 2012; M. van den Heuvel, E. Demerouti, M. C. W. Peeters, *The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being*, in Journal of Occupational and Organizational Psychology, 2015, Vol. 88, 511–532.

enhanced mental wellbeing. In other words, increased job satisfaction was the mechanism carrying the effect of the organizational policies to balance work and personal (e.g., family, leisure) responsibilities and to increase employees' control over their schedule on mental health.
Finally, the focus of organizational-level interventions could be the management of the organization, the leadership function[54]. This is intended in two ways. First, programs may want to increase leaders' awareness of mental health issues in the workplace. A learning mechanism is operating here, since leaders acquire information on how to recognize the phenomenon, deal with and treat it. Second, programs may aim to act on leaders' mental health[55], in order to increase their mental resources and wellbeing, and help them to overcome personal stressors. In turn, this should foster the creation of a positive work environment, consequently boosting coworkers' mental wellbeing in a sort of positive loop. The mechanism appears to be related (again) to a change in the working conditions. Leaders' mental strength could be developed through programs targeting their emotional intelligence skills or their Psychological Capital (PsyCap)[56]. The latter refers to an individual's positive psychological state of development characterized by elevated self-efficacy (i.e., the beliefs to be able to put in the necessary effort to succeed in a task), hope (i.e., persevering toward a goal and redirecting strategies if necessary), optimism (i.e., positive attribution about the future), and resilience (i.e., bouncing back and beyond obstacles or difficulties). As for job crafting, PsyCap interventions are able to improve mental wellbeing, since the group of the four aforementioned dimensions is associated with job satisfaction and psychological wellbeing positively, and with cynicism, job stress and anxiety negatively (see the meta-analysis by Avey, Reichard, Luthans, and Mhatre, 2011)[57].
Our review also shed light on some of the best practices to plan individual and organizational interventions in the workplace in order to enhance employee mental health. First, organizations may want to guide managers to recognize and understand the meaning and nature of mental wellbeing,

---

[54] A. Martin, K. Sanderson, J. Scott, P. Brough, *op.cit.*, 2009; A. Stansfeld, S. Kerry, T. Chandola, J. Russell, L. Berney, N. Hounsome, D. Lanz, C. Costelloe, M. Smuk, K. Bhui, *op. cit.*, 2015.
[55] A. Martin, K. Sanderson, J. Scott, P. Brough, *op.cit.*, 2009.
[56] F. Luthans, C. M. Youssef, B. J. Avolio, *Psychological capital: Developing the human competitive edge*, Oxford University Press, New York, NY, 2007.
[57] J. B. Avey, R. J. Reichard, F. Luthans, K. H. Mhatre, *Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance*, in Human Resource Development Quarterly, 2011, Vol. 22, n. 2, pp. 127–152.

as well as its link to the elevated costs for employee health and productivity. To this purpose, executive training could be offered, focusing not only on informative sessions on mental health and related costs, but also on information and communication skills to empower managers to discuss health issues in the workplace. In turn, this would discourage the emergence of an organizational culture that stigmatizes mental illness and avoids talking about mental health conditions at work, while promoting a supportive culture that encourages employees to disclose mental illness with colleagues and supervisors and to seek support and help for it.

Furthermore, executive training on mental health should reinforce the introduction and implementation of policies and practices to manage stress and strain in the workplace in a preventive perspective. Line managers are the key actors in the process. In fact, having daily (or frequent) interactions with their co-workers, they play an important role in dealing with employees' possible mental health problems and in managing them on a day-to-day. This would not only assure that employees' conditions are not going overlooked and untreated, but would also help to decrease organizational turnover, preventing the possibility that people with mental health conditions leave the organization. The active involvement of line managers is essential also throughout organizational interventions, in order to gain the commitment of the employees participating to the intervention. Indeed, line managers can act as role models, who activate and favour the change in the employees' mental models. Moreover, they are responsible for the communication and day-to-day implementation of the intervention activities, such that they can either facilitate or obstruct the change in employees' behaviours, affecting the intervention outcomes. It has been shown that, when line managers are engaged in and supportive of the intervention, more proactive modification in working conditions by employees is registered as well as a higher level of psychological wellbeing[58]. Setting up participatory programs is a further practice to enhance the intervention effectiveness. As discussed, participatory approaches involve employees in the collective identification and proposal of possible solutions to craft the work conditions that are able to trigger or aggravate mental health problems. In addition, it is extremely relevant to gather the engagement and

---

[58] K. Nielsen, J. Yarker, R. Randall, F. Munir, *The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: a cross-sectional questionnaire survey*, in Int J Nurs Stud., 2009, Vol. 46, n.9, pp.1236-44.

commitment of all the organizational stakeholders, including the top management, implicated in the intervention. Assuring their cooperation and understanding of their roles and responsibilities within the intervention is essential to secure its success. For instance, senior management can delay or facilitate the intervention action plan by choosing who is going to participate or by releasing employees from their tasks to give them the opportunity to participate during working hours, boosting the attendance to the intervention activities. Furthermore, they can overtly oppose the implementation of the intervention. This is well described in the study by Munn-Giddings and colleagues[59] where the chief executive of organizations refused to implement the action strategies collectively identified by workers to address the core issues causing or worsening mental distress at work. The author explained this reluctance through the fear that the organization could be blamed to trigger employees' mental illness. This could be prevented through with the management, to make them aware of the organizational culture, of the values and attitudes behind their perceptions of the intervention, and on how these can affect its success or failure. A positive mutual relationship among the key figures involved in the intervention can also foster this awareness process. As we, these figures are the employees, the middle and senior management, but also external consultants. Are usually responsible bring the external expertise on mental health issues and to offer practical help in recruiting and retaining employees with mental health problems. They can also help to develop theory-based intervention protocols tailored to the specific needs of the organization. Thus, a best practice is to look both inside and outside the organization in order to continue to train managers on mental health issues for daily employee management on the one hand, and to develop partnerships with health providers and a range of external professional figures (e.g., work and organizational psychologists, health consultants, physicians) to offer the necessary expertise to develop intervention strategies on the other hand.

Finally, the study by Krajewski and colleagues[60] suggests some best practice recommendations related to the duration, time and place of mental health programs. Not surprisingly, long-term implementation of the intervention, rather than isolated action, is preferable. Assuring adequate and sufficient time within the employees work schedule and space (e.g., private rooms for relaxation exercises) is also fundamental.

[59] C. Munn-Giddings, C. Hart, S. Ramon, *op.cit.*, 2005.
[60] J. Krajewski, R. Wieland, M. Sauerland, *op.cit.*, 2009.

The physical setting is crucial for EAPs, and it should never be for granted, as it can seriously interfere with the counselling process. Organizations should provide settings that are free from outside "noise" and disturbance, and that convey a feeling of warmth and security.
A few limitations arise from the analysed studies; some of them are peculiar to a certain study, others are more generalizable, opening the way to future research directions. First, the overall focus seems to be only on the results of the intervention, that is whether it worked or not. Careful consideration of the mechanisms underlying such results could help to understand the reason behind the intervention's effectiveness. For the future, the realist evaluation framework could be used[61]. We noticed a prevalence of individualistic approaches, such as one-to-one counselling in the EAPs, over contextual or organizational ones. This could cause the emergence of a culture that isolates and stigmatizes the individual; the problem is the individual and any organizational and work determinants of mental ill-being are denied. Moreover, this discourages group programs to tackle mental health in the workplace, while group processes are desirable to enhance the illness disclosure, support and mutual aid, and the sharing of problems and their solutions. Furthermore, such culture is based on the individuation of a "cure" for the individual; it generates immediate, short-term solutions, rather than planning prevention strategies that are integrated in the human resource management system of the organization. The short-term perspective also denotes the higher attention devoted to stress management interventions and the lack of interventions focusing on more general mental health problems as anxiety, depression or other mental health conditions. With regard to the effectiveness of the intervention, a possible limitation is the lack of long-term follow-ups. Interventions imply changes, which requires time for the individuals to implement. Hence, it can take time to see the effects of interventions on people's mental wellbeing. Finally, the present review is not without limitations. First, not all existing studies might have been included, as we have missed some papers despite the electronic and manual search. Moreover, we did not take into consideration the contextual features of the organization nor the country where the interventions were carried out. Our goals were to summarize what organizations do to address employee mental health, how the intervention can function, and draw best practices to design future mental health programs in the workplace. Future research can explore the contextual

[61] R. Pawson, op. cit., 2013; R. Pawson, N. Tilley, *op. cit.*, 1997.

characteristics that may hinder or facilitate the mechanisms of an intervention, according to the C-M-O configurations in the realist evaluation model[62].

[62] K. Nielsen, R. Randall, *The importance of employee participation and perceptions of changes in procedures in a teamworking intervention*, in Work Stress, 2012, Vol. 26, n. 2, 91–111; R. Pawson, *op. cit.*, 2013.

References

E. Atlantis E, C. M. Chow, A. Kirby, M. F. Singh, *An effective exercise-based intervention for improving mental health and quality of life measures: a randomized controlled trial*, in Preventive Medicine Journal., 2004, Vol. 39, n. 2, 424-434.

J. B. Avey, R. J. Reichard, F. Luthans, K. H. Mhatre, *Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance*, in Human Resource Development Quarterly, 2011, Vol. 22, n. 2, 127–152.

A. B. Bakker, E. Demerouti, A.I. Sanz-Vergel, *Burnout and work engagement: The JD-R approach*, in Annual Review of Organizational Psychology and Organizational Behavior, 2014, Vol. 1, 389–411.

A. B. Bakker, M. Tims, D. Derks, *Proactive personality and job performance: The role of job crafting and work engagement*, in Human Relations, 2012, Vol. 65, 1359-1378.

F. W. Bond e D. Bunce, *Mediators of change in emotion-focused and problem-focused worksite stress management interventions*, in Journal of Occupational Health Psychology, 2000, Vol. 5, n.1, 156–163.

T. Cox et al., *Work, employment and mental health in Europe*, in Work & Stress, 2004, Vol. 18, n. 2, 1-7.

E. Demerouti, P.M. Le Blanc, A.B. Bakker, W.B. Schaufeli, J. Hox, *Present but sick: A three-wave study on job demands, presenteeism and burnout*, in Career Development International, 2009, Vol. 14, 50–68.

E. Demerouti, A. B. Bakker, J. R. B. Halbesleben, *Productive and counterproductive job crafting: A daily diary study*, in Journal of Occupational Health Psychology, 2015, Vol. 20, 457 – 469.

M. D. Egger, G. Smith, *Principles of and procedures for systematic reviews,* in M. Egger, G. Smith, D. G. Altman (Eds.), *Systematic reviews in health care: Meta-analysis in context*, in BMJ Publishing Group, 2001, 23-42.

R. S. Grajendan, D. A. Harrison, *The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences*, in Journal of Applied Psychology, 2007, Vol. 92, 1524-1541.

M. van den Heuvel, E. Demerouti, M. C. W. Peeters, *The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being*, in Journal of Occupational and Organizational Psychology, Vol. 88, 511–532.

A. Lacouture, E. Breton, A. Guichard, V. Ridde, *The concept of mechanism from a realist approach: a scoping review to facilitate its operationalization in*

public health program evaluation, in Implementation Science, Vol. 10, 153- 163; R. Pawson, Op. Cit., 2013.

A. D. LaMontagne, T. Keegel, A. M. Louie, A. Ostry, A., P. A. Landsbergis, *A systematic review of the jobstress intervention evaluation literature*, 1990–2005, in International Journal of Occupational and Environmental Medicine, 2007, Vol. 13, 268–280.

M. Liimatainen, P. Gabriel, *Mental health in the workplace. Situation analysis: United Kingdom*, in International Labour Office, 2000.

R. Lines, *Influence of participation in strategy change: resistance, organizational commitment and change goal achievement*, in Journal of Change Management, 2004, Vol. 4, 193–21.

L. Lu, S. Q. Peng, H. Yen Lin, C. L. Cooper, *Presenteeism and health over time among Chinese employees: The moderating role of self- efficacy*, in Work and Stress, 2014, Vol. 28, 165-178.

F. Luthans, C. M. Youssef, B. J. Avolio, *Psychological capital: Developing the human competitive edge*, Oxford University Press, New York, NY, 2007.

S. J. Jang, R. Park, A. Zippay, *The interaction effects of scheduling control and work–life balance programs on job satisfaction and mental health*, in International Journal of Social Welfare, 2011, Vol. 20, n. 2, 135–143.

G. Johns, *Presenteeism in the workplace: A review and research agenda*, in Journal of Organizational Behavior, 2010, Vol. 31, 519-542.

N. Kawakami, K. Kogi, T. Yoshikawa, A. Tsutsumu, M. Nagami, M. Shimazu, A. Shimazu, *Mental Health Action Checklist for a Better Workplace Environment*, in T. Yoshikawa et al. (eds.), *The second workshop of occupational safety and health for health care workers in Asia*, in Occupational Health Training Center, The University of Occupational and Environmental Health, Japan, 2006.

R. C. Kessler, R. G. Frank, *The impact of psychiatric disorders on work loss days*, in Psychological medicine, 1997, Vol. 27, n. 4, 861-873.

Dr. A. K. Kirk, D. F. Brown, *Employee Assistance Programs: A Review of the Management of Stress and Wellbeing Through Workplace Counselling and Consulting*, in Australian Psychologist, 2003, Vol. 38, n.2, 138–143.

J. J. van der Klink, R. W. Blonk, A. H. Schene, F. J. van Dijk, *The benefits of interventions for work-related stress*, American Journal Public Health, 2001, Vol. 91, n. 2, 270-276.

J. Krajewski, R. Wieland, M. Sauerland, *Regulating strain states by using the recovery potential of lunch breaks*, in Journal of Occupational Health Psychology, 2010, Vol.15, n. 2, 131-139.

Y. Kobayashi, A. Kaneyoshi, A. Yokota, N. Kawakami, *Effects of a worker*

participatory program for improving work environments on job stressors and mental health among workers: A controlled trial, in Journal Of Occupational Health, 2008, Vol. 50, n. 6, 455–470.

S. Macdonald, S. Wells, S. Lothian, M. Shain, *Absenteeism and Other Workplace Indicators of Employee Assistance Program Clients and Matched Controls*, in Employee Assistance Quarterly, 2000, Vol. 15, n. 3, 41-57.

A. Martin, K. Sanderson, J. Scott, P. Brough, *Promoting mental health in small-medium enterprises: an evaluation of the "Business in Mind" program*, in BMC Public Health, 2009, Vol. 9, 239.

A. Mikkelsen, *Methodological challenges in the study of organizational interventions in flexible organizations*, in A. M. Fuglseth, I. A. Kleppe (Eds.), *Anthology for Kjell Grønhaug in celebration of his 70th birthday*, Bergen, 2005, 150–178.

C. Munn-Giddings, C. Hart, S. Ramon, *A participatory approach to the promotion of well-being in the workplace: lessons from empirical research*, in International Review of Psychiatry, 2005, Vol. 17, n. 5, 409-417.

Nair, M. Xavier, *Initiating Employee Assistance Program (EAP) for a Corporate: An Experiential Learning*, in IUP Journal of Organizational Behavior, 2012, Vol. 11, n. 2, 67-76.

National Business Group on Health, National Comprehensive Cancer Network, *An Employer's Guide to Cancer Treatment & Prevention*, Supporting Document, 2013.

K. Nielsen, M. Miraglia, *What works for whom in which circumstances? On the need to move beyond the "what works?" question in organizational intervention research*, in Human Relations, in press.

K. Nielsen, R. Randall, *Opening the black box: Presenting a model for evaluating organizational-level interventions*, in European Journal of Work and Organizational Psychology, 2013, Vol. 22, n. 5, 601-617.

K. Nielsen, J. Yarker, R. Randall, F. Munir, *The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: a cross-sectional questionnaire survey*, in Int J Nurs Stud., 2009, Vol. 46, n.9, 1236-44.

K. Niven, N. Ciborowska, *The hidden dangers of attending work while unwell: A survey study of presenteeism among pharmacists*, in International Journal of Stress Management, 2015, Vol. 22, 207–221.

K. M. Oude Hengel, J.E. Bosmans, J.M. Van Dongen, P.M. Bongers, A. J. Van der Beek, B.M. Blatter, *Prevention program at construction worksites aimed at improving health and work ability is cost-saving to the employer: Results from an RCT*, in American Journal of industrial medicine, 2014, Vol. 57, n. 1, 56-68.

R. Pawson, G. Wong, *Public Opinion and Policy-making, in Social Policy Administration*, 2013, Vol. 47, n. 4, 434–450.

M. Richardson, H. R. Rothstein, *Effects of occupational stress management intervention programs: a meta- analysis*, Journal Occupational Health Psychology, 2008, Vol. 13, n.1, 69-93.

J. Ruotsalainen, C. Serra, A. Marine, J. Verbeek, *Systematic review of interventions for reducing occupational stress in health care workers*, Scandivian Journal Work Environment Health, 2008, Vol. 34, n. 3, 169–178.

Sainsbury Centre for Mental Health, *Mental Health at Work: Developing the Business Case*, Sainsbury Institute for Mental Health, London, 2007, Policy Paper 8.

K. Skagen, A. M. Collins, *The consequences of sickness presenteeism on health and wellbeing over time: A systematic review*, in Social Science & Medicine, 2016, Vol. 161, 169-177.

S. A. Stansfeld, S. Kerry, T. Chandola, J. Russell, L. Berney, N. Hounsome, D. Lanz, C. Costelloe, M. Smuk, K. Bhui, *Pilot study of a cluster randomised trial of a guided e-learning health promotion intervention for managers based on management standards for the improvement of employee well-being and reduction of sickness absence*, in Occupational and environmental medicine, 2015, Vol. 5, n. 10.

A. Tsutsumi, M. Nagami, T. Yoshikawa, K. Kogi, N. Kawakami, *Participatory intervention for workplace improvements on mental health and job performance among blue-collar workers: a cluster randomized controlled trial*, in Journal Occupational Environment Medicine, 2009, Vol. 51, n. 5, 554-563.

J. E. Ware, K. K. Snow, M. Kosinski, *SF-36 health survey: Manual and interpretation guide*, Quality Metric Incorporated, Lincoln, RI, 2000.

K. E. Weick, K.M. Sufcliffe, D. Obstfeld, *Organizing and the process of sensemaking*, in Organization Science, 2005, Vol. 16, 409–421.

World Health Organization, *The World Health Report 2001*, Geneva, 2001.

World Health Organization, *Investing in mental health*, 2003.

World Health Organization, *Mental Health Policies and programmes in the workplace*, 2005.

E. de Zeeuw, E. Tak, E. Dusseldorp, I. Hendriksen, *Workplace exercise intervention to prevent depression: A pilot randomized controlled trial*, in Mental Health and Physical Activity, 2010, Vol. 3, n. 2, 72-77.