Chapter 8

Mentally Healthy Healthcare:
Main Findings and Lessons Learned From a Needs Assessment Exercise at Multiple Workplace Levels

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ABSTRACT

Interventions addressing healthcare workers' mental health should build upon an exhaustive understanding of the major causes of both work-related stress conditions (i.e., job demands) and positive mental health (i.e., job resources) in the workplace at all the levels they might unfold, namely the individual, the group, the leader, and the organization. The chapter draws upon a multilevel workplace mental health needs assessment exercise performed within three different departments of a large healthcare institution and involving both managers and employees. It aims to illustrate the job demands and resources at multiple levels in the targeted organization, differentiate among healthcare workers' mental models of their working conditions, and discuss the research and practical implications of such findings. Also, it offers practical recommendations on how to effectively conduct such activities by, on the one hand, considering both healthcare workers' mental health risk and protective factors and, on the other hand, encompassing multiple workplace levels of analysis.

INTRODUCTION

In the healthcare sector, workers are at risk of suffering from poor mental health due to the characteristics of their jobs. For instance, systematic reviews and meta-analyses (e.g., Membrive-Jiménez et al., 2020) have found adverse working conditions – such as work overload, need to mediate interpersonal conflicts, time pressure, and lack of supervisor support – to contribute to the development of nursing managers' burnout symptoms like emotional exhaustion and depersonalization. Shift work may also negatively impact mental health in healthcare, so that there might be relevant differences between daytime versus night-time healthcare workers' mental health (Brown et al., 2020). Conversely, favorable working conditions – such as work autonomy, opportunities for development at work, and influence over one's work – have been found to negatively correlate with burnout in palliative care nurses (Gómez-Urquiza et al., 2020).

Drawing upon the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2017, 2018; Schaufeli, 2017), academic literature has highlighted both negative and positive aspects of working in healthcare. The JD-R model conceives the work environment as a potential source of either positive or negative mental health depending on how the work environment is designed, organized, and managed. According to this framework, the work environment can be considered as a constellation of job demands and resources, which differently influence workers' mental health. On the one hand, job demands refer to physical, psychological, social, or organizational aspects of the job that require physical or psychological efforts from the worker. Examples may be emotional demands, team conflict, heavy workload, time pressure. As such, job demands can be understood as risk factors for healthcare workers' mental health. Nevertheless, job demands have recently been differentiated into hindering job demands and challenging job demands (Van den Broeck et al., 2010), where the former hinder the optimal functioning of the individual and the latter stimulate work engagement and individual well-being. On the other hand, job resources correspond to physical, psychological, social, or organizational aspects of the job, that healthcare workers can use to counterbalance the costs implied by job demands in terms of physical, cognitive, and emotional energy. Examples may be personal protective equipment, safety devices, cognitive and behavioral patterns, job autonomy, skill variety, performance feedback, support from colleagues or supervisors, role clarity, job control, adequate pay, job security, career opportunities. In addition, recent studies (e.g., Chen et al., 2018) have integrated job resources with personal resources from the positive psychological tradition – such as, for instance, resilience, adaptability, flexibility, optimism, self-efficacy, hope, psychological capital. Job resources are intrinsically motivating and may help healthcare workers fulfill their basic needs, achieve work-related goals, and positively influence their personal growth and development. Although both job demands and job resources can independently impact individual well-being, job resources may buffer job demands by enabling healthcare workers to cope with job demands. In this framework, distress results from an imbalance between job demands and resources; when job demands exceed resources, poor mental health may show up. Specifically, the JD-R model postulates two distinct processes leading to workers' mental health; through the health impairment process, high job demands are causally linked to burnout over time, while through the motivation process, high job resources result in positive outcomes.

Broetje et al. (2020) performed an integration of previous literature reviews on the topic and identified the key job demands and job resources that nursing staff perceive to be present in their work environment. Healthcare workers' main job demands included work overload, lack of formal rewards, and work-life interference. In contrast, main job resources included supervisor support, fair and authentic management,

transformational leadership, positive interpersonal relations, autonomy, and professional resources such as work equipment, access to necessary information, organization of work tasks.

Healthcare workers' mental illness not only constitutes an inherently undesirable human cost – that is, being mentally ill is an unpleasant experience in itself –, but it also translates into worsened quality of care (e.g., Garman et al., 2002; Teoh et al., 2020) and reduced patient safety (e.g., Cheng et al., 2020; Teo et al., 2021). Thus, effective measures should address the working conditions of healthcare workers to positively impact their mental health. On the one hand, interventions should prevent, remove, or reduce factors of healthcare workers' mental illness, namely risk factors or job demands. On the other hand, interventions should promote factors of healthcare workers' positive mental health through protective factors or job resources, thus leveraging what is already going well (e.g., Christensen et al., 2020; Nielsen & Christensen, 2021).

From an ecological perspective, the workplace can be viewed as a system made of different sub-systems, where various patterns of relationships between workers and different working environments occur. Also, workers' mental health can be seen as embedded in such a system. Consequently, mental health interventions should be developed at all systemic levels of the workplace to address potential sources of either good or poor workers' mental health (e.g., Bakker & Demerouti, 2018; Chen et al., 2018; Martin et al., 2016; Teoh et al., 2020). Specifically, sources of mental health and well-being at work can exist at four levels, such as the individual (I), the group or work team (G), the leader (L), and the organization (O). These levels are framed as the IGLO model (Day & Nielsen, 2017; Nielsen & Christensen, 2021; Nielsen et al., 2017). At the individual level, one worker's mental health can derive from work-specific cognitive, affective, and behavioral factors or resources, for instance, work-related self-efficacy and job crafting. At the group level, work-related well-being can be associated with colleagues' support and workgroup climate. The leader level encompasses workers' mental health predictors like line managers' knowledge, skills, abilities, attitudes, behaviors, and support. Finally, at the organizational level, Human Resources Management practices and policies, job design, and occupational health services can play a meaningful role in promoting or hindering workers' psychological well-being. To summarize, the individual level has to do with personal variables, the group level is about team states, processes, and dynamics, the leader level refers to characteristics of and actions implemented by managers, and the organizational level points to how both the work and the working environment are designed, managed, and organized.

When mental health interventions are introduced in organizations, an exhaustive understanding of the work environment is needed (e.g., Di Tecco et al., 2020; Fridrich et al., 2015; Ramos et al., 2020), which can be achieved through a workplace mental health needs assessment exercise. Consistent with JD-R and IGLO, such assessment should encompass, on the one hand, both job demands and job resources and, on the other hand, cover all levels of the workplace system. So, since they can allow the identification of multilevel sources of either good or bad workers' mental health within a given working environment – i.e., barriers to positive mental health at work/major causes of work-related stress and positive aspects of work/major causes of work-related mental health and well-being –, JD-R and IGLO can be deemed as flexible and easy-to-use instruments, not only to perform actual interventions, but also to conduct workplace mental health needs assessment exercises. In this regard, an integration between JD-R and IGLO can be achieved by making the individual, group, leader, and organizational levels serve as a classificatory framework for job demands and job resources. Ultimately, this framework can be deployed as a guide for a workplace mental health needs assessment exercise.

Workplace assessment activities are useful to tailor subsequent interventions according to the specific workers' needs. However, these needs may depend on how workers perceive their work environment. Ac-

cording to Persson et al. (2012), each worker has his/her mental model about his/her work environment. That is, people take cues from the work environment and make sense (e.g., Weick, 1995) and develop a certain understanding of it. This understanding is collectively shared because of common conditions that people may find themselves in together. For instance, one worker's type of perception of a given work environment may depend on the position the worker occupies within the work environment as well as on local working conditions. Similarly, a perceptual distance phenomenon (Gibson et al., 2001, 2009) may occur, whereby managers and employees do not always interpret a given work situation in the same way. This might be the case in healthcare too, where healthcare workers' perceptions of their work environment may differ depending on the hierarchical position they occupy as well as on the belonging department.

To summarize the above, by taking cues from each other at work, people develop shared mental models about their working conditions. So, these appraisals influence what workers see as being a job demand or a job resource. Therefore, it is important to gather workers' mental models of their working environment and to identify which aspects of the work environment they share according to the positions they find themselves in or local conditions. In this vein, workplace mental health needs assessment exercises should be properly contextualized (Nielsen et al., 2014; Vignoli et al., 2017). This means conducting them within the field of homogeneous work environments – e.g., same roles, same physical space, same set of activities, same cultural setting, same working patterns, and so on –, as each work environment is likely to show its own characteristics, peculiarities, and idiosyncrasies, and therefore is not necessarily comparable to others, as much as the knowledge retrieved in one work environment is not necessarily generalizable to another one. In addition, needs assessment activities should adopt a multi-source approach to combine information from different action and acquire a comprehensive picture thanks to the triangulation of perspectives on the targeted assessment issues.

To capture workers' mental models, assessment activities need to involve workers directly (Nielsen et al., 2021). The bottom-up, participatory approach is a guiding principle in this regard. It is one of the most critical success factors of assessment and intervention activities and it consists of the direct participation of relevant employees and stakeholders throughout the whole process. According to Nielsen et al. (2010), the importance of employee participation is because it can (1) help optimize the fit with the local organizational context, (2) be considered an intervention, and (3) facilitate the intervention process. In a bottom-up perspective on workplace mental health promotion, employees should not be seen as passive subjects, but rather as active actors able to change their work environment. Such an approach is able to (1) ensure the use of relevant stakeholders' local knowledge of what the key issues are concerning job demands and job resources, (2) show what changes need to be made and how, and (3) ensure stakeholders feel valued, empowered, and looked after. By using a participatory approach, workers and their managers collectively gain resources, knowledge, and skills to identify workplace problems, develop solutions, and implement changes to improve their working conditions (Nielsen et al., 2014). Thus, employees and managers are to be considered key informants along the assessment activities (Christensen et al., 2019; Tafvelin, 2018).

The present chapter draws upon a multilevel workplace mental health needs assessment exercise performed within a healthcare setting. The overarching aim was to collect suggestions to inform the subsequent design, development, and implementation of multilevel interventions, actions, and initiatives addressing healthcare workers' mental health. The chapter will present the main findings from the needs assessment exercise and discuss a list of key insights and lessons learned from performing the field experience. Particularly, the importance of locally assessing healthcare workers' mental health by means of a contextualized, bottom-up, participatory approach will be argued. Consistently, the focus

of the needs assessment was on three hierarchical positions (i.e., senior managers, middle managers, employees) from three departments of the targeted healthcare organization, since (1) the implementation of subsequent interventions, actions and initiatives was planned in each of these departments, (2) this was thought to enable comparisons across both hierarchical positions and departments as well as to (3) clarify whether mental models of job demands and job resources at the different IGLO levels differed across hierarchical positions and/or departments. Thus, along the chapter, study results will be synthesized and organized according to hierarchical roles and departments and framed using JD-R and IGLO analytical categories. Finally, insights into facilitators and barriers to the implementation and effectiveness of workplace mental health needs assessment exercises in healthcare will be provided, thus raising some practical implications, solutions, recommendations, and directions for future research.

THE WORKPLACE MENTAL HEALTH NEEDS ASSESSMENT EXERCISE

The workplace mental health needs assessment exercise, designed to capture job demands and job resources at IGLO levels, was carried out in three departments of a large healthcare institution in Northern Italy. The institution is one of Italy's largest public healthcare organizations in terms of size and care complexity. Its jurisdiction includes 46 municipalities on approximately 3.000 square kilometers, encompassing over 870.000 inhabitants, of which over 23% is over 65 years old, 8% is over 80 years old, and 11% is made of foreign residents. The organization is divided into six territorial districts, extending across the metropolitan area, and is composed of six hospital departments, four territorial department, and five support departments. It has nine district clinics, a growing number of healthcare facilities for older adults, and outpatient clinics spread throughout the whole metropolitan area. It employs over 9.000 professionals, more than 1.300 of which are physicians and 5.100 are care workers.

In the present chapter, the three targeted departments will be named Department A, Department B, and Department C to preserve privacy and anonymity. Each department is different from the others not only in terms of size and discipline, but also because of unique work and organizational cultures. First, Department A counts around 600 employees and most of the clinical activities performed here by healthcare workers are characterized by emergency and urgency. These activities are multidisciplinary and take place in different buildings spread over and beyond the metropolitan area. Second, Department B counts around 600 employees, and it is a multidisciplinary medical institute whose clinical activities – e.g., prevention, diagnosis, and non-surgical treatment of several diseases – are quite routine as compared to Department A. These activites are also spread over the urban territory, such that Department B may include both people working in central hospitals and people working in peripheral hospitals. Third, Department C counts about 300 employees and it consists of a both clinical and research institute, where the medical and the academic mindsets intertwine. Given its monodisciplinary focus and strive for scientific excellence, Department C is considered as more of a specialized hospital. Different from the other two departments, all activities performed by Department C's healthcare workers take place in one building only. Despite the General Director of the main healthcare organization being the same for all three departments, the management style may differ significantly across them, also due to the presence of different senior and middle managers. Also, the three department do not necessarily show the same working patterns, processes, and procedure, as well as they are not necessarily equipped in the same way in terms of technical, financial, and human resources. All these differences between the

three departments legitimated the need for differently investigating working conditions and healthcare workers' mental models in each of them.

The workplace mental health needs assessment methodology comprised four main parts, such as (1) a quali-quantitative contextual measurement, aiming to capture the extent to which management was committed to dealing with mental health issues, what sort of policies, practices, and programmes were in place in the healthcare setting and how they were perceived, (2) semi-structured individual interviews with middle and senior managers, aiming to understand middle and senior managers' experiences, ideas and perspectives around the needs for multilevel interventions to improve mental health for their employees, (3) focus groups with employees, aiming to gain mutual knowledge of psychosocial factors affecting mental health at work, and (4) an action plan workshop with a Steering Committee composed of main organizational stakeholders, aiming to identify strategies and interventions needed to improve mental health in the workplace in each department. In the targeted organization, middle managers corresponded to coordinators of work teams within the hospital departments – for instance, they might be head nurses managing other nurses or head physicians managing other physicians. In contrast, senior managers corresponded to directors or heads managing all the employees of the hospital departments.

Contextual Measurement: The Organizational Perspective

Methods

Contextual measurement consisted of a survey to be completed by a small group of employee representatives and investigating three thematic areas, namely (1) description of policies, programs, and practices within the organization, (2) perception of policies, programs, and practices, and (3) management support, commitment and priority, and organizational communication, involvement, and participation. The instrument was composed of 7 open-ended questions for part (1). Eleven Likert-type items were used for part (2) and inspired from the Workplace Integrated Safety and Health (WISH) assessment by Sorensen et al. (2018) and López Gómez et al. (2021). Twelve Liker-type items were used for part (3) and inspired from the Psychosocial Safety Climate (PSC-12) assessment by Hall et al. (2010). The Health and Safety Manager, the Workers Safety Representative, and each Director of the three departments contributed to completing the survey. Qualitative text data went through full NVivo content analysis (Bazeley & Jackson, 2013), while quantitative answers were used to complement the summaries of qualitative findings.

Results

Despite work was not reported to be systematically and preventatively designed, organized, and managed with the explicit aim of promoting healthcare workers' mental health – with the only exception being the organization of work shifts –, some structured practices could be identified. Monthly team meetings were reported to be held whereby employees can discuss both work-related issues and concerns about mental health. These meetings were reported to help conflict management thanks to adopting a mediating leadership style. A "feedback meeting" was mentioned as part of a more extensive performance evaluation system and reported as an occasion for employees to express concerns. A "Counsellors of Confidence" group was reported to be elected by senior management to be voluntarily consulted by employees about psychosocial issues. Psychological support service was reported to be provided to employees by the

Health and Safety Department. The occupational physician was reported to hold a decisive role "as a proxy" in guiding workers to suitable facilities for their needs.

Several initiatives aimed to promote workplace mental health were mentioned such as, for instance, organizational climate assessments and work-related stress surveys. However, participation in such initiatives was described as increasable, lack of impact from these initiatives beyond mere diagnosis was perceived, and some participants appeared more aware than others. Interviewees themselves agreed about internal organizational communication being a need to address for the organization to be able to support workers' mental health. Specific professional categories – e.g., vulnerable workers, workers caring for the elderly, workers with problematic children, workers with work-life balance issues – were reported to be able to take advantage of some mental health-related benefits such as telework, flex time, part-time work, reduced waiting time for healthcare professionals when needing medical diagnostic services, and specially discounted public transport subscriptions.

The COVID-19 pandemic outbreak was reported to have negatively impacted these organizational services, compelling workers to remain at work with limited opportunities for holidays. Nevertheless, extra hours were reported to have been rewarded by regional incentives. Organization-wise, COVID-19 impact on the working environment was reported as a passed test for organizational resilience and adaptability, teaching the organization to implement flexible and agile organizational models instead of old and rigid ones. Breaks, training opportunities, adequate equipment, and financial affordability of basic survival needs – i.e., board and lodging – were reported as organization's strengths. On the other hand, despite a reported increase in managerial sensitivity towards workplace mental health matters, it was reported that senior management commitment to the topic could increase by providing substantial support beyond the formal responsibilities, giving employees' mental health priority above productivity, and being proactive rather than reactive towards initiatives to promote mental health at work.

Semi-Structured Individual Interviews: The Managerial Perspective

Methods

Twenty-one one-hour semi-structured individual interviews with senior and middle managers were conducted. In Department A, two senior managers and three middle managers were interviewed (n = 5). In Department B, four senior managers and six middle managers were interviewed (n = 10). In Department C, two senior managers and four middle managers were interviewed (n = 6). The interviews investigated (1) perceptions, knowledge, and attitudes towards mental health in the workplace, (2) hindering and facilitating aspects for the middle/senior managers' role in promoting and/or preventing mental health issues at work, (3) needs towards creating a mentally healthy workplace, (4) barriers and triggers related to implementing workplace mental health initiatives, and (5) proposals to create and implement workplace mental health initiatives successfully. Interviews were audio-recorded and transcribed qualitative text data went through NVivo deductive content analysis (Bazeley & Jackson, 2013).

Results: Job Demands and Job Resources at IGLO levels in the Healthcare Institution as Reported by Senior Managers

In Department A, healthcare workers' intrinsic motivation to ensure patients' health and well-being was mentioned as an individual-level personal resource. At times, this motivation was reported to drive

employees to take initiatives to improve their own well-being. A positive team climate was reported as a group-level resource, as indicated by effective teamwork, cooperation, collaboration, cohesion, open communication, and ability to manage interpersonal conflicts. Especially cooperation among and between senior and middle managers was mentioned, as it was stated, "[…] through working groups, through meetings, which we do periodically, through observation, we try to understand how to strengthen the service and individuals". Nevertheless, mental health problems were reported to be perceived as an individual weakness, which may be due to some degree of stigma – i.e., group-level demand. At the leader level, a compassionate, supportive, and empowering leadership style was self-reported as a crucial resource, especially to pay attention to younger employees and to make employees feel valued; for instance, "I involve interns in our activities and meetings as much as possible. In my opinion, it is an involvement that gives them the feeling of being valued". The middle managers' role was depicted as extremely important, as they hold direct and constant contact with employees – "they are the first contact with the staff, so it is a vital role because they are the ones that absorb a whole series of situations, which are not only organizational but also relational and emotional, at times". At the organizational level, understaffing and high turnover rates were linked to high workload. Continuous and rapid organizational changes, such as departmental restructuring, were linked to employees feeling pressed to adapt to top-down superimposed changes. There was a perception of lacking workplace mental health organizational policies. Limited physical space to properly treat all patients was mentioned. A desire for more open and inclusive organizational communication was expressed. On the other hand, the availability of the Health and Safety Department was perceived as a resource helping to support workers' positive mental health.

In Department B, low employee motivation was mentioned among individual-level job demands. At the group level, the main resource reported was the availability of multidisciplinary teams composed of diverse expertise, skills, and abilities, which were deemed necessary to deal with patients' medical complexity. Team cohesion and open attitudes towards mental health in the workplace were also mentioned. Still, communication between doctors was described as fragmented. At the leader level, leading by example, actively working within the healthcare unit, valuing employee participation and involvement, bottom-up decision-making, and encouraging all professionals to adopt a shared vision supporting departmental identity were self-reported as job resources. For instance, it was stated, "my colleagues have embraced my idea of seeing and thinking of this department as a large operational unit, as a whole". About job demands, a lack of open discussion among all decision-making's stakeholders was mentioned as raising the risk of affecting employees adversely. At the organizational level, senior managers felt their needs supported by the organization as well as workers' psychological well-being ensured by participatory, bottom-up decision-making process. On the other hand, lack of recognition of Department B's value for patients' health, politically determined cuts to beds and personnel, high turnover rates, patient-specific medical complexity, lack of control over tasks and work pace, workload, long shifts, work-life unbalance, lack of professional recognition, and dealing with interpersonally challenging patients and patients' relatives were reported as job demands. For instance, it was stated, "It is a department where the patient is dependent on you, it can be a chronic patient, an elderly patient, a fragile patient as if to say it is a patient who needs commitment and involves a high workload".

In Department C, low work engagement and employee commitment were mentioned as individual-level job demands, especially related to older workers. High work-related emotional loads were linked to medical situations involving children and patients' families. Employees' resistance to change, poor flexibility, and poor openness to learning and development opportunities were cited as to potential obstacles to future interventions' effectiveness. At the group level, interpersonal conflicts, both among

peers and different hierarchical roles, were reported as a job demands, whereas no group-level job resources were mentioned. At the leader level, a supportive, empowering, and intellectually stimulating managerial style was self-reported as fostering team cohesion and providing followers' needs with proper listening as much as possible. Several demands were attached to leaders' role, such as coordination of multiple tasks, monitoring collaboration after organizational changes, and poor learning opportunities for leaders. These demands were reported as preventing leaders from always ensuring a positive team climate. At the organizational level, job demands included excessive bureaucracy, top-down management decisions, lack of workers' involvement in decision-making processes, lack of technological support, unequal distribution of technological devices around the hospital, inaccurate evaluation feedback, and poor career opportunities. These demands were perceived as linked to organizational management's unawareness of actual ward issues. On the other hand, equal career and learning opportunities, high task rotation against boredom and monotony, and the psychological support service in the department were reported as job resources.

Table 1 summarizes job demands and job resources at IGLO levels in the healthcare institution as reported by senior managers.

Results: Job Demands and Job Resources at IGLO levels in the Healthcare Institution as Reported by Middle Managers

In Department A, no job resources were mentioned at the individual level. Conversely, high physical, psychological, and emotional demands were referred to, as well as symptoms of psychological distress and physical fatigue. For instance, it was stated, "As soon as you arrive in the morning, you have to take charge a little bit of the whole team, and also manage their specific situations, person by person, so you have to involve everyone at the same time". At the group level, exchange of positive feedback within teams was reported among job resources. Among job demands, interpersonal conflict was linked to unfair career opportunities and lack of recognition from the management. At the leader level, a supportive and participatory leadership style was described as prompting a sense of organizational identification and shared mission and vision. On the other hand, poor learning opportunities for leaders were perceived as job demands. At the organizational level, long shifts affecting healthcare workers' work-life balance and conflicts with patients and/or patients' relatives were listed among job demands. For instance, it was stated, "[…] the typical customer/patient has changed. The user's expectations have changed, everyone comes a bit arrogant, and it is a very, very difficult position the one that you have". No organizational-level job resources were mentioned by middle managers in Department A.

In Department B, no job demands, nor job resources were mentioned at the individual level. A positive team climate was reported as a group-level resource, as indicated by cohesion, support, collaboration, trust, and good group communication. For instance, it was stated, "[…] being able to feel like someone whose point of view is being asked is already a great openness". At the leader level, lack of leadership training was reported as a job demands, whereas informally acquired leadership skills to manage employees' health and well-being were self-reported as job resources. At the organizational level, organizational support towards workplace mental health initiatives was reported as a job resource, even if such support was described as reactive rather than proactive, and although such initiatives were described as discontinuous and little participated. Understaffing, high turnover rates, long shifts, work overload, and work-life unbalance were listed as job demands. Continuous and rapid organizational changes, such as departmental restructuring, were reported as a further job demand, as it was stated, "There were times

when people found themselves embedded in a new setting and therefore the references between peers and superiors were not yet clear". Finally, infrequent organizational communication and top-down decision-making were reported to make employees' professional value feel not recognized, as it was stated, "there would be a strong need to share what are the goals that we all have to try to achieve, and not so much between peers but between the different existing hierarchies".

Table 1. Job demands and job resources at IGLO levels as reported by senior managers

	Job Demands	**Job Resources**
Department A	*Individual* ● None. *Group* ● Mental health stigma. *Leader* ● None. *Organization* ● Understaffing. ● Turnover. ● Workload. ● Organizational changes. ● Lacking workplace mental health policies. ● Limited physical space. ● Poor organizational communication.	*Individual* ● Intrinsic motivation. *Group* ● Positive team climate. *Leader* ● Compassionate, supportive, and empowering leadership. *Organization* ● Health and Safety Department.
Department B	*Individual* ● Low employee motivation. *Group* ● Fragmented communication between doctors. *Leader* ● Lack of open discussion among decision-making's stakeholders. *Organization* ● Lack of recognition. ● Cuts to beds and personnel. ● Turnover. ● Patients' medical complexity. ● Lack of job control. ● Workload. ● Long shifts. ● Work-life unbalance. ● Organizational changes. ● Interpersonally challenging customers.	*Individual* ● None. *Group* ● Multidisciplinary teams. ● Team cohesion. ● Open attitudes towards mental health. *Leader* ● Leading by example. ● Working within healthcare unit. ● Valuing employee participation. ● Bottom-up decision-making. ● Supporting departmental identity. *Organization* ● Organizational support.
Department C	*Individual* ● Low employee engagement/commitment. ● Emotional load. ● Resistance to change. *Group* ● Interpersonal conflicts. *Leader* ● Coordination of multiple tasks. ● Managing organizational changes. ● Poor learning opportunities for leaders. *Organization* ● Bureaucracy. ● Top-down management. ● Lack of technological support. ● Inaccurate feedback. ● Poor career opportunities.	*Individual* ● None. *Group* ● None. *Leader* ● Supportive, empowering, and intellectually stimulating leadership. *Organization* ● Equal career opportunities. ● Equal learning opportunities. ● Task rotation. ● Psychological support service.

Mentally Healthy Healthcare

In Department C, poor personal flexibility was mentioned as an individual-level job demand. At the group level, positive team climate was reported as a job resource, as indicated by cohesion, openness to mental health problems, and quality teamwork. For instance, it was stated, "There is a beautiful environment and exchange between specialists, which allows us to grow together". On the other hand, concern was expressed that such a cohesive, established, and long-lasting team may reveal counterproductive over time when faced with needs for change or adaptations. For instance, it was stated, "When I came to run this facility, I felt as if I was dealing with people who were all very rigid and reluctant to change". Lack of communication skills training was also mentioned. At the leader level, a supportive, proactive, democratic, and bottom-up leadership style was described. At the organizational level, a lack of psychological support was linked to poor employee involvement. Work overload and cumbersome bureaucracy were mentioned as additional job demands, along with lack of support when dealing with interpersonally challenging patients' relatives. Low rates of sick leaves were mentioned as an organizational-level resource.

Table 2. Job demands and job resources at IGLO levels as reported by middle managers

	Job Demands	Job Resources
Department A	*Individual* ● Psychological distress. ● Emotional demands. ● Physical fatigue. *Group* ● Interpersonal conflicts. *Leader* ● Poor learning opportunities for leaders. *Organization* ● Unfair career opportunities. ● Long shifts. ● Work-life unbalance. ● Interpersonally challenging customers.	*Individual* ● None. *Group* ● Mutual positive feedback. *Leader* ● Supportive and participatory leadership. *Organization* ● None.
Department B	*Individual* ● None. *Group* ● None. *Leader* ● Lack of leadership training. *Organization* ● Understaffing. ● Turnover. ● Long shifts. ● Workload. ● Work-life unbalance. ● Poor organizational communication. ● Top-down decision-making.	*Individual* ● None. *Group* ● Positive team climate. *Leader* ● Employee well-being management skills. *Organization* ● Support to workplace mental health initiatives.
Department C	*Individual* ● Poor flexibility. *Group* ● Excessive cohesiveness. ● Lack of communication skills training. *Leader* ● None. *Organization* ● Lack of psychological support. ● Workload. ● Bureaucracy.	*Individual* ● None. *Group* ● Positive team climate. *Leader* ● Supportive, proactive, democratic, bottom-up leadership. *Organization* ● Low rates of sick leaves.

153

Table 2 summarizes job demands and job resources at IGLO levels in the healthcare institution as reported by middle managers.

Focus Groups and Cognitive Mapping: The Employee Perspective

Methods

Four two-hour focus groups with 27 healthcare professionals were conducted. In Department A, two focus groups took place with a total of three doctors, eight nurses, and four healthcare assistants (n = 15). In Department B, one focus group was conducted with two doctors, three nurses, and one healthcare assistant (n = 6). In Department C, one focus group was conducted with six nurses and two healthcare assistants (n = 8), whereas doctors could not participate. The focus groups investigated (1) perceptions, knowledge, and attitudes towards mental health in the workplace, (2) hindering and facilitating working conditions for mental health issues at work, and (3) needs towards creating a mentally healthy workplace. Focus groups were audio-recorded and transcribed qualitative text data went through NVivo deductive content analysis (Bazeley & Jackson, 2013).

Each focus group included a cognitive mapping exercise to gather healthcare workers' reflections on how job demands and job resources at different IGLO levels interact with each other. To ensure all employees having the same understanding about workplace mental health, the exercise started with an explanatory video of the JD-R model. Then, participants were given five minutes to individually note up to three keywords reflecting the current main issues for their mental health they perceived in their workplace. With this reflection in mind, participants were asked to fill in green post-it notes with at least three job resources and red post-it notes with at least three job demands. This first part of the exercise was carried out without seeing the cognitive map not to bias participants' ideas with predefined categories, but to make them think freely.

Subsequently, the facilitator introduced the actual cognitive map. On the map, some gears illustrated how the IGLO levels interact with each other in the workplace system. There were three smaller gears for the individual (I), the group (G), and the leader (L), placed within a larger gear for the organization (O). Each gear had some example work-related categories attached to its teeth, typical for a (un)healthy workplace, which the facilitator provided some brief explanation about. However, there was also room for additional categories, if needed, which the facilitator could fill in by the unmarked teeth on the gears. Employees were instructed to place their post-it notes on the most suitable category. The facilitator could assist participants by discussing the reported job demand or job resource. Post-it notes that could not be placed clearly could be parked on a "P" area and discussed further later. Finally, participants' statements were discussed collectively in the group. The facilitator sorted participants' statements according to the map categories to check whether some were misplaced and/or pertained to multiple categories. "Parked" statements were discussed to identify the best fit on the map. The facilitator moved the green and red post-it notes around the map and drew relationships, if any, with a marker pen. (S)he summarized the most important discussion points and asked if participants had anything to add before concluding the meeting.

Results: Job Demands and Job Resources at IGLO levels in the Healthcare Institution as Reported by Employees

In Department A, healthcare professionals mostly mentioned intrinsic motivation to ensure patients' health and well-being as an individual-level personal resource. This motivation was described as necessary when facing difficult situations or interpersonally challenging customers. Personal initiative for discussing workplace mental health with colleagues and searching for improvement strategies was cited. Feeling adrenalin from emergency activities was reported as a challenging job demand. For instance, it was stated, "We become emergency-addicted". One the other hand, repetitiveness and boredom from most work activities were reported as hindering job demands. At the group level, teamwork was referred to as a fundamental job resource. For instance, it was stated, "My motivation for this work stays high only because of the group support". Doctors and nurses listed peer mutual support, listening in difficult working conditions, organizational citizenship behaviors, strong sense of community, positive work climate, and team cohesion as crucial group-level job resources. Nevertheless, interpersonal conflicts, blaming attitudes, and disrespectful behaviors could be identified as group-level job demands. At the leader level, the importance of team coordinators' role was underlined, but communication from and to leaders was described as improvable. At the organizational level, lack of scheduled meetings, policies, practices, and trainings on workplace mental health was reported as job demand making employees perceive the organization as distant from their needs. Also, top-down decision-making process about shift management, turnover, and job rotation between central and peripheral hospitals were reported to negatively impact work-life balance. For instance, it was stated, "You are not asked if you want to do the rotation, or if you are available". Among job resources, a specialized team member offering psychological support was reported to be available in one team. Desire for generalizing this service to the whole department was expressed.

Figure 1 and Figure 2 show the cognitive maps from the first and second focus group at Department A. The maps allowed to gather links and interactions among job demands and job resources at different IGLO levels. For instance, an organizational-level job demand such as lack of structured psychological support was linked to an individual-level job demand such as emotional burden. Two organizational-level job demands, such as perceived lack of autonomy and perceived task unclarity, were traced back to a leader-level job demand such as lack of middle managers' communication as well as to an organizational-level job demand such as top-down decision-making. An individual-level job resource such as initiative for discussing workplace mental health was reported to lead to a group-level job resource such as positive relationships with colleagues. Consistent with JD-R theory, some job resources were reported as potentially buffering some job demands. For instance, an individual-level job resource such as further development of stress management skills was mentioned as a possible solution to both emotional burden and conflicts with customers. At the group level, team cohesion was mentioned as a possible resource to increase the sharing of both positive and negative experiences at work.

In Department B, high intrinsic motivation was mentioned as an individual-level personal resource. For instance, it was stated, "[…] let us do not forget, first of all, our passion about patients and medicine". At the group level, team cohesion, effective cooperation, and positive relationships with colleagues were listed as job resources. At the leader level, job demands included inadequate middle managers' behaviors and skills, such as poor communication and neglecting employees' health and well-being needs. At the organizational level, several job demands were reported such as attributing more value to performance rather than to human needs – for instance, it was stated, "they think of us as numbers, not as people"

155

–, lack of workplace mental health policies, top-down decision-making about holidays and shifts, and personnel understaffing as affecting workload. The latter was described as potentially undermining team cohesion. Organizational demands were described as negatively influencing employee commitment. For instance, it was stated, "a psychologically healthy workplace does not make you want to run away". Additional job demands included work-life balance issues and aggressive customers – healthcare professionals stated patients and their relatives should be made aware of the specific healthcare roles. Answering patterns could be observed per occupational categories. For instance, nurses mentioned consistently higher workload than doctors. Healthcare assistants expressed desire for being included in morning debriefings occurring between doctors and nurses.

Figure 1. Cognitive map from first focus group at Department A. Red boxes = job demands; green boxes = job resources

Figure 3 shows the cognitive map from focus group at Department B. Organizational-level job demands such as lack of recognition, lack of workplace mental health policies and practices, top-down decision-making, personnel understaffing, and high workload were linked to individual-level job demands such as low organizational commitment. A vicious cycle was established between the organizational and individual level, whereby organizational-level job demands would decrease organizational commitment which, in turn, would determine personnel understaffing and high workload. The latter was also described as threatening team cohesion and positive relationships with colleagues at the group level. Finally, an individual-level job demand such as frustration was traced back to a leader-level job demand such as managers' poor communication.

Figure 2. Cognitive map from second focus group at Department A. Red boxes = job demands; green boxes = job resources; KSAOs = knowledge, skills, abilities, and other characteristics

Figure 3. Cognitive map from focus group at Department B. Red boxes = job demands; green boxes = job resources; HR = human resources

In Department C, intrinsic motivation and healthcare workers' dedication to work were mentioned among individual-level job resources. At the group level, team cohesion, team support, and positive team climate were listed among job resources. On the other hand, ineffective communication processes were also reported as a job demand. For instance, it was stated, "There is a lack of communication on how information is received and how it is given". At the leader level, inadequate leadership was mentioned as a job demand entailing inability to effectively manage communication processes, conflictual interpersonal relationships, and employees' workload due to the need to manage one's own already high workload. For instance, it was stated, "Even if you have no family and you are young, it is still a problem not knowing shifts and schedules and, in the long run, not having stability". At the organizational level, lack of involvement in rota planning and short notice about work schedule were reported as job demands leading to work-family issues, especially among younger employees. On the other hand, positive relationships with patients, recognition, appreciation, development opportunities through intensive job rotation – especially for nurses –, and implementation of – although discontinuous – psychological support initiatives were listed as job resources.

Figure 4 shows the cognitive map from focus group at Department C. Organizational-level job demands such as lack of workplace mental health initiatives, policies, and practices and lack of structured and psychological support were linked to an individual-level job demand such as emotional burden. In turn, emotional burden was perceived as threatening an individual-level job resource such as intrinsic motivation to ensure patients' health and well-being. Organizational issues were also traced back to leadership issues.

Figure 4. Cognitive map from focus group at Department C. Red boxes = job demands; green boxes = job resources; HR = human resources

KEY INSIGHTS

The workplace mental health needs' assessment exercise allowed to achieve three main goals, such as (1) gathering job demands and job resources that healthcare workers perceived at different IGLO levels in their workplace, (2) identifying similarities and differences in perceptions – i.e., shared versus diverging mental models – of working conditions across the considered hierarchical positions and departments, and (3) informing a tailored action plan to enhance workplace mental health within the targeted organizational contexts. These goals are delved in the sections below.

Similarities and Differences Among Healthcare Workers' Mental Models

Integration between the JD-R and the IGLO models allowed to identify job demands and job resources that healthcare workers perceived at the individual, group, leader, and organizational levels in the targeted healthcare organization. Also, the contextualizing, bottom-up, participatory approach towards the workplace mental health needs' assessment exercise allowed to gather the extent to which different key stakeholders in different departments agreed or disagreed about major issues related to workplace mental health. That is, it was possible to capture similarities and differences in both the nature and the content of reported workplace mental health issues across hierarchical positions and healthcare departments. Ultimately, such an approach allowed to verify whether workplace mental health needs from senior managers versus middle managers versus employees – both within and between departments –, as well as those from Department A versus Department B versus Department C – both within and between hierarchical positions –, aligned or misaligned. In other words, a picture of shared versus diverging mental models of working conditions within the targeted organizational contexts across the considered hierarchical positions and departments could be taken thanks to collecting a variety of views, perceptions, and needs.

Senior managers tended to agree about low employee motivation and low work engagement as individual-level job demands, although this was not the case for senior managers in Department A. While senior managers from Department B and Department C agreed on employee motivation as an area for improvement, senior managers from Department A mentioned healthcare workers' intrinsic motivation to promote patients' health and well-being. Also, senior managers tended to agree about teamwork – e.g., team cohesion, peer support – as a group-level job resource. However, this was not the case for senior managers in Department C, who consistently reported frequent interpersonal conflicts as a group-level job demand. Senior managers from all three departments agreed about effective leadership as a crucial leader-level job resource, entailing supporting, valuing, and empowering employees as well as listening to their needs. Senior managers from Department A and Department B agreed about high turnover rates as an organizational-level job demand, while senior managers from Department C did not mention it. Senior managers from Department A and Department C agreed about top-down decision-making as an organizational-level job demand, whereas senior managers from Department B even reported bottom-up decision-making as an organizational-level job resource. Finally, senior managers from Department A and Department C agreed about psychological support services as an organizational-level job resource, while senior managers from Department B did not mention it.

Middle managers tended to report few or no issues at the individual level. As an exception, middle managers from Department C – like senior managers – mentioned low employee flexibility as an individual-level job demand. Middle managers from all three departments agreed about teamwork – e.g., team cohesion, peer support, positive social climate – as a group-level job resource. Nonetheless, middle

managers from Department C reported concerns about excessive team cohesion in face of needs for change and adaptation. Also, middle managers from Department B mentioned effective team communication as a group-level job resource, whereas middle managers from Department C reported lack of training in communication skills as a group-level job demand. Middle managers from all three departments agreed about supportive and participatory leadership as a crucial leader-level job resource. Nonetheless, middle managers tended to agree about lack of formal training in leadership skills as a leader-level job demand. Middle managers from all three departments agreed about high workload, long shifts, and work-life balance issues as intertwining organizational-level job demands. Middle managers from Department B and Department C agreed about top-down decision-making as an organizational level job demand, whereas middle managers from Department A did not mention it. Also, middle managers from Department B and Department C agreed about limited psychological support services, although middle managers from Department B described workplace mental health initiatives as discontinuous and little participated, whereas middle managers from Department C described workplace mental health initiatives as poor.

Employees from all three departments reported intrinsic motivation to promote patients' health and well-being as an individual-level job resource – and this finding was quite at odds with both senior and middle managers' reports. All employees mentioned positive social climate, team support, and team cohesion as crucial group-level job resources – and this finding was consistent with both senior and middle managers' reports. Nevertheless, employees from Department A and Department C mentioned interpersonal conflicts and ineffective team communication as group-level job demands. Employees from all three departments agreed about ineffective leadership as a leader-level job demand, which was also associated with interpersonal conflicts and poor communication. Finally, all employees agreed about top-down decision-making, lack of professional recognition, and work-life conflicts as organizational-level job demands. Employees from Department B reported conflicts with customers as a job demand, whereas employees from Department C even described positive relationships with patients and patients' relatives as a job resource. Employees from Department A and Department B agreed about lack of workplace mental health policies and practices, whereas employees from Department C mentioned an organizational effort to implement – even if discontinuous – psychological support initiatives.

Overall, shared versus diverging mental models of local working conditions could be gathered across both hierarchical positions and departments. On the one hand, employees mentioned intrinsic motivation as an individual-level job resource more than senior and middle managers did. In fact, senior and middle managers described low employee motivation as an individual-level job demand. On the other hand, senior and middle managers mentioned effective leadership as a leader-level job resource more than employees did. In fact, employees described ineffective leadership as a leader-level job demand. All healthcare workers tended to agree about effective teamwork as a crucial group-level job resource. Also, all healthcare workers tended to agree about organizational-level job demands, such as top-down decision-making, lack of workplace mental health initiatives, and lack of psychological support services. In general, employees seemed to agree on workplace mental health issues more than senior and middle managers. Also, the organizational level seemed to be the most critical one for all healthcare workers.

Ultimately, workplace mental health needs' assessment findings might vary within the same healthcare organization, as well as within the same hierarchical position – depending on healthcare departments – and within the same healthcare department – depending on hierarchical positions. Differences in results from assessment exercises may depend on perceptions of local working conditions. This was the case in the herein described workplace mental health needs' assessment exercise since each department the assessment activities took place in corresponded to a unique work and organizational culture – e.g., workers

providing healthcare versus research services, workers in central versus peripheral hospital, and so on. Thus, such differences reflect the organizational complexity of the targeted public healthcare institution, which is to be considered when performing workplace mental health needs' assessment exercises.

Suggestions for Improvement and Action Plan

The needs' assessment exercise allowed to inform a tailored action plan to enhance workplace mental health within the targeted organizational contexts. To ensure fit between the organizational context and subsequently implemented interventions (Peters et al., 2020), and thanks to the participatory approach, healthcare workers themselves offered concrete, practical, and applicable suggestions for improving mental health in their work environments. These suggestions varied according to shared or diverging mental models about local working conditions.

In Department A, middle managers suggested individual-level training programmes for employees to reduce the emotional burden associated with dealing with interpersonally challenging customers, as well as leader-level training programmes for managers to develop stronger delegating skills. Training was recommended to take place during working hours to ensure healthcare workers' participation by preventing prolonging workload after the working day. Suggestions for organizational-level interventions included the provision of better career development opportunities and structured psychological support services. Particularly, debriefing sessions were envisaged whereby healthcare workers could discuss lessons learned from the COVID-19 experience. Also, a structured job rotation plan was suggested to increase individual skills and reduce boredom and resistance to change. Special attention was recommended to newcomers and older workers, since the former may find themselves involved in sudden and unstructured job rotations, whereas the latter's expertise should be exploited in end-of-career plans. Another suggestion entailed the implementation of flexible and innovative management models to overcome heavy bureaucracy; for instance, it was stated, "We have a shift management system that appeared to look innovative, but it is cumbersome".

Employees from Department A suggested scheduled clinical discussions to enhance individual skills and critical thinking about work. Structured psychological support was described as a priority. Particularly, top-down psychological support program was suggested to reduce workplace mental health stigma. For instance, it was stated, "We may need some hours of supervision, in which a psychologist comes to us, and everyone in the group talks about what they want. It could also be useful on an individual level, to talk about work but also other stuff, and this should be openly welcomed".

In Department B, senior managers mainly suggested leader-level interventions, with particular attention to middle managers as they find themselves between managing employees' needs and achieving organizational goals (cfr., Gjerde & Alvesson, 2020). Leveraging upon top managerial support towards workplace mental health initiatives and ensuring constant monitoring of activities were recommended as strategies to promote interventions' long-term sustainability as well as workers' participation and perceptions of usefulness. Also, organizational-level interventions were suggested as solutions to work unpredictability, resource cuts, and patients' medical complexity; these included the refinement of organizational models and the conduction of thematic workshops where healthcare workers could disclose problems and perspectives.

Middle managers from Department B suggested individual-level training programmes for employees to promote communication skills when dealing with healthcare customers. Also, training on technical skills was suggested to facilitate staff rotation in hospital departments suffering from personnel shortages.

Suggestions for group-level interventions included the improvement of interdepartmental communication. Leader-level training programmes for managers were suggested to support open dialogue with employees. Managing technological malfunctioning, providing structured psychological support – particularly to deal with COVID-19's mental health aftermaths –, and raising awareness about workplace mental health issues were listed as organizational-level interventions.

In Department C, middle managers suggested individual-level training programmes for employees to promote coping strategies in face of emotional distress associated with COVID-19 and interpersonally challenging customers. Physical activity group sessions were suggested to promote interprofessional team climate. Suggestions for organizational-level interventions included providing structured psychological support to guide healthcare workers through the COVID-19 experience, establishing periodical job rotation to facilitate a shared vision of organizational needs, enhancing work-life flexibility, valorizing human resources, and scheduling shifts based on individual preferences – e.g., based on where one lives, based on whether one prefers to work at day rather than at night, and so on.

Employees from Department C suggested regular meetings to share objectives, work plans, and updates. Psychological support services were suggested to improve healthcare workers' communication skills and behavioral strategies to manage problematic work situations or challenging customers.

As a final phase of the workplace mental health needs' assessment process, an action plan was developed. Healthcare workers' needs and suggestions were reported to the project's Steering Committee, which was composed of key stakeholders from each targeted hospital department. The aim was to define consistent interventions for each department. Factors to job resources – i.e., elements to preserve – and factors to reduce job demands – i.e., elements to improve – were identified. In Department A, elements to preserve included work engagement and resilience, team cohesion and support, leader-member exchange and support, and internal psychological support services. On the other hand, elements to improve included intra-team and inter-departmental team building, leader-level training courses, and job rotation. In Department B, elements to preserve included shared vision and identity, engagement, intrinsic motivation, team cohesion and support, and internal psychological support services. On the other hand, elements to improve included communication skills – i.e., between healthcare workers and customers, as well as between managers and employees. Finally, in Department C, elements to preserve included intrinsic motivation, intergenerational collaboration, and internal psychological support services. On the other hand, elements to improve included stress management skills, team building, and leadership skills.

LESSONS LEARNED AND RECOMMENDATIONS

Some lessons could be learned from performing the workplace mental health needs assessment exercise. It yielded several insights which may reveal useful to both researchers and occupational mental health practitioners to carry out workplace assessment exercises in the healthcare sector.

First, in line with Nielsen et al. (2013), the constant interaction with an organizational representative acting as a main contact person can be recommended to implement activities as planned. For instance, this may prove particularly relevant about sampling. At the time of conducting the herein described assessment exercise, healthcare personnel's working time in the targeted organization was fully devoted to facing COVID-19's first wave in Italy. Also, work shifts rotation influenced recruitment in focus groups. As a result, this scenario made convenience sampling unavoidable. Then, available healthcare workers

were recruited thanks to close collaboration with the Health and Safety Manager, who played a pivotal role in facilitating employee participation and engaging the final interviewed sample.

Similarly, the instalment of a project's Steering Committee can be recommended. In the current case, the Steering Committee was composed of the Health and Safety Manager, the Workers Safety Representative, the Directors of the three targeted departments, and the Nursing Manager. Each stakeholder provided a specific contribution. The Health and Safety Manager and the Workers Safety Representative planned and implemented a structured communication strategy, while the three Directors and the Nursing Manager facilitated employee participation and ensured the project-organization fit. Employee participation was facilitated by encouraging healthcare workers to take part in the upcoming needs assessment activities, while project-organization fit was ensured by making sure that the relevance and usefulness of the upcoming needs assessment activities were correctly perceived in each working environment. In addition, communications from the General Director of the healthcare institution revealed crucial to show the importance of the project and to guarantee healthcare workers' commitment. Ultimately, it is important to involve all the relevant stakeholders of the foreseen activities, otherwise it may be difficult to access the targeted working environments. Nevertheless, due to ongoing organizational changes, the stakeholders' engagement operation was not without obstacles. That is, when relevant stakeholders changed, effort was required to take the new stakeholders on board. For instance, the election of a new General Director called for a need to re-establish a common vision on the running workplace mental health project. Also, the Health and Safety Manager's retirement slowed down the process due to bureaucracy, despite this person not leaving the project itself.

Regarding the quality of gathered data, recruiting healthcare workers from different hierarchical positions and hospital departments may have ensured a sufficient degree of triangulation (Ramos et al., 2020). It also allowed to take the perceptual distance phenomenon into account (Gibson et al., 2001, 2009). However, as a drawback of the deployed recruitment and data collection strategy, ingroup bias might have occurred within focus groups. For instance, doctors, nurses, and healthcare assistants in Department B seemed to express consistent opinions depending on the belonging occupational group. Further, a positive image of leadership was likely to stem from the semi-structured individual interviews. Leaders may tend to overestimate themselves and their contribution (Stone et al., 2002) to creating a mentally healthy workplace. Therefore, the role of the interviewer in clarifying expectations related to the needs assessment is crucial; (s)he should encourage participants' willingness to reveal their sincere viewpoints by creating a climate of psychological safety within a comfortable and convivial meeting environment.

Another challenge in interviews and focus groups related to ethics. In the herein described assessment exercise healthcare workers were reassured that their privacy would be protected. Accordingly, each worker was asked to self-generate a code to preserve their anonymity when data would have been stored while allowing researchers to link them to the participants. Before participation, all workers were allowed to read an informed consent form detailing the participation procedure, the contents of the project, the purpose of the data collection, the modalities of future dissemination of data, the participants' rights, and the contact points for any inquiry. It was underlined that participation in the assessment activities was voluntary and that it could be withdrawn at any time without any consequence. Trust-based measures were taken by focus groups' facilitators by clearly explaining the importance of every participant's compliance with the ethical requirements of anonymity, privacy, and confidentiality. Each worker was advised to respect the confidentiality of what was shared by others during the focus group as well as to respect the others' words and viewpoints without judging or attacking anyone. Also, facilitators com-

mitted to a strict code of ethical scientific and professional conduct whereby they should not disclose any sensitive information they might be aware of regarding the interviewed persons.

Finally, the development of an actional plan as a final phase of the workplace mental health needs' assessment process can be recommended. The action plan signals that the assessment exercise is not an end, but rather a means to the design and development of effective interventions to reduce job demands and promote job resources at multiple workplace levels. As such, this phase may help to strengthen the partnership between the assessors and the organizational stakeholders. Involving organizational representatives within the action plan phase allows them to have their say about future initiatives based on the results from the needs assessment, which can maximize the feasibility and monitorability of implemented actions.

CONCLUSION

Interventions addressing healthcare workers' mental health should build upon an exhaustive understanding of causes of stress and factors of positive mental health in the workplace. Also, interventions should reduce job demands and promote job resources at all workplace levels, such as the individual, the group, the leader, and the organization. As a mean to the design and development of tailored interventions, workplace mental health needs assessment exercises should follow the same logic. Particularly, participatory, bottom-up assessment activities are required to directly ask healthcare workers what they feel about their working environment, as this cannot be known a priori.

The present chapter drawn upon a workplace mental health needs assessment exercise involving senior managers, middle managers, and employees from three departments of a large healthcare institution in Northern Italy. Healthcare workers' perceptions of local working conditions could be gathered at different IGLO levels via semi-structured individual interviews and focus groups. By integrating the JD-R and IGLO models into one analytical framework, two separate research strands were linked, and such an integrated framework can be used in future healthcare workers' mental health studies. Also, in line with Nielsen et al. (2013), Nielsen et al. (2014), and Abildgaard et al. (2018), cognitive mapping revealed effective in mapping job demands and job resources at different IGLO levels, how they interact and, thus, what interventions can be developed. Furthermore, similarities and differences in mental models across hierarchical positions and hospital departments could be analyzed.

Practical recommendations on how to effectively conduct assessment activities could be developed. Therefore, the present chapter contributes to informing some core design and implementation principles of workplace mental health needs' assessment activities in healthcare settings. These includes, among others, encompassing both job demands and job resources at individual, group, leader, and organizational levels; constantly interacting with relevant organizational representatives and stakeholders; installing a devoted Steering Committee; clarifying expectations towards the needs assessment exercise; ensuring psychological safety while conducting the assessment activities; and including an action plan phase at the end of the needs' assessment process. Moreover, throughout the workplace mental health needs assessment exercise, healthcare workers themselves, both managers and employees, provided some practical suggestions for improvement of mental health in their workplaces, to inform an action plan and choose interventions to enhance workplace mental health. Main foreseen solutions included, among others, training programs on both hard – e.g., job-related techniques – and soft skills – e.g., emotional distress and interpersonal conflict management, leadership, and communication –; creating better ca-

reer development opportunities; refining job rotation plans; renewing the organizational management models; introducing both work-oriented and people-oriented workshops; scheduling physical activity group sessions; and providing structured psychological support services.

Researchers and occupational mental health practitioners are hereby provided with a usable assessment methodology to gather job demands and job resources that healthcare workers might experience at different workplace levels. The methodology considers the local conditions healthcare workers may find themselves working in or their hierarchical positions within their peculiar work environment. In general, the described procedure might inform the design and implementation of workplace mental health needs' assessment activities in healthcare settings, but also the development of interventions based on suggestions for improvement from participants – as long as some critical issues are taken care of, such as, for instance, the engagement of all relevant stakeholder, the recruitment and sampling of participants, the potential methodological bias which may threaten the quality of collected data, and ethical challenges.

One limitation of the presented work relates to the concept of shift work and the negative effects that shift work has been found to cause to healthcare workers (Brown et al., 2020). Relevant differences might exist in the mental health of daytime versus nighttime healthcare workers. However, in the described study, information about whether the involved healthcare workers were shift workers, daytime workers or nighttime workers was not systematically collected, as it was out of the scope of the research and intervention project that the chapter was based on. It may have happened to come across this type of information during the interviews and focus groups that have been run with the healthcare workers, but this would not be enough to perform a proper analysis or state a precise distinction between such categories of workers. Thus, it is not exactly clear if all healthcare workers that participated in the study were daytime workers or whether any nighttime workers were tested. This could impact the generalizability of the retrieved results. Nighttime workers may have provided different responses and may have different managers, which could influence the results.

Recommendations for effective implementation of workplace mental health needs' assessment activities in healthcare should be considered considering the constraints that may be imposed by the highly dynamic contingencies that healthcare settings may find themselves in. The organizational impact of COVID-19 could be one example. Contingencies may prevent the involvement of key actors, delay the process as compared to what was initially planned, and determine deviations from or adjustments to the original project. Therefore, flexibility and adaptivity of deployed instruments, tools, procedures, techniques, and methodologies may reveal critical factors for those willing to perform workplace mental health assessments in the healthcare sector.

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KEY TERMS AND DEFINITIONS

Bottom-Up Decision-Making: A type of organizational decision-making process whereby employees are seen as key informants about working conditions as well as active actors able to change their workplace environment. As such, employees are directly involved and called to participate in, contribute to, and influence the decision-making process itself.

IGLO: Ecological model of mental health in the workplace. The model posits that sources of mental health and well-being at work exist at five different levels, namely the individual (I), the group or work team (G), the leader (L), and the organization (O).

Job Demands: The physical, social, or organizational job aspects requiring sustained physical or psychological effort and costs, which have a detrimental effect on employees' well-being and job performance.

Job Resources: The physical, psychological, social, and organizational aspects of a job that can help employees achieve work goals, which can boost employees' well-being and job performance and buffer the detrimental effect of job demands.

Mental Health: A state of well-being in which an individual realizes his/her own abilities, can cope with the everyday stresses of life, can work productively, and can contribute to his/her community. Mental health is an integral and essential component of health, which is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. Mental health is more than just the absence of mental disorders or disabilities.

Needs Assessment: Data collection process aimed to identify organizational needs in terms of work-related mental health, and to select tailored interventions addressing the satisfaction of those needs subsequently.

Personal Resources: The physical or psychological aspect of an individual that can help achieve work goals, well-being, and performance.

Top-Down Decision-Making: A type of organizational decision-making process whereby employees are seen as passive subjects of the workplace environment and, therefore, unable to change their workplace environment. As such, employees are not involved in the process and decisions are made by the managers only.

Workplace Well-Being: All aspects of working life, from the quality and safety of physical environment, to how workers feel about their work, their working environment, the climate at work and work organization, which is perceived to be primarily determined by work, and that can be influenced by workplace interventions.