A mixed-method study on the bright side of organizational change: Role clarity

and supervisor support as resources for employees' resilience

Chiara Bernuzzi<sup>a</sup> (ORCID ID:0000-0003-0703-1398),

Valentina Sommovigo<sup>a</sup> (ORCID ID:0000-0001-9273-5706),

Marina Maffoni<sup>b</sup> (ORCID ID:0000-0002-3360-7293),

Ilaria Setti<sup>a</sup> (ORCID ID:0000-0001-7901-4226),

Piergiorgio Argentero<sup>a</sup> (ORCID ID:0000-0002-0494-4290)

<sup>a</sup> Department of Brain and Behavioural Sciences, Unit of Applied Psychology, University of Pavia,

Pavia, Italy

<sup>b</sup> Istituti Clinici Scientifici Maugeri IRCCS, Psychology Unit of Montescano Institute, Montescano

(PV), Italy

Address for correspondence: Chiara Bernuzzi, Department of Brain and Behavioural Sciences, Unit

of Applied Psychology, University of Pavia, Piazza Botta 11, 27100 Pavia, Italy.

E-mail: chiara.bernuzzi01@universitadipavia.it

Telephone number: 0382986126

Chiara Bernuzzi is currently a doctoral student at the University of Pavia, Department of Brain and

Behavioural Sciences (Italy). Her research interests include employee's wellbeing, personal resources and

work-life interface. Email: chiara.bernuzzi01@universitadipavia.it

Valentina Sommovigo (PhD), work and organizational psychologist, is researcher and lecturer in Work and

Organizational Psychology at Sapienza - University of Rome (Italy). She is specialized in research on

workplace aggression and occupational well-being. She completed her PhD in Psychology, Neuroscience and

Medical **Statistics** from University of Pavia University of Limerick. Email: and

valentina.sommovigo@uniroma1.it

Marina Maffoni (PhD) is a clinical psychologist at the ICS Maugeri Institute of Montescano (Pavia - Italy).

Her main areas of interest are the following: qualitative and mixed-methods research, healthcare professionals'

1

distress and well-being, moral distress, medication and behavioural adherence, clinical psychology,

neuropsychological assessment. She completed her PhD in Psychology, Neuroscience and Data Science from

University of Pavia. Email: marina.maffoni@icsmaugeri.it

Ilaria Setti (PhD) is an Associate Professor in Work and Organizational Psychology at University of Pavia

(Italy). She studies topics related to occupational well-being, in particular she is an expert in psycho-social

risks among helping professions (healthcare and emergency workers), with specific reference to burnout, post-

traumatic symptoms, violence at work. Email: ilaria.setti@unipv.it

Piergiorgio Argentero is a Professor in Work and Organizational Psychology at University of Pavia and

University of Roma-LUMSA (Italy). He conducts research and professional activities in the following areas:

assessment of skills and performance, validation of tools for the evaluation of personal and organizational

characteristics, organizational well-being, return to work, engagement, motivation and satisfaction at work.

Email: piergiorgio.argentero@unipv.it

**Abstract** 

This mixed-method study aims to analyse how and when employees' perceptions of positive organizational

change may be related to role clarity and resilience and conditional on supervisor support levels. A total of 40

employees participated in focus groups. Thematic analysis revealed that participants perceived differently

organizational change, role, supervisor support, and resilience. A total of 178 employees completed

questionnaires analysing perceptions of organizational change, role clarity, resilience, and supervisor support.

Quantitative analyses revealed that role clarity mediated the association between employees' perceptions of

positive organizational change and resilience. This relationship was enhanced by supervisor support. Overall,

the results suggest that employees who positively perceive organizational change may more easily understand

their new role and demands, which is positively related to their resilience. When employees perceive being

supported by their supervisors, they are more likely to perceive themselves as resilient, even in the face of

organizational change. Our results suggest that organizations should adopt a transparent change management

communication plan based on employee involvement.

Keywords: Organizational change; Role clarity; Resilience; Supervisor support; Mixed-method study

2

#### **MAD** statement

This study moves an important step forward in both the change management and resilience literature, as it is the first to examine the mechanisms and boundary conditions explaining how and when employees' perceptions of positive organizational change may facilitate resilience. By adopting a positive psychology perspective and a mixed-method design, this study identifies role clarity and supervisor support as two important resources that allow employees to benefit from organizational change. As such, it would contribute to providing new insights on how employee resilience can be enabled during organizational change.

#### Introduction

Nowadays, organizational change (i.e., actions aimed at modifying the structure or culture of an existing organization; Herold et al., 2008) occurs even more frequently due to the rapid globalization and technological innovations (Rahaman et al., 2020; Herold & Fedor, 2008). This process is vital because it enables companies to remain competitive, continuously adjusting to the market environment (Rahaman et al., 2020). However, as organizational change requires employees to adapt to new working conditions, it may be a stressful agent that can elicit stress reactions and affect employees' well-being (De Fátima Nery et al., 2020). According to the Transitional Model of Stress and Coping (TMSC; Lazarus & Folkman, 1984), this depends on an employee's subjective appraisal of the situation: how an individual cognitively appraises a certain organizational change determines how he/she reacts to that change (Tavakoli, 2010). This explains why some workers may be negatively affected by organizational change, while others - especially those who positively perceive this change - may not or to a lesser extent (Ciampa et al., 2018). These perceptions may also influence the successful implementation of an organizational change (Gupta & Singh, 2021). Indeed, managers' underestimation of employees' perceptions (Greenhalgh et al., 2004) may explain why it has been estimated that only a third of organizational change initiatives are regarded as a success (Brown et al., 2016). Thus, investigating employees' perceptions of organizational change is of the utmost importance to allow the successful implementation of the change itself, maximize the benefits, and minimize the negative consequences for workers (Cullen et al., 2014). However, most empirical

studies considering the individual-level effects resulting from workers' subjective perceptions of organizational change have shown that employees tend to negatively appraise (e.g., Fugate et al., 2008) and respond to change initiatives in their workplace (e.g., Oreg et al., 2011). This research has also concluded that the experience of (greater) change is harmful to employees' well-being and job attitudes (Contreras & Gonzalez, 2021). Additionally, although there is evidence that how an employee views a certain organizational change (i.e., positive, negative, neutral) can better explain how he/she reacts to his/her changing workplace than the total quantity of changes he/she experiences (Cullen-Lester et al., 2019), little is known about the bright side of organizational change for employees' personal resources.

According to the Conservation of Resource (COR) theory (Hobfoll, 2001), personal characteristics are resources to the extent that they help individuals face stressors and maintain smooth functioning in the face of demanding situations (Montani et al., 2020). Among these, resilience is a particularly relevant personal coping resource because, unlike personal traits, it can be improved through specific training (Chitra & Karunanidhi, 2021; Brassington & Lomas, 2021). It refers to a dynamic process that enables individuals to bounce back from adversities, recover their strengths and adapt to stressful situations (Bernuzzi et al., 2021). Drawing on the COR theory, when employees function within resource-rich work environments, they have fertile ground to develop and accumulate resource gains (Hobfoll et al., 2015). Then, employees who work in work settings that are rich in job resources are more likely to become resilient (Hobfoll et al., 2015). Indeed, previous studies showed that resilience can stem from a person's positive appraisal of external events (Lazarus & Folkman, 1984) and from the specific characteristics of the work context in which a person operates (Hartmann et al., 2020). However, the current literature on the association between employees' perceptions of organizational change and resilience is scarce and has not reached a consensus on this relationship. Indeed, while some studies have demonstrated that organizational change can foster resilience (e.g., Miller et al., 2020), others have reported a negative relationship between the two constructs (e.g., Senbeto & Hon, 2020). To reach a more fine-grained understanding of these inconsistent patterns that have emerged from previous studies, it is relevant to investigate the conditions through and under which employees' perceptions of organizational change can be beneficial to their resilience.

In this regard, organizational resources are relevant in changing workplaces (Albrecht et al., 2020). Among these, role clarity (i.e., clarity regarding role responsibilities and expectations; Rizzo et al., 1970) represents a key resource since it may help employees deal with the transformations in work roles resulting from an organizational change (Saksvik et al., 2007). Although role clarity can be considered as the desired outcome of organizational change, to our knowledge, only one study has analysed whether employees' perceptions of organizational change correlate with role clarity, reporting a positive relationship between the two constructs (Ciampa et al., 2018). Nevertheless, evidence has shown that this organizational resource may positively influence employees' well-being (Lundmark et al., 2022), and job attitudes (Lundmark et al., 2022). Additionally, although there is some evidence that role clarity positively correlates with resilience (Duraisingam et al., 2020), to date, no study has examined the positive effects of this organizational resource on resilience. Thus, this is the first study to analyse how and when employees' perceptions of positive organizational change may be associated with resilience. Empirically addressing this issue is critical to establishing conditions on the bright side of organizational change and, correspondingly, unravelling how organizations can maximize the benefits of organizational change for employee resilience.

Furthermore, as far as we know, no previous research has analysed whether the relationship between employees' perceptions of positive organizational change and resilience through role clarity could be conditional on supervisor support levels (i.e., the extent to which employees perceive that their supervisors value their contributions and are interested in their well-being; Shanock & Eisenberger, 2006). Nevertheless, previous studies have widely demonstrated that supervisors play a key role in influencing employees' attitudes, behaviours, and well-being (Rathi & Lee, 2017). More specifically, in changing organizational contexts, supervisor support can represent a social resource (Hobfoll et al., 2018) because it provides collaborators with instrumental and emotional support, helping them reduce uncertainties about their job's objectives and responsibilities arising from the new job

condition or tasks assigned (Saksvik et al., 2007). Drawing on the COR theory (Hobfoll et al., 2018), workplaces that are characterized by high role clarity and supervisor support levels can be viewed as caravan passageways because these settings provide their employees with possibilities to access resources and protection against resource losses, facilitating and accelerating resource gains (i.e., resilience; Hobfoll et al., 2015). Thus, demonstrating how role clarity may interact with supervisor support to promote employees' resilience may provide useful insights on how to design supportive work environments during changing times.

This study contributes to the literature on organizational change management and resilience in several ways. Unlike previous studies that have extensively examined the negative effects of organizational change in terms of role conflict and distress and the effectiveness of coping strategies in such stressful situations, this study adopts a positive psychology perspective. Thus, by integrating the TMSC (Lazarus & Folkman, 1984) with the COR theory (Hobfoll, 2001; Hobfoll et al., 2018), this study aims to clarify through which mechanism and under which conditions employees' perceptions of positive organizational change can promote their resilience. In doing so, this study answers recent calls from the scientific community to investigate how organizational change can enable employees to flourish (Cameron & McNaughtan, 2014) and to provide more empirical support for the existence of resource gains within organizational contexts (Yao & Li, 2019). Furthermore, by answering a call for more qualitative research on the employees' perspective on organizational change (Yu & Lee, 2018), this study adopts a parallel mixed-method approach by which the qualitative results from focus groups are read in light of quantitative data from surveys to provide a more in-depth contribution to the literature (Schoonenboom & Johnson, 2017). This integration enables enhancing the integrity of the findings (Bryman, 2006). Additionally, by unravelling the bright side that organizational change might have for employees' resilience and by identifying two resources (i.e., role clarity and supervisor support) facilitating positive outcomes, this study would provide new theoretical and practical knowledge on how to activate those resources in the workplace.

# Hypotheses development

The same organizational change can be interpreted by the employee as either having the potential for personal gain and development (i.e., challenge appraisal), or as interfering with the pursuit of these desirable goals (i.e., hindrance appraisal; Lazarus & Folkman, 1984). As part of the appraisal employees form, they evaluate whether the impact of the organizational change is positive (enhances their job), neutral (does not impact their job), or negative (threatens to make their job worse or more difficult; Cullen-Lester et al., 2019). This is crucial as coping with change cannot begin until an employee appraises it (e.g., Bernerth et al., 2011; Fugate et al., 2008; Lazarus, 1999). Drawing on the TMSC (Lazarus & Folkman, 1984) and on the COR theory (Hobfoll et al., 2018), when organizational change is positively appraised as challenging but manageable, employees' expectations for personal gain (i.e., this change will improve my job) can motivate them to overcome obstacles by increasing their efforts (Perrewé & Zellars, 1999), promoting the adoption of active coping strategies (Searle & Auton, 2015) and eliciting feelings of fulfilment or achievement (Edwards et al., 2014; Selye, 1982). A study by Cullen-Lester and colleagues (2019) indicated that employees experiencing greater positive change are motivated to react favourably to their changing work environment by, for instance, increasing their organizational commitment (Cullen-Lester et al., 2019). Then, employees who perceive positive organizational change may be more willing to invest their resources in their job and in their growth, which can be a source of personal resilience (Crane & Searle, 2016; Hobfoll et al., 2015). Accordingly, some previous studies showed that organizational change can foster employees' personal resources (Grunberg et al., 2008), including resilience (Miller et al., 2020). Then, we propose:

*Hypothesis 1*: Employees' perceptions of positive organizational change will be positively associated with resilience.

Facing organizational change (especially in the form of internal reorganizations as those occurring in the company under investigation) involves alterations in an employee's usual ways of performing tasks as well as in his/her job roles and responsibilities, which may require him/her to acquire new skills to effectively handle non-familiar job duties (Herold & Fedor, 2008). Drawing on the COR theory (Hobfoll, 2001) and on the TMSC (Lazarus & Folkman, 1984), when employees positively perceive an organizational change (i.e., as a challenge), they may focus on the potential gain provided by the new situation and be more motivated to invest resources to actively understand their new role and to acquire new skills. Under these conditions, employees may be better able to adapt themselves to the new working situation and respond efficiently to new job demands, perceiving role clarity. Previous literature found a positive association between employees' perceptions of positive organizational change and role clarity (Ciampa et al., 2018). Thus, we propose:

*Hypothesis 2*: Employees' perceptions of positive organizational change will be positively associated with role clarity.

Unlike what happens in the face of role stressors (such as role conflict and ambiguity), employees who experience role clarity can be more self-aware of their contribution to the organizational system (Gressgård & Hansen, 2015). Drawing on the COR theory (Hobfoll, 2001), role clarity can be considered an organizational resource that can support employees in efficiently fulfilling work tasks (Katz & Kahn, 1978) and reaching a better understanding of how their actions may be useful for the achievement of organizational goals. A work environment characterized by role clarity can represent a caravan passageway wherein employees may have access to more resources and protect their available resources (Hobfoll et al., 2018). For instance, role clarity can improve accountability and facilitate learning by providing employees with clear directives on how to perform in their job, in addition to reducing the loss of resources potentially due to job overlapping and role ambiguity (Akhtar & Zia-ur-Rehman, 2017; Grossman & Burke-Smalley, 2018). This may leave employees with more resources to invest to further increase their resource reservoirs and then foster their resilience (Hobfoll et al., 2015). Although a considerable body of research has demonstrated the existence of a negative relationship between role-related stressors (e.g., role ambiguity) and resilience (e.g., De Clercq, 2019), only a few studies have analysed how role clarity may be related to resilience,

showing a positive association between these two constructs (Duraisingam et al., 2020). Hence, we expect:

Hypothesis 3: Role clarity will be positively associated with employees' resilience.

When employees appraise an organizational change in a positive light, they are more likely to perceive the new situation as an opportunity to improve their professional profiles. This can motivate them to engage in actions aimed at acquiring new knowledge and skills useful for the fulfilment of unfamiliar job-related demands (Ciampa et al., 2018; Lazarus & Folkman, 1984). As a result, employees may reach a better understanding of how their new role fits into the larger work environment and how it intersects with other functions more readily (Mäkikangas et al., 2019). In a condition in which the content of new tasks and work methods is clearly understood (i.e., role clarity), employees can not only invest their available resources to effectively fulfil their job tasks (Fried et al., 2003), but also acquire additional resources (e.g., knowledge). In such a situation, employees may develop positive attitudes that may accelerate their adaptation to new working conditions, thereby facilitating resilience (Hobfoll et al., 2015). Thus, we hypothesize the following:

Hypothesis 4: Role clarity will mediate the association between employees' perceptions of positive organizational change and employees' resilience.

Drawing on the TMSC (Lazarus & Folkman, 1984) and on the COR theory (Hobfoll et al., 2018), how an employee appraises and reacts to organizational change can be affected by situational factors, such that employees with greater social resources are better positioned for resource gain. In this view, under high levels of supervisor support, positive organizational change can facilitate employees' adjustment to new working conditions (i.e., role clarity) and provide them with an opportunity for personal and professional growth, thus helping them become more resilient. Accordingly, previous studies have suggested that the quality of relationships matters for resilience (Morgan et al., 2013; Stephens et al., 2013), the lack of support undermines employees' resilience (Schulz-Knappe et al., 2019), and the presence of job social resources promotes resilience (Meneghel et al., 2016). Indeed,

under conditions of high job social resources, employees can more easily comprehend hardships and effectively cope with them (Carmeli et al., 2013). In this regard, previous studies indicated that supervisor support buffers the negative effects of organizational change on employees' health outcomes (Day et al., 2017; Coupaud, 2022) and is a protective factor for employees' well-being in changing workplaces (Lucia-Casademunt et al., 2018). In fact, the immediate supervisors play a crucial role in guiding collaborators through an organizational change because they are likely to manage the change process of their work group as part of their managerial obligations (Arnéguy et al., 2022). Thus, in a changing organizational context, which engenders feelings of unpredictability, workers might be particularly receptive to their immediate supervisor because he/she is a source of stability (Oreg & Berson, 2011) who may instil positivity and hope in them in the face of an organizational change (Lee, 2021). Employees may also resolve any doubts about how the change may impact their work tasks, responsibilities, and processes by asking their direct supervisor for further clarification (Arnéguy et al., 2022), which might facilitate role clarity. Accordingly, there is empirical evidence showing a positive relationship between social support and role clarity (Fukui et al., 2021; Gilardi et al., 2020). Evidence has also been provided for the protective role of supervisor support against the negative effects of role-related stressors (Day et al., 2017), while the enhancing effect of supervisor support within a changing organizational context is still unclear. In this regard, drawing on the COR theory (Hobfoll et al., 2015), employees who understand well what is expected of them in their job (i.e., high role clarity) and, simultaneously, feel supported by their supervisors (high supervisor support) are in resource-rich work environments (i.e., resource caravans). As such, they are more likely to accumulate resource gains because of the rich reservoir of protective resources from which they can draw on and then feel resilient (Hobfoll et al., 2015). Indeed, when employees clearly perceive their work role, they may invest their resources in activities facilitating their adaptation and resilience. This tendency may be strengthened by the presence of supportive supervisors as employees may feel more comfortable in fulfilling their work role when they perceive that their supervisor is supportive (Arnéguy et al., 2022; Oreg & Berson, 2011). In such a situation,

employees not only know what tasks they are supposed to accomplish but also can rely on the help of their supervisors when dealing with unfamiliar tasks. Additionally, supportive supervisors may provide socio-emotional support and meaningful feedback to employees on how they accomplish their tasks (Eisenberger & Stinglhamber, 2011), reassuring them that they will be able to meet their personal needs (e.g., professional growth) in return for their effort; thereby, promoting their resilience (Lazarus & Folkman, 1984; Çakmak-Otluoğlu, 2012). Thus, we hypothesize:

Hypothesis 5: Supervisor support will strengthen the effects of employees' perceptions of positive organizational change on resilience (H5a), and role clarity (H5b) as well as the effects of role clarity on resilience (H5c), such that these positive effects will be stronger when supervisor support is high (vs. low).

#### Research context

This study fitted into a stress-management intervention assessment required by the management of an Italian subsidiary of a European multinational company active in the food producer sector after an organizational restructuring process occurred in the past six months. The organizational restructuring process involved an internal reorganization with a union of different business units to increase the profitability of the company, reduce costs, and maintain a competitive market position. Although all employees remained employed after this process, at the time of the study, they had to face its consequences, including the redefinition and rearrangements of work procedures, tasks, and responsibilities. Indeed, previous studies have widely demonstrated that organizational restructuring may lead employees to lose clarity regarding their roles and responsibilities (Baillien & De Witte, 2009; Oreg et al., 2011), in addition to negatively influencing their well-being (de Jong et al., 2016).

## **Qualitative study**

Some focus groups were conducted to explore the perceptions of employees about some variables relevant in organizational changing contexts. The excerpts, which were hand-written by the

two psychologists who conducted these focus groups, were qualitatively analysed through thematic analysis (Braun & Clarke, 2006; Schilling, 2006; King & Brooks, 2018).

#### Method

### **Participants**

In total, 40 employees of the above-mentioned company participated in focus groups. Applications were accepted until the maximum number of participants per focus group was reached. Because of the need of addressing cross-cutting issues, focus groups were heterogeneous and well-balanced in terms of gender, age, and units.

### Materials

Following literature suggestions (Krueger & Casey, 2000; Nyumba et al., 2018), five focus groups were arranged with eight respondents per session. The semi-structured focus group technique was chosen to elicit the multifaceted perceptions of the investigated variables without confining the responses within pre-constituted options, striving to bridge the gap between theory and practice. In this vein, a topic guide was prepared, asking for employees' overall experiences of organizational change. Specifically, the majority of questions aimed to deeply investigate the variables that emerged from the previous literature as relevant in post-organizational change conditions (i.e., role-related factors, supervisor support, resilience).

#### Procedure

The focus groups were organized in a silent room at the participants' workplace. Each session lasted in the mean 90 minutes as recommended by the literature (Nyumba et al., 2018) and was facilitated by two psychologists (VS, MM) trained in conducting focus groups. The discussions were not audio-recorded to make participants feel more comfortable regarding their privacy. Paper-pencil notes were taken by VS, MM and excerpts were compared at the end of each session so that only shared notations were considered eligible for data analysis.

The excerpts were subsequently analysed using the thematic analysis approach, which is frequently used in organisational research (Schilling, 2006; King & Brooks, 2018). Specifically, three

authors (VS, MM, CB) read the notes several times to gain the subjective nuances related to each topic and labelled specific thematic codes to define concepts. Meaningful excerpts were associated with each code to ensure the trustworthiness of the findings (Whittemore et al., 2001). A shared description of each concept was also provided. Divergences were collectively discussed among all authors to reach a full consensus. Finally, two authors (IS, PA) critically reviewed the emerged codes, finalising the data analysis.

### **Qualitative results**

Overall, four categories emerged from the qualitative analysis of the focus groups. The categories, codes and participants' quotations are reported in *Table 1*.

# [Please insert *Table 1*]

# The overall perception of organizational change

When asked to describe their daily experiences regarding organizational change (e.g., work procedures, company organigram), participants focused on their involvement in decision-making and internal communication processes, which resulted in both positive and negative perceptions of this change. Specifically, some reported that relevant changes within the organization were frequently imposed from above and not adequately communicated. They stated that "it would be nice to be more consulted about certain changes impacting on our work". Most workers also reported that "there were changes imposed from above and regarding which neither explanations nor objectives were given". As a result, employees felt themselves to be "not adequately involved in decision-making processes and not sufficiently prepared for the practical impact that these changes could have on their daily work routines and professional roles". Consequently, they negatively welcomed these "imposed and not communicated changes". Although this critical feedback, all participants recognized that, in general, the management was willing to collect suggestions on certain minor organizational changes through "working tables". Under these circumstances, "feedback has been requested from the team" and a positive evaluation of organizational change was described thanks to a "satisfying experience" of being involved in organizational change.

## Role-related perceptions

When asked about role perceptions, most of the respondents reported a lack of role clarity related to their perceptions of and the low quality of communication about organizational change. They described sudden work requests and reorganization actions, which made it difficult for them to understand "who exactly must do what". There were overlaps between activities to carry out, and the boundaries of their role and responsibilities were fuzzy due to "unclear objectives and different (work) approaches". Moreover, they stated that "usually there is more than one contact person, and this leads to chaos (...) there are several changes in strategies and directions and, as a consequence, there are continuous re-works and difficulties in setting priorities". This situation seemed to result in a "continuous questioning and reassessment of the decisions taken, thus making the decision-making process extremely slow and unnecessarily cumbersome". Therefore, all respondents underlined the need to "simplify internal organizational processes" and be "supported and adequately informed about roles and duties to get a better clarity".

## Supervisor support

Most interviewees emphasized how their perception of being supported "depends on the people in charge". Specifically, they evaluated the quality of their relationship with the management mainly based on communication exchanges with their supervisors. On the one hand, some employees reported that the "daily communication and relationship with superiors should be improved". Indeed, "information either is not provided or is provided in an incomplete, piecemeal and (most of the time) time-delayed manner, and then there is often limited room for manoeuvre". These situations were characterized by "feelings of being unsupported". On the other hand, others reported that they could rely on their team leaders for further clarifications and that they "have never found their door locked". In particular, these team leaders were available to provide feedback on their work and attempt to prompt their subordinates "to think about how to do a job differently and in a more contextualized manner" to promote their personal and professional growth. In these cases, the general perception

was to be "supported, understood, and accepted". These feelings were connected with the belief that one was "more equipped and prepared to do what is asked".

#### Resilience

Two perspectives emerged on the capacity of respondents to face daily challenges and difficulties at work. On the one hand, some respondents perceived that their ability to face challenging events was compromised, stating that they "were not able to manage, lead changes and exert control over events due to the overlap of team members' roles and responsibilities and the hectic rhythms (of their own work activities), resulting in a loss of personal resources". On the other hand, other respondents underlined how managing particularly demanding situations could turn into positive results because "in the long term it can help you grasp new perspectives (e.g., "I learned to react. Everything and everyone teach something. You constantly get experience")". Indeed, "facing obstacles and succeeding in overcoming them increase your self-esteem and confidence because you think that if it happens again, you will be ready". Furthermore, some respondents pointed out that individual reactions were largely dependent on the frequency of occurrence of stressful situations, as "a little bit of challenge is good, but not too much. If you do not have time to breathe and rest, the work will eventually become demotivating".

## Discussion of qualitative results

The qualitative findings reveal that employees underpin the importance of being clearly informed, supported, and involved in any organizational change due to its impact on their daily routines. These results are in line with previous qualitative studies that highlight the pivotal role of communication processes in the workplace (e.g., Maffoni et al., 2020). Moreover, employees reported that organizational change may result in a lack of role clarity in the presence of uncoordinated job requests (Kras et al., 2017), which are perceived as high demanding. Simplification of procedures, positive support and adequate communication of tasks are described as essential to gain more clarity concerning one's professional role. This is in line with previous literature showing that a change management strategy that communicates change clearly and as smoothly as possible, together with

supportive relationships with supervisors, may contribute to role clarity (e.g., Kauppila, 2014). Respondents agreed their immediate supervisor played a crucial role in the process of organizational change implementation. Additionally, the present research demonstrated that challenging situations seem to both reinforce and deplete employees' resilience depending on the frequency of the occurrence of stressful situations. This is understandable in light of COR theory because a resource loss spiral may be triggered by an excessive resource loss (Hobfoll, 2001). Overall, these results indicated that four themes were particularly relevant for the interviewed employees: a) the impact of organizational change; b) the importance of role clarity; c) the key role of the immediate supervisor in supporting the adjustment to new work conditions; and d) resilience as an outcome of changing circumstances. These themes were further analysed through quantitative methods as described below.

# **Quantitative study**

#### Method

# **Participants**

Paper-and-pencil surveys were administrated to 480 employees working in the company mentioned above. After providing their informed consent, a total of 186 respondents completed paper-and-pencil questionnaires. Of these, eight participants were removed from the analyses as they did not complete at least the 60% of the questionnaire, reducing the sample size from 186 to 178 employees (response rate: 37%). Most participants were women (59.0%) with an average age between 31 and 40 years (40.4%). Participants were working in different units: customer relationship center (i.e., quality customer service that assists customers by phone or via webchats; 19.10%), strategic business unit (i.e., unit that builds a reputation for high-quality products, deals with strategic analysis for brand and develops plans and competitive repositioning; 16.30%), supply chain and logistics (i.e., unit that interacts with suppliers to produce and distribute products to the final buyer;14.0%), field service (i.e., unit that manages external sales network; 9.0%), and sales and distribution (41.60%).

#### Procedure

A coordinator and a team of researchers personally informed the employees about the study's purposes. Employees who voluntarily agreed to participate in the research were reassured about the anonymity and confidentiality of their answers to decrease their social desirability concerns (Podsakoff et al., 2003). Special rooms were prepared where, during shift changes, participants could complete questionnaires in the presence of researchers who were willing to respond to any potential questions regarding the survey's content. In these rooms, special cardboard boxes were positioned wherein participants placed the completed questionnaires. Completion of the survey required approximately 20 minutes. Only a few socio-demographic features (i.e., age, gender, and unit) were asked to ensure anonymity. Respondents were invited to answer questions about their perceptions of organizational change, role clarity, resilience, and supervisor support.

#### Measures

Change perceptions were evaluated using the ten-item Evaluation of Changes scale from the Organizational Check-up Survey (Leiter & Maslach, 2000; Borgogni et al., 2005). This construct refers to how organizational change is perceived regarding different aspects, including the quality of the services provided by the company, job security, the quality of internal leadership, and collaboration among people at work. Participants indicated the quality of the change that occurred within their organization over the last six months (e.g., How do you perceive change over the past six months in your involvement in decisions that affect your work?) on a five-point Likert scale (1=strongly negative change, 5=strongly positive change;  $\alpha$ =.89). Greater scores indicate perceptions of more positive organizational change. We decided to use this scale because it measures how employees appraise the general change within the firm: whether employees recently perceived things getting better or worse within the workplace. Because of its temporal dimension, this measure allowed us to specifically assess employees' positive change perceptions over the last six months, namely starting from when the internal reorganization began. Although the scale evaluates a wide array of issues, the measure concentrates on employees' general assessment of progress (i.e., positive change) or deterioration (i.e., negative change) within the firm, as apparent in the relatively high level of inter-

item consistency across the scale items (Leiter & Maslach, 2005). As such, the overall variable of perception of positive change is calculated as the average rating across all the change items (Leiter & Maslach, 2005). This instrument has been used in the Italian context to measure burnout and its associated organizational factors (e.g., Gazzaroli et al., 2019; Argentero & Setti, 2008; Bettinardi et al., 2007).

Role clarity was assessed using the five-item subscale of the Health and Safety Executive's (HSE) Management Standards Indicator Tool (HSE-MS-IT; Marcatto et al., 2011). Respondents indicated how frequently they tended to perceive that their organization guarantees that they did not have conflicting roles (e.g., I am clear what is expected of me at work) on a five-point Likert scale (1=never, 5=often; α=.87). Greater scores indicate greater role clarity. The UK Health and Safety Executive's (HSE) Management Standards approach to supporting firms in effectively handling work-related stress recommends the use of a 35-item self-report survey instrument (Cousins et al., 2004). This instrument, known as the Management Standards Indicator Tool, allows collecting information on employees' viewpoints on seven key areas of work design, namely demands, control, supervisor support, peer support, relationships, role, and change (Cousins et al., 2004). When these factors are not adequately managed, workers are likely to be at increased risk of stress, poor health, lower productivity, and higher sickness absence rates (Bockerman & Ilkmakunnas, 2008; Houdmont et al., 2013; Ravalier et al., 2021). However, when these factors are optimized, the management can increase the engagement and performance of their staff at work (Ravalier et al., 2018). This wellestablished international measurement has been chosen over other instruments (e.g., perceived supervisor support scale; Eisenberger et al., 2002) due to its practice-oriented approach, as it represents a readily accessible resource that companies can use not only to evaluate employees' exposure to these areas but also as a basis for discussions with stakeholders (generally conducted in a focus group format) interested in identifying psycho-social risk factors as candidates for health intervention activities in the workplace (HSE, 2010). This instrument is commonly adopted in realworld contexts to conduct work-related stress assessments (e.g., Brookes et al., 2013). Its original version was validated on a large sample of workers from the UK and Ireland (Edwards et al., 2008). Subsequently, this questionnaire has been validated in more than fifteen languages (see <a href="https://www.hse.gov.uk/stress/standards/languages/index.htm">https://www.hse.gov.uk/stress/standards/languages/index.htm</a>). It has been widely used in its Italian validation to evaluate potential sources of psycho-social risks contributing to work-related stress (e.g., Carpi et al., 2021; Marcatto et al., 2021; Wood et al., 2019; Zaghini et al., 2020), showing good psychometric properties and confirming the individual contribution of each of its scale in predicting important job-related stress outcomes (e.g., Marcatto et al., 2014).

Supervisor support was evaluated using the five-item subscale of the HSE-MS-IT (Marcatto et al., 2011). Respondents indicated how frequently they perceived that their supervisors encourage and support them at work (e.g., I can talk to my line manager about something that has upset or annoyed me about work) on a five-point Likert scale (1=never, 5=often;  $\alpha$ =.87). Greater scores indicate greater supervisor support.

Resilience was measured using the ten-item Connor-Davidson Resilience Scale (Di Fabio & Pallazzeschi, 2012). Participants indicated their level of agreement with each statement describing ways of reacting to stressful situations (e.g., *I tend to bounce back after illness or hardship*) on a five-point Likert scale (0=almost always false, 4=almost always true;  $\alpha$ =.89), where higher scores denote higher resilience.

Variables used in alternative models. To conduct our sensitivity analyses and moderated mediation models, we further considered three dimensions from the HSE-MS-IT (Marcatto et al., 2011), namely control, demands, relationships, and peer support. Control refers to the degree to which an employee perceives to exert autonomy/control over how his/her work activities are conducted (6 items, e.g., *I have a choice in deciding how I do my work*;  $\alpha$ =.77). Demands regard excessive job demands, including excessive workload and work pace, unattainable deadlines, and unrealistic time pressures (6 items, e.g., *I have to work very intensively*;  $\alpha$ =.84). Relationships include conflictual relationships and unacceptable behaviours in the workplace, such as harassment and bullying at work (6 items, e.g., *I am subject to personal harassment in the form of unkind words or behaviour*;  $\alpha$ =.78).

Peer support refers to the extent to which an employee feels respected, supported and helped by his/her colleagues (4 items, e.g., *My colleagues are willing to listen to my work-related problems*;  $\alpha$ =.85). Responses were provided on a five-point Likert scale (1=*strongly negative change*, 5=*strongly positive change*). Greater scores indicate greater perceptions of control over one's work, excessive job demands, negative relationships at work, and peer support. Additionally, to compare our selected moderated mediation model, we utilized the social support seeking scale (five items, e.g., *Seek as much social support as possible*,  $\alpha$ =.67) from the Occupational Stress Inventory (Sirigatti & Stefanile, 2002). Respondents indicated how frequently they tended to search for social support when dealing with stressful situations on a six-point Likert scale (1=*never*, 6=*very extensively*) where higher scores indicate greater tendencies to search for social support.

# Statistical analyses

Firstly, SPSS 25 was used to establish the normality of the data, identify outliers, verify multicollinearity, and compute intercorrelations. Given that variance inflation factors (i.e., 1.43 for the highest value) and tolerance statistics (1.05 for the lowest value) were below the cut-off point of 10, there was no sign of multicollinearity. Skewness and kurtosis indexes were adequate (values ranging from -1.05 to .90 and from 1.48 to .02 for skewness and kurtosis, respectively). The missing values varied between a minimum of 0% and a maximum of 1.7%. The results of Little's MCAR test were statistically non-significant ( $\chi$ =941.37, df=880, p=.07), suggesting that the data were completely missing at random (MCAR). Then, to identify the socio-demographic variables to control for in our subsequent analyses, we conducted independent t-test analyses based on gender and analyses of variance (ANOVAs) based on age and units. Next, the appropriateness and fit of our hypothesized models were assessed through structural equation modelling (SEM). Based on the results of Little's MCAR test, an optimal Full Information Maximum Likelihood (FIML) approach was selected. Then, Mplus Version 8 statistical software (Muthén & Muthén, 2012) was used to perform CFAs with the FIML method and to compare the measurement model with several concurrent models. Once determined a good fit for the measurement model, we tested our mediation model using bias-corrected

bootstrapping analyses with 1000 random samples. The indirect effects were deemed significant if the zero was not included in the 95% confidence interval deriving from the bootstrap analysis and, at the same time, the p-value was less than — or equal to — 0.05. Factor loadings were evaluated in their magnitude and statistical significance. Additionally, model fits were analysed by considering traditional approximate fit indices, namely the Root-Means-Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR), in addition to two incremental fit indices, namely the comparative fit index (CFI), and the Tucker-Lewis index (TLI). Next, Mplus Version 8 was used to conduct sensitivity analyses to verify whether role clarity would maintain its expected mediation effects regardless of a) other mediators that represented concepts similar to role clarity, namely control, demands, and relationships; b) control variables (i.e., gender, age, and unit). To test reverse causality, we compared expected and reverse mediation models in terms of the Akaike information criterion (AIC) and Bayesian information criterion (BIC), where lower values of AIC and BIC mean a better fit. Then, given the non-significance of the direct effect, we conducted a moderated mediation model to verify whether supervisor support could moderate the remaining two paths. Since supervisor support did not moderate the first path but only the second, we performed a moderated mediation model in which supervisor support moderated the relationship between role clarity and resilience only. To assess the goodness of this model, we compared it with alternative models (including its moderated mediation reverse model) in terms of AIC and BIC.

## **Quantitative results**

### Descriptive statistics

The study's variables correlated with each other in the predicted way (see *Table 2*) except for resilience which did not correlate with any socio-demographic variables. Anyway, to identify the presence of statistically significant differences based on socio-demographic characteristics and then control variables, we conducted independent sample t-test analyses and ANOVAs. There were no statistically significant differences in the constructs of interest across gender, as revealed by the results of the t-test analyses (see *Online Supplement S1*).

Conversely, the results of the ANOVAs showed that there were statistically significant differences in the quality of organizational change perceptions across age groups ( $F_{(3,175)}$ =9.87, p<.001; see Online Supplement S2) and units  $(F_{(4,171)}=15.20, p<.001;$  see Online Supplement S3). More specifically, the results of the Bonferroni post-hoc tests indicated that younger employees were more likely to positively evaluate organizational change (M=3.50, SD=.58) than middle-aged (M=2.92, SD=.71) and older (M=2.69, SD=.62) employees. The results of the Bonferroni post-hoc tests also showed that employees working in the field service reported greater positive organizational change (M=2.92, SD=.71) than those operating in the supply chain and logistics (M=2.31, SD=.63) or in the customer service center (M=3.10, SD=.61). Likewise, employees working in the field service reported greater role clarity and resilience than others. However, the results of Bonferroni post-hoc tests indicated that they did not statistically significantly differ from others in terms of resilience, while they reported higher levels of role clarity (M=4.26, SD=.42) than those working in in the supply chain and logistics (M=3.67, SD=.89) or in the customer service center (M=3.78, SD=.81). Accordingly, in our subsequent analyses, we then decided to control employees' perceptions of positive organizational change for being aged less than 30 years old (0= other group ages; 1= < 30 years old) and use field service (0= other units; 1= field service) as a co-variate of employees' perceptions of positive organizational change and role clarity.

# [Please insert *Table 2*]

## Confirmatory factor analyses (CFA) and control of common method bias

To verify the measurement quality of all latent constructs, a CFA was conducted utilizing the maximum likelihood method. The results (see *Table 3*) indicated that the four-factor model (i.e., change perceptions, role clarity, resilience and supervisor support) outperformed all the competing models ( $\chi^2$ [399]=658.32, RMSEA=.06, SRMR=.06, CFI=.90, TLI=.89), supporting the discriminant validity of our measurements. Then, we used modification indexes for detecting significant correlated residual error terms to further ameliorate the fit indices of our selected model ( $\chi^2$ [396]=574.36, RMSEA=.05, SRMR=.06, CFI=.93, TLI=.92). Precisely, the residual error terms of three pairs of

items (i.e., from the role clarity scale, the scale of change perceptions, and the supervisor support scale, respectively) were correlated because these items overlapped into very similar actions. We retained the resulting modified four-factor measurement model in all subsequent SEMs. Harman's single factor test (Harman, 1976) indicated that the first factor of the unrotated principal component factor analysis explained 27.56% of the overall variance, revealing that no general factor was apparent. Additionally, the hypothesized four-factor model yielded a better fit to the data after the inclusion of the unmeasured latent method factor ( $\chi^2$ [364]=480.67, RMSEA=.04, SRMR=.05, CFI=.95, TLI=.95). Furthermore, the unmeasured latent method factor explained 8.10% of the total variance (which is less than 25%, the average amount of method variance observed in self-report research; Podsakoff et al., 2012), This suggested that common method variance was unlikely to confound the interpretation of results.

## [Please insert *Table 3*]

## Mediation analyses

Employees' perceptions of positive organizational change were positively and statistically significantly related to role clarity ( $\beta$ =.42, SE=.08, p<.001, 95%CI [.27, .57]), while they were positively but not statistically significantly related to resilience ( $\beta$ =.14, SE=.09, p=.13, 95%CI [-.04, .32]; see *Figure 1* and *Table 4*). Being under 30 years of age was positively related to these perceptions ( $\beta$ =.24, SE=.08, p<.01, 95%CI [.09, .39]). Being employed in the field service was positively and statistically significantly related to perceptions of positive organizational change ( $\beta$ =.18, SE=.06, p<.01, 95%CI [.05, .30]), but not role clarity ( $\beta$ =.04, SE=.04, p=.33, 95%CI [-.04, .12]). Role clarity was positively and statistically significantly associated with resilience ( $\beta$ =.21, SE=.09, p<.05, 95%CI [.02, .39]) and fully mediated the relationship between perceptions of positive organizational change and resilience ( $\beta$ =.09, SE=.04, p<.05, 95%CI [.01, .16]). The indirect effect was positive, suggesting that when employees more positively perceived organizational change, they were more likely to perceive role clarity which, in turn, was positively associated with their resilience. Then, *Hypothesis 1* was not supported while *Hypotheses 2*, 3 and 4 were supported.

[Please insert *Figure 1*]

[Please insert *Table 4*]

### Sensitivity analyses

Following previous scholars' recommendations (e.g., Maffoni et al., 2021), we conducted sensitivity analyses to verify whether role clarity would maintain its expected mediating effect regardless of: a) other mediators that represented concepts similar to role clarity, namely control, demands, and relationships; b) control variables (i.e., age, gender, and unit). We decided to consider control, demands, and relationships as alternative mediators as, like role clarity, these constructs represent key sources of pressure that, if not properly handled, may generate stress-related problems, undermining employees' occupational well-being and then organizational productivity. In addition, these variables are sub-dimensions of the same instrument (HSE stress indicator tool). Thus, we tested our selected mediation model with the addition of control as a parallel mediator to verify whether perceptions of positive organizational change had a different effect on resilience, independently from control. Although satisfactory fit indices emerged for the mediation model ( $\chi^2$ [427]=654.78, RMSEA=.06, SRMR=.07, CFI=.91, TLI=.89), control did not exert a statistically significant mediating effect (β=-.01, SE=.04, p=.77, 95%CI [-.12, .05]). When taking into account this effect, the indirect effect of perceptions of positive organizational change through role clarity on resilience remained statistically significant ( $\beta$ =.10, SE=.04, p<.05, 95%CI [.02, .20]). Next, we tested an alternative model having demands as additional mediators. Despite the goodness of fit of this model  $(\chi^2[488]=711.69, RMSEA=.06, SRMR=.07, CFI=.91, TLI=.90),$  demands did not mediate the relationship between perceptions of positive organizational change and resilience (β=-.05, SE=.04, p=.24, 95%CI [-.14, .02]). In this model, role clarity continued to exert its mediating effect ( $\beta$ =.09, SE=.04, p<.05, 95%CI [.13, .19]). Then, to examine whether perceptions of positive organizational change had a diverse impact on resilience, independently from relationships, we included this latter construct as a parallel mediator. Although the mediation model was quite satisfactory  $(\chi^2[370]=615.04, RMSEA=.06, SRMR=.07, CFI=.89, TLI=.88)$ , the mediating effect of relationships

was not statistically significant (β=-.12, SE=.10, p=.25, 95%CI [-.32, .06]). When considering this effect, the mediating effect of role clarity in the link between perceptions of positive organizational change and resilience remained statistically significant (β=.11, SE=.05, p<.05, 95%CI [.03, .21]). Then, beginning from the simple mediation model, we simultaneously included gender, age, and unit as control variables in every regression path to verify whether socio-demographic variables would impact the mediating effect of role clarity. Role clarity kept having a positive and statistically significant indirect effect (β=.08, SE=.04, p<.05, 95%CI [.01, .17]), even after the addition of these covariates ( $\chi^2$ [336]=539.85, RMSEA=.06, SRMR=.06, CFI=.90, TLI=.89). In this model, among the control variables, age ( $\beta$ =.66, SE=.20, p<.01, 95%CI [.10, .40]) and unit ( $\beta$ =.64, SE=.22, p<.01, 95%CI [.05, .32]) had a positive and statistically significant impact on employees' perceptions of positive organizational change only. Overall, role clarity had a positive mediating effect independently of the established contributor of alternative sources of pressure (i.e., control, demands, relationships, managers' support, and peer support) or the addition of covariates. This revealed the significance of this construct for comprehending the relationship between employees' perceptions of positive organizational change and resilience. Because resilience was measured at the same time as the mediator (i.e., role clarity) and the independent variable (perceptions of positive organizational change), we cannot exclude potential reverse effects. Accordingly, we tested the indirect relationship between resilience and perceptions of positive organizational change via role clarity. Although the mediating effect of role clarity was statistically significant (β=.06, SE=.03, p<.05, 95%CI [.01, .12]), this effect was weaker than that found in the expected model. Additionally, this model had less satisfactory fit indices than the previous one ( $\chi$ 2[317]=518.08, RMSEA=.06, SRMR=.06, CFI=.90, TLI=.89). The results also showed that the reverse model yielded larger information criteria than the hypothesized model (reverse model: AIC=10179.02, BIC=10442.17; expected mediation model: AIC=10169.69, BIC=10432.84), indicating that the expected model provided superior fit to the data.

### Moderated mediation analyses

To demonstrate that our expected moderated mediation model was the best-fitting model, we compared it with some alternative models (i.e., in terms of BIC and AIC comparative indices). Firstly, given the not statistically significant direct effect of perceptions of positive organizational change on resilience, we tested a moderated mediation model having supervisor support as a moderator in the remaining paths (i.e., perceptions of positive organizational change-role clarity path and role clarityresilience path). However, the results of this model indicated that supervisor support did not moderate the association between perceptions of positive organizational change and role clarity ( $\beta$ =-.31, SE=.16, p=.06, 95%CI [-.63, .01]), while statistically significantly moderated the relationship between role clarity and resilience (β=.14, SE=.06, p<.05, 95%CI [.03, .25]). Then, we tested the moderated mediation model examining the moderating effect of supervisor support on the relationship between role clarity and resilience only. This model had better fit indices (AIC=12401.85, BIC=12722.06) than the previous one (AIC=12439.25, BIC=12756.29). This model also showed better fit indices than the reverse moderated mediation model in which the relationship between resilience and perceptions of positive organizational change via role clarity was conditional on supervisor support levels (AIC=12443.74, BIC=12757.62). As shown in Table 5, the model with supervisor support as a moderator in the relationship between role clarity and resilience was the bestfitting model also when compared with alternative models that analysed different potential sources of pressure (i.e., control, demands, relationships) and support-related constructs (i.e., peer support, social support seeking). In this model, supervisor support moderated the association between role clarity and resilience. The interaction effect was positive (β=.16, SE=.07, p<.05, 95%CI [.02, .31]) suggesting that employees who received moderate or high levels of support from their supervisors were more likely to benefit from role clarity in the presence of positive organizational change. The moderated mediation effect of perceptions of positive organizational change on resilience through role clarity was significant for individuals who felt moderately (β=.23, SE=.09, p<.05, 95%CI [.04, .42]) or highly ( $\beta$ =.35, SE=.14, p<.05, 95%CI [.07, .62]) supported by their supervisors, but not for those who reported low supervisor support levels (β=.11, SE=.08, p=.16, 95%CI [-.04, .27]; see Table 6). Thus, *Hypotheses 5a* and *5b* were rejected, while *Hypothesis 5c* was confirmed. The results of the interaction plot indicated that under the condition of high role clarity employees who felt more supported by their supervisors could benefit more in terms of resilience than those who reported low supervisor support (see *Figure 2*).

# [Please insert *Table 5, 6* and *Figure 2*]

## Discussion of quantitative results

The quantitative results reveal that role clarity totally mediates the relationship between employees' perceptions of positive organizational change and resilience. Drawing on the COR theory (Hobfoll, 2001) and on the TMSC (Lazarus & Folkman, 1984), when employees experience positive organizational change, they may focus on the potential opportunities for growth provided by the novel situation and be more motivated to use their resources to efficiently perform their work-related tasks. When workers can clearly perceive their work role and meet job requirements, a motivational process may occur, thereby promoting their resilience (Ciampa et al., 2018; Duraisingam et al., 2020). This is further strengthened in the presence of high supervisor support. Indeed, drawing on the COR theory (Hobfoll et al., 2015), the simultaneous presence of role clarity and supervisor support may create a caravan passageway that provides employees with high levels of social and contextual resources, promoting resilience. Moreover, by showing that high or moderate levels of supervisor support are necessary for the indirect effect of employees' perceptions of positive organizational change on resilience to occur, this study indicates that supervisor support works as a crucial contextual factor to create a supportive workplace, in which employees can develop resilience even in changing organizational contexts.

#### **Overall discussion**

This parallel mixed-method study examined through which mechanism employees' perceptions of positive organizational change may be related to resilience, and how this may be conditional on supervisor support levels. The results indicated that when organizational change is

managed and communicated adequately, employees are more likely to have a clear understanding of their tasks, and processes at work which, in turn, may promote their resilience. This is likely to occur especially in the presence of supportive supervisors. Thus, this study contributes to the literature in several ways. Although the negative effects of organizational change on employees' psychological health and job attitudes are well-known (Contreras & Gonzalez, 2021), the benefits derived from employees' perceptions of positive organizational change are still understudied. Thus, by adopting a positive psychology perspective and integrating the TMSC (Lazarus & Folkman, 1984) with the COR theory (Hobfoll et al., 2018), this is one of the first studies to shed light on the bright side that organizational change may have when it is positively perceived by employees. In doing so, we respond to recent calls from the scientific community to investigate how organizational change can enable employees to flourish (Cameron & McNaughtan, 2014) by demonstrating that when organizational change is managed effectively and positively perceived, employees can benefit from it in terms of resilience. Indeed, to the best of our knowledge, this is the first study to show that employees' perceptions of positive organizational change are positively related to role clarity and, in turn, to employees' resilience, especially in the presence of high supervisor support levels. However, our quantitative results did not provide evidence for a significant direct relationship between employees' perceptions of positive organizational change and resilience. This means that experiencing positive organizational change might not be a sufficient condition for employees to become resilient. Indeed, according to COR theory (Hobfoll et al., 2015), resilience develops as a product of functioning within resource-rich environments, suggesting the importance of considering the presence of perceived organizational resources (e.g., role clarity) as underlying psychological mechanisms linking employees' perceptions of positive organizational change to resilience. Additionally, the qualitative results suggest that when the management does not adequately inform their collaborators about internal corporate change, employees are likely to perceive this change as threatening because they might be concerned about how their daily routines would be impacted. Drawing on the COR theory (Hobfoll, 2001), this represents a stressful condition as employees may

feel their working conditions threatened and then consume their energies in attempting to understand what is expected of them and how to deal with unfamiliar job demands, in addition to continuing to meet their regular job tasks. In such a condition, employees may perceive job-related requests as unclear and then need to invest additional resources to meet conflicting job demands concurrently. If despite these investments, they are unable to fulfil all job demands, an energy-depleting process may occur, which may threaten their resilience (Hobfoll et al., 2015). However, the qualitative findings reveal that although some employees perceive the redefinition of their work tasks and responsibilities due to the organizational restructuring process as a threatening situation that compromises their resilience, others perceive it as a personal growth opportunity that fosters their resilience. This may occur since individuals may differently appraise and react to the same situation depending on their levels of resources (Hobfoll et al., 2018; Lazarus & Folkman, 1984). Thus, employees with fewer resources might be more likely to perceive an organizational change as threatening and feel unable to handle its consequences, which may trigger an energy-depleting process undermining their resilience. Conversely, those with greater resources might perceive the same change as challenging and be able to mobilise their reservoirs of resources to effectively face unfamiliar job demands. This may enable them to maintain and foster their resources, including resilience (Hobfoll et al., 2018). In this regard, as far as we know, this is the first study to reveal that the effect of employees' perceptions of positive organizational change on resilience through role clarity is conditional on supervisor support levels. Specifically, employees who perceive moderate or high levels of support from their supervisors are more likely to benefit from role clarity in the presence of organizational change. Consistently, the qualitative results reveal that some employees can effectively rely on their supervisors to obtain constructive feedback on how to deal with job tasks to facilitate their personal and professional growth, while others reveal a lack of clear communication, which makes them feel unsupported. Then, employees who receive adequate support from their supervisors are likely to feel that they will be able to meet their personal needs (e.g., personal and professional growth) in return for their effort to adjust themselves to the changing work scenario (Lazarus & Folkman, 1984), then being more

motivated to face potential challenging situations. In addition, they are likely to feel well-equipped to handle unfamiliar job demands and potential faults in new workflows because of the resources provided by their supervisors, thereby enhancing their resilience. Notably, unlike our expectations, supervisor support did not enhance either the relationship between employees' perceptions of positive organizational change and resilience or the association between employees' perceptions of positive organizational change and role clarity. While the absence of a moderating effect on the first relationship is attributed to the lack of a statistically significant direct effect of employees' perceptions of positive organizational change on resilience, the non-significance of the latter interaction term might have different explanations. It might be that the presence of supervisor support could have been more salient in the face of negative (vs. positive) organizational change (Kaufmann & Beehr, 1986), when employees could have needed help to make sense of and adjust to threatening unfamiliar working conditions. Conversely, when employees positively perceive organizational change, they can interpret it as a signal of their company's investments and improvement (Cullen-Lester et al., 2019). This may instil in them confidence that the change has the potential for enhancing their job, motivating them to invest their resources to proactively understand their new role, perceiving role clarity without the need for supervisor support. Alternatively, it might be related to how supervisor support was measured in this study, namely as a unique dimension, including instrumental (e.g., asking one's supervisor for advice) and emotional (e.g., talking to one's supervisor about one's emotions) forms of support. However, the efficacy of social support may depend on the subtype of support (Sommovigo et al., 2022) and the specific content of supportive communications (Kaufmann & Beehr, 1986). In this regard, it should be noted that the organization in which our data were collected had provided its supervisors with appraisal support training to improve their capacity to provide constructive evaluative feedback to their subordinates' performance. Therefore, it might be that the supervisors of this company could have been more prone to provide this form of support to their subordinates. This could also explain why supervisor support enhanced the effect of role clarity on resilience: receiving positive feedback on the self (i.e., appraisal support) from their supervisors could have improved the self-concept and internal resources of the targeted employees (Thoits, 1986), including their personal resilience (e.g., McDonald et al., 2016). Supervisor appraisal support could also have positively influenced employees' self-evaluation, self-esteem, and sense of worth (House, 1981; Cohen & Wills, 1985; Furman & Buhrmester, 1985), which are all conducive to resilience (e.g., Baguri et al., 2022; Hartling, 2008). Conversely, other forms of support that were not measured in this study and were not the object of training for supervisors working in the company where the study took place, such as task-oriented instrumental support, could have been more relevant to enhancing employees' role clarity (e.g., by providing employees with the information useful to better understand their job role after organizational change; House, 1981). By unravelling the role of supervisor support in the context of organizational restructuring, this study adds to the management and organizational change literature by providing suggestions on how to maintain the resilience of employees in the face of changing situations.

# Limitations and practice implications

The cross-sectional design of the quantitative study does not allow us to make causal inferences about the proposed relationships. As a result, we cannot exclude reverse causality. In this regard, our mixed-method findings supported the association of employees' perceptions of positive organizational change with resilience because the fit indices of the reverse model were poorer than those of the selected model, and the qualitative results supported this direction. However, the reverse causal relationship might also be plausible given that our quantitative results found a positive indirect relationship between resilience and employees' perceptions of positive organizational change via role clarity. In this view, drawing on the COR theory (Hobfoll et al., 2018), resilience might be a personal coping resource that helps employees overcome stressful situations by crafting their job activities (i.e., creating more role clarity), allowing them to interpret organizational change more positively. Future longitudinal research is needed to closely analyse the causal ordering between these variables and detect potential reciprocal relationships.

Although we used a parallel mixed-method design, this study relied on single-source data, which may raise issues of common method bias. However, following recommendations from methodologists (Podsakoff et al., 2012), we adopted statistical strategies (i.e., the unmeasured latent method factor technique) and procedural remedies (i.e., the use of different anchor labels for independent and dependent variables) to limit such bias. In this regard, results of Harman's singlefactor test (i.e., 27.56% of the variance explained by the first factor; Podsakoff et al., 2003) and unmeasured latent method factor technique (i.e., 8.10% of the total variance explained by this factor; Podsakoff et al., 2012) as well as the substantially different factors found in CFA, indicated that common method variance was unlikely to be a major issue in this study. We also diminished respondents' tendency to answer in a socially desirable manner by collecting only a few sociodemographic variables to further guarantee anonymity, telling participants that there were no right or wrong answers, and ensuring that individuals have different opinions about the issues addressed in the survey and focus groups (Podsakoff et al., 2012). Moreover, the use of self-ratings was justifiable because we were interested in revealing subjective evaluations and individual perceptions. Likewise, the collection of only a few socio-demographic variables was decided in accordance with the management to encourage employees to participate in the study and reduce their evaluation apprehension. Nevertheless, future studies should combine data from multiple sources of information to minimize the risk of method bias and collect further socio-demographic information that could help better contextualize the conditions under which a certain organizational change is positively appraised.

Furthermore, this study was limited to a single subsidiary company located in Northern Italy. The inclusion of a more nationally representative sample or diverse samples from other countries in future studies would increase the generalizability of these findings. Finally, although this study was drawn on the COR (Hobfoll, 2001) and TMSC (Lazarus & Folkman, 1984) theories, we did not directly assess any resource loss processes or any cognitive appraisals, and we concentrated on one resource only as a boundary condition. Then, future work should consider these constructs to verify

more sophisticated SEMs that could enable to reach a better understanding of how and when organizational change can be conducive to resilience. Additionally, given the use of the Italian version of HSE-MS-IT (Marcatto et al., 2011), we measured supervisor support as a unique dimension without considering the different types of support that supervisors can provide (i.e., emotional, instrumental, informational, and appraisal; House, 1981). However, previous studies demonstrated that the efficacy of social support can vary depending on the subtype of support provided (Malecki & Demaray, 2003; Sommovigo et al., 2022). Therefore, future studies should better understand which form of supervisors' support is the most helpful to enable the positive effect of employees' perceptions of positive organizational change on resilience through role clarity.

Moreover, in this study, the specific importance of role clarity might be due to the nature of the change process itself, as it focused on an internal reorganization process which, as demonstrated by previous studies, may result in issues with role clarity (Hastings et al., 2014), such as lower clarity of job roles and responsibilities (Baillien & De Witte, 2009; Oreg et al., 2011). The firm where the study was conducted converted departments focused on product types into divisions based on a matrix-oriented structure that stemmed from the union of business units and was supported by multidisciplinarity capabilities. This role blurring and challenges for working across professional boundaries could have potentially created perceptions of erosion of professional roles and identities in involved employees (Belling et al., 2011), which might have made role clarity a significant explaining mechanism linking organizational change to resilience among our research participants. Although different types of organizational change might generate role stress due to uncertainty about several different aspects of the job, role ambiguity is particularly likely to occur when the expectations applicable to the old firm have not been replaced by clear expectations set by the new firm, which could happen as a result of an internal reorganization (Shaw et al., 1993). However, other mediating variables could be relevant in transmitting the effects of other types of organizational change on employees' resilience (e.g., job certainty in the case of a downsizing). Thus, future studies should investigate the mechanisms through which other types of corporate change could promote employees'

personal resources. Finally, the literature has found that organizational change is highly contextual and substantial variation across organizational units may exist as different units can assign diverse meaning and interpretation to the changing conditions (e.g., Dee & Leisyte, 2017). Although we controlled our analyses for unit, finding that unit was associated with employees' perceptions of positive organizational change, we could not perform multi-level analysis due to our limited sample size. This kind of analysis would be strongly recommended in future research to better understand whether the unit-level climate might produce a certain team climate and then might influence individual practices and outcomes.

Despite these limitations, this study suggests several implications for managerial practice. The management could consider adopting communication actions to promptly inform and periodically update employees about how a certain organizational change would impact their daily work practices, explaining the reasons and advantages behind it. Reverse mentoring could help older employees develop new ways of looking at corporate change, accept this change, and reap its potential benefits more easily. To create a more participatory workplace, the management could organize round tables wherein employees may offer suggestions for improvement and feedback to guide decision-making. Additionally, to foster role clarity, role clarification conversations with one's supervisor and work group discussions about team members' reciprocal roles could be particularly useful (Montani et al., 2020). Moreover, given the key role of supervisor support, initiatives to create a socially supportive workplace environment should be implemented. For example, aligning job redesign with leadership training with the purpose of leaving supervisors with more time to devote to their collaborators may be an effective strategy for companies to encourage supervisor support (Tafvelin et al., 2019). Finally, organizations should offer psychological resilience training (Chitra & Karunanidhi, 2021; Brassington & Lomas, 2021) and counselling services to support needy workers.

### Conclusion

This parallel mixed-method study revealed that employees' perceptions of positive organizational change are related to role clarity which, in turn, is positively related to their resilience levels,

especially at high levels of supervisor support. As suggested by our qualitative findings, organizations could consider adequately informing and actively involving employees in change implementation processes to facilitate positive outcomes in the face of organizational change. To conclude, we hope that our findings will garner more research attention on the role of employees' individual differences in change management plans.

# **Funding details**

The authors did not receive any specific grant for this research.

### Disclosure statement

No potential conflict of interest was reported by the authors.

## Data availability statement

The data for this study are available from the corresponding author upon request.

### References

- Akhtar, S., & Zia-ur-Rehman, M. (2017). Impact of managerial coaching behavior on job performance: analyzing the role of organization commitment and role clarity. *Journal of Managerial Sciences*, 11(3), 298-318.
- Albrecht, S. L., Connaughton, S., Foster, K., Furlong, S., & Yeow, C. J. L. (2020). Change Engagement, Change Resources, and Change Demands: A Model for Positive Employee Orientations to Organizational Change. *Frontiers in Psychology*, 11, 531944. https://doi.org/10.3389/fpsyg.2020.531944
- Argentero, P., & Setti, I. (2008). Job perception, work conditions and burnout in emergency workers. *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 30(1), 64-70.
- Arnéguy, E., Ohana, M., & Stinglhamber, F. (2022). Readiness for change: which source of justice and support really matters?. *Employee Relations*, 44(1), 210-228. https://doi.org/10.1108/ER-05-2020-0225

- Baguri, E. M., Roslan, S., Hassan, S. A., Krauss, S. E., & Zaremohzzabieh, Z. (2022). How Do Self-Esteem, Dispositional Hope, Crisis Self-Efficacy, Mattering, and Gender Differences Affect Teacher Resilience during COVID-19 School Closures?. *International Journal of Environmental Research and Public Health*, 19(7), 4150. https://doi.org/10.3390/ijerph19074150
- Baillien, E., & De Witte, H. (2009). Why is Organizational Change Related to Workplace Bullying?

  Role Conflict and Job Insecurity as Mediators. *Economic and Industrial Democracy*, *30*(3), 348-371. https://doi.org/10.1177/0143831X09336557
- Belling, R., Whittock, M., McLaren, S., Burns, T., Catty, J., Jones, I. R., ... & Wykes, T. (2011). Achieving continuity of care: facilitators and barriers in community mental health teams. *Implementation Science*, 6(1), 1-7. https://doi.org/10.1186/1748-5908-6-23
- Bernerth, J. B., Walker, H. J., & Harris, S. G. (2011). Change fatigue: Development and initial validation of a new measure. *Work & Stress*, 25(4), 321-337. https://doi.org/10.1080/02678373.2011.634280
- Bernuzzi, C., Setti, I., Maffoni, M., & Sommovigo, V. (2021). From moral distress to burnout through work-family conflict: the protective role of resilience and positive refocusing. *Ethics & Behavior*, 1-23. Advance online publication. https://doi.org/10.1080/10508422.2021.1955682
- Bettinardi, O., Argentero, P., & Giorgi, I. (2007). Assessment of occupational stress among workers in rehabilitation medicine. *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 29(3), 693-695.
- Bockerman, P., & Ilkmakunnas, P. (2008). Interaction of working conditions, job satisfaction, and sickness absences: Evidence from a representative sample of employees. *Social Science & Medicine*, 67(4), 520–528. https://doi.org/10.1016/j.socscimed.2008.04.008
- Borgogni, L., Galati, D., Petitta, L., & Centro Formazione Schweitzer (2005). *Il questionario checkup organizzativo*. *Manuale dell'adattamento Italiano* [Organizational Checkup System (OCS). Instructions for the Italian version]. O.S. Organizzazioni Speciali.

- Brassington, K., & Lomas, T. (2021). Can resilience training improve well-being for people in high-risk occupations? A systematic review through a multidimensional lens. *The Journal of Positive Psychology*, *16*(5), 573-592. https://doi.org/10.1080/17439760.2020.1752783
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Brookes, K., Limbert, C., Deacy, C., O'reilly, A., Scott, S., & Thirlaway, K. (2013). Systematic review: work-related stress and the HSE management standards. *Occupational Medicine*, *63*(7), 463-472. https://doi.org/10.1093/occmed/kqt078
- Brown, S., Manning, M. R., & Ludema, J. D. (2016). Organization identity: Its role in organization change. In D. A. Noumair & A. B. Shani (Eds.), *Research in Organizational Change and Development* (Vol. 24, pp. 145-183). Emerald Publishing Limited. https://doi.org/10.1108/S0897-301620160000024006
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6(1), 97-113. https://doi.org/10.1177/1468794106058877
- Çakmak-Otluoğlu, K. Ö. (2012). Protean and boundaryless career attitudes and organizational commitment: The effects of perceived supervisor support. *Journal of Vocational Behavior*, 80(3), 638-646. https://doi.org/10.1016/j.jvb.2012.03.001
- Cameron, K., & McNaughtan, J. (2014). Positive organizational change. *The Journal of Applied Behavioral Science*, 50(4), 445-462. https://doi.org/10.1177/0021886314549922
- Carmeli, A., Friedman, Y., & Tishler, A. (2013). Cultivating a resilient top management team: The importance of relational connections and strategic decision comprehensiveness. *Safety Science*, *51*(1), 148-159. https://doi.org/10.1016/j.ssci.2012.06.002
- Carpi, M., Bruschini, M., & Burla, F. (2021). HSE Management Standards and burnout dimensions among rehabilitation professionals. *Occupational Medicine*, 71(4-5), 204-210. https://doi.org/10.1093/occmed/kqab055

- Chitra, T., & Karunanidhi, S. (2021). The impact of resilience training on occupational stress, resilience, job satisfaction, and psychological well-being of female police officers. *Journal of Police and Criminal Psychology*, 36, 8-23. https://doi.org/10.1007/s11896-018-9294-9
- Ciampa, V., Balducci, C., Avanzi, L., & Fraccaroli, F. (2018). The effect of perceived organizational change on psychological well-being and work-related stress: A longitudinal study. *Psicologia Sociale*, *13*(3), 251-266. https://doi.org/10.1482/91432
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357. https://doi.org/10.1037/0033-2909.98.2.310
- Contreras, S., & Gonzalez, J. A. (2021). Organizational change and work stress, attitudes, and cognitive load utilization: a natural experiment in a university restructuring. *Personnel Review*, 50(1), 264-284. https://doi.org/10.1108/PR-06-2018-0231
- Coupaud, M. (2022). Organizational change and psychosomatic symptoms: Exploring pathways through working conditions and assessing the moderating role of social support among European workers. *Economic and Industrial Democracy*. https://doi.org/10.1177%2F0143831X211069411
- Cousins, R., Mackay, C. J., Clarke, S. D., Kelly, C., Kelly, P. J., & McCaig, R. H. (2004). 'Management standards' work-related stress in the UK: Practical development. *Work & Stress*, 18(2), 113-136. https://doi.org/10.1080/02678370410001734322
- Crane, M. F., & Searle, B. J. (2016). Building resilience through exposure to stressors: The effects of challenges versus hindrances. *Journal of Occupational Health Psychology*, 21(4), 468–479. https://doi.org/10.1037/a0040064
- Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, 29(2), 269-280. https://doi.org/10.1007/s10869-013-9312-y

- Cullen-Lester, K. L., Webster, B. D., Edwards, B. D., & Braddy, P. W. (2019). The effect of multiple negative, neutral, and positive organizational changes. *European Journal of Work and Organizational Psychology*, 28(1), 124-135. https://doi.org/10.1080/1359432X.2018.1544896
- Day, A., Crown, S. N., & Ivany, M. (2017). Organisational change and employee burnout: The moderating effects of support and job control. *Safety Science*, 100, 4-12. https://doi.org/10.1016/j.ssci.2017.03.004
- De Clercq, D. (2019). Getting creative with resources: How resilience, task interdependence, and emotion sharing mitigate the damage of employee role ambiguity. *The Journal of Applied Behavioral Science*, 55(3), 369-391. https://doi.org/10.1177/0021886319853803
- Dee, J., & Leisyte, L. (2017). Knowledge sharing and organizational change in higher education. *The Learning Organization*, 27(5), 355-365. http://dx.doi.org/10.1108/TLO-04-2017-0034
- De Fátima Nery, V., Franco, K. S., & Neiva, E. R. (2020). Attributes of the organizational change and its influence on attitudes toward organizational change and well-being at work: A longitudinal study. *The Journal of Applied Behavioral Science*, 56(2), 216-236. https://doi.org/10.1177/0021886319865277
- de Jong, T., Wiezer, N., de Weerd, M., Nielsen, K., Mattila-Holappa, P., Mockallo, Z. (2016). The impact of restructuring on employee well-being: a systematic review of longitudinal studies. *Work Stress*, 30(1), 91–114. http://dx.doi.org/10.1080/02678373.2015.1136710
- Di Fabio, A., & Palazzeschi, L. (2012). Connor-Davidson Resilience Scale: Proprietà psicometriche della versione italiana [Connor-Davidson Resilience Scale: Psychometric Properties of the Italian Version]. *Counseling. Giornale Italiano Di Ricerca E Applicazioni*, 5, 101-110.
- Duraisingam, V., Roche, A. M., Kostadinov, V., Hodge, S., & Chapman, J. (2020). Predictors of work engagement among Australian non-government drug and alcohol employees: Implications for policy and practice. *International Journal of Drug Policy*, 76, 102638. https://doi.org/10.1016/j.drugpo.2019.102638

- Eisenberger, R., & Stinglhamber, F. (2011). *Perceived Organizational Support: Fostering Enthusiastic and Productive Employees*. American Psychological Association. https://doi.org/10.1037/12318-000
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565–573. https://doi.org/10.1037/0021-9010.87.3.565
- Edwards, B. D., Franco-Watkins, A. M., Cullen, K. L., Howell, J. W., & Acuff Jr, R. E. (2014). Unifying the challenge-hindrance and sociocognitive models of stress. *International Journal of Stress Management*, 21(2), 162-185. https://psycnet.apa.org/doi/10.1037/a0034730
- Edwards, J. A., Webster, S., Van Laar, D., & Easton, S. (2008). Psychometric analysis of the UK Health and Safety Executive's Management Standards work-related stress Indicator Tool. *Work & Stress*, 22(2), 96-107. https://doi.org/10.1080/02678370802166599
- Fried, Y., Slowik, L., Shperling, Z., Franz, C., Ben-David, H., Avital, N., & Yeverechyhau, U. (2003).

  The moderating effect of job security on the relation between roleclarity and job performance: A longitudinal field study. *Human Relations*, 56(7), 787–805. https://doi.org/10.1177/00187267030567002
- Fugate, M., Kinicki, A. J., & Prussia, G. E. (2008). Employee coping with organizational change: An examination of alternative theoretical perspectives and models. *Personnel Psychology*, *61*(1), 1-36. https://doi.org/10.1111/j.1744-6570.2008.00104.x
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, 21(6), 1016–1024. https://doi.org/10.1037/0012-1649.21.6.1016
- Fukui, S., Salyers, M. P., Morse, G., & Rollins, A. L. (2021). Factors that affect quality of care among mental health providers: Focusing on job stress and resources. *Psychiatric Rehabilitation Journal*, 44(3), 204-211. https://doi.org/10.1037/prj0000469

- Gazzaroli, D., Gozzoli, C., & Sánchez-Gardey, G. (2019). The living and working together perspective on creativity in organizations. *Frontiers in Psychology*, 10, 2733. https://doi.org/10.3389/fpsyg.2019.02733
- Gilardi, S., Guglielmetti, C., Converso, D., Fida, R., & Viotti, S. (2020). Third-party aggression and emotion work among nurses: Testing a moderated mediation model. *International Journal of Stress Management*, 27(2), 146-159. https://doi.org/10.1037/str0000136
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly*, 82(4), 581-629. https://doi.org/10.1111/j.0887-378X.2004.00325.x
- Gressgård, L. J., & Hansen, K. (2015). Knowledge exchange and learning from failures in distributed environments: The role of contractor relationship management and work characteristics. 

  \*Reliability Engineering & System Safety, 133, 167-175.\*\*

  https://doi.org/10.1016/j.ress.2014.09.010
- Grossman, R., & Burke-Smalley, L. A. (2018). Context-dependent accountability strategies to improve the transfer of training: A proposed theoretical model and research propositions. *Human Resource Management Review*, 28(2), 234-247. https://doi.org/10.1016/j.hrmr.2017.08.001
- Grunberg, L., Moore, S., Greenberg, E. S., & Sikora, P. (2008). The changing workplace and its effects: a longitudinal examination of employee responses at a large company. *The Journal of Applied Behavioral Science*, 44(2), 215-236. https://doi.org/10.1177/0021886307312771
- Gupta, A., & Singh, P. (2021). Job crafting, workplace civility and work outcomes: the mediating role of work engagement. *Global Knowledge, Memory and Communication*, 70(6-7), 637-654. https://doi.org/10.1108/GKMC-09-2020-0140
- Harman, H. H. (1976). Modern factor analysis. University of Chicago press.
- Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace: A multilevel review and synthesis. *Applied Psychology*, 69(3), 913-959. https://doi.org/10.1111/apps.12191

- Hartling, L. M. (2008). Strengthening resilience in a risky world: It's all about relationships. *Women & Therapy*, 31(2-4), 51-70. https://doi.org/10.1080/02703140802145870
- Hastings, S. E., Armitage, G. D., Mallinson, S., Jackson, K., & Suter, E. (2014). Exploring the relationship between governance mechanisms in healthcare and health workforce outcomes: a systematic review. *BMC Health Services Research*, *14*(1), 1-14. https://doi.org/10.1186/1472-6963-14-479
- Herold, D. M., & Fedor, D. B. (2008). Change the way you lead change: Leadership strategies that really work. Stanford University Press.
- Herold, D. M., Fedor, D. B., Caldwell, S., & Liu, Y. (2008). The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93(2), 346-357. https://doi.org/10.1037/0021-9010.93.2.346
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process:

  Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337-421.

  https://doi.org/10.1111/1464-0597.00062
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128. https://doi.org/10.1146/annurev-orgpsych-032117-104640
- Hobfoll, S. E., Stevens, N. R., & Zalta, A. K. (2015). Expanding the science of resilience: Conserving resources in the aid of adaptation. *Psychological Inquiry*, 26(2), 174-180. https://doi.org/10.1080/1047840X.2015.1002377
- House, J. (1981). Work stress and social support. Reading, MA: Addison-Wesley.
- Houdmont, J., Randall, R., Kerr, R., & Addley, K. (2013). Psychosocial risk assessment in organizations: Concurrent validity of the brief version of the Management Standards Indicator Tool. Work & Stress: An International Journal of Work, Health & Organizations, 27(4), 403–412. https://doi.org/10.1080/02678373.2013.843607

- Health and Safety Executive (HSE, 2010). *HSE Management Standards Indicator Tool*. http://www.hse.gov.uk/stress/standards/pdfs/indicatortool.pdf
- Katz, D., & Kahn, R. L. (1978). The social psychology of organizations. Wiley.
- Kaufmann, G.M. & Beehr, T.A. (1986). Interactions between job stressors and social support: some counterintuitive results, *Journal of Applied Psychology*, 71, 522–6. https://doi.org/10.1111/1467-8551.00112
- Kauppila, O. P. (2014). So, what am I supposed to do? A multilevel examination of role clarity. *Journal of Management Studies*, 51(5), 737-763. https://doi.org/10.1111/joms.12042
- Kras, K. R., Rudes, D. S., & Taxman, F. S. (2017). Managing up and down: Community corrections middle managers' role conflict and ambiguity during organizational change. *Journal of Crime and Justice*, 40(2), 173-187. https://doi.org/10.1080/0735648X.2015.1085889
- King, N., & Brooks, J. (2018). Thematic analysis in organizational research. In C. Cassell, A. L. Cunliffe, & G. Grandy (Eds.), *The SAGE Handbook of Qualitative Business and Management Research Methods: Volume 2: Methods and Challenges* (Vol. 2). Sage Publications Ltd.
- Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (4th ed.). Sage Publications Inc.
- Lazarus, R. S. (1999). Stress and emotion: A new synthesis. Springer.
- Lazarus, R.S., & Folkman, S. (1984). Stress, Appraisal, and Coping. Springer.
- Lee, H. (2021). Changes in workplace practices during the COVID-19 pandemic: the roles of emotion, psychological safety and organisation support. *Journal of Organizational Effectiveness:*People and Performance, 8(1), 97-128. https://doi.org/10.1108/JOEPP-06-2020-0104
- Leiter, M.P., & Maslach, C. (2000). Preventing burnout and building engagement: A complete program for organizational renewal. Jossey-Bass.
- Leiter, M. P., & Maslach, C. (2005). 36 A mediation model of job burnout. In A. G. Antoniou and C. L. Cooper (Eds.), *Research companion to organizational health psychology* (pp. 544-564). Edward Elgar Publishing Limited. https://doi.org/10.4337/9781845423308

- Lucia-Casademunt, A. M., Cuéllar-Molina, D., & García-Cabrera, A. M. (2018). The role of human resource practices and managers in the development of well-being: Cultural differences in the changing workplace. *Cross Cultural & Strategic Management*, 25(4), 716-740. https://doi.org/10.1108/CCSM-05-2017-0054
- Lundmark, R., Richter, A., & Tafvelin, S. (2022). Consequences of Managers' Laissez-faire Leadership During Organizational Restructuring. *Journal of Change Management*, 22(1), 40-58. https://doi.org/10.1080/14697017.2021.1951811
- Maffoni, M., Argentero, P., Giorgi, I., & Giardini, A. (2020). Underneath the white coat: risk and protective factors for palliative care providers in their daily work. *Journal of Hospice* & *Palliative Nursing*, 22(2), 108-114. https://doi.org/10.1097/NJH.00000000000000023
- Maffoni, M., Sommovigo, V., Giardini, A., Velutti, L., & Setti, I. (2021). Well-being and professional efficacy among health care professionals: The role of resilience through the mediation of ethical vision of patient care and the moderation of managerial support. *Evaluation & the Health Professions*. Advance online publication. https://doi.org/10.1177/01632787211042660
- Mäkikangas, A., Mauno, S., Selenko, E., & Kinnunen, U. (2019). Toward an understanding of a healthy organizational change process: A three-wave longitudinal study among university employees. *International Journal of Stress Management*, 26(2), 204–212. https://doi.org/10.1037/str0000059
- Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly*, 18(3), 231-252. https://doi.org/10.1521/scpq.18.3.231.22576
- Marcatto, F., Colautti, L., Larese Filon, F., Luis, O., & Ferrante, D. (2014). The HSE management standards indicator tool: concurrent and construct validity. *Occupational Medicine*, *64*(5), 365-371. https://doi.org/10.1093/occmed/kqu038
- Marcatto, F., Di Blas, L., Luis, O., Festa, S., & Ferrante, D. (2021). The Perceived Occupational Stress Scale: A brief tool for measuring workers' perceptions of stress at work. *European Journal*

- of Psychological Assessment. Advance online publication. https://doi.org/10.1027/1015-5759/a000677
- Marcatto, F., D'Errico, G., Di Blas, L., & Ferrante, D. (2011). Assessing work-related stress: an Italian adaptation of the HSE management standards work-related stress indicator tool. *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 33(4), 403-408.
- McDonald, G., Jackson, D., Vickers, M. H., & Wilkes, L. (2016). Surviving workplace adversity: a qualitative study of nurses and midwives and their strategies to increase personal resilience.

  \*Journal of Nursing Management, 24(1), 123-131. https://doi.org/10.1111/jonm.12293
- Meneghel, I., Borgogni, L., Miraglia, M., Salanova, M., & Martinez, I. M. (2016). From social context and resilience to performance through job satisfaction: A multilevel study over time. *Human Relations*, 69(11), 2047-2067. https://doi.org/10.1177/0018726716631808
- Miller, S. M., Kim, J., & Lim, D. H. (2020). "Everybody needs everyone": a case study of workplace learning after a downsize. *European Journal of Training and Development*, 44(2/3), 159-170. https://doi.org/10.1108/EJTD-02-2019-0013
- Montani, F., Setti, I., Sommovigo, V., Courcy, F., & Giorgi, G. (2020). Who Responds Creatively to Role Conflict? Evidence for a Curvilinear Relationship Mediated by Cognitive Adjustment at Work and Moderated by Mindfulness. *Journal of Business and Psychology*, 35(5), 621-641. https://doi.org/10.1007/s10869-019-09644-9
- Morgan, P. B., Fletcher, D., & Sarkar, M. (2013). Defining and characterizing team resilience in elite sport. *Psychology of sport and exercise*, *14*(4), 549-559. https://doi.org/10.1016/j.psychsport.2013.01.004
- Muthén, L.K., & Muthén, B.O. (2012). Mplus User's Guide. Muthén & Muthén.
- Nyumba, T.O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, *9*(1), 20-32. https://doi.org/10.1111/2041-210X.12860

- Oreg, S. & Berson, Y. (2011). Leadership and employees' reactions to change: the role of leaders' personal attributes and transformational leadership style. *Personnel Psychology*, *64*(3), 627-659. https://doi.org/10.1111/j.1744-6570.2011.01221
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change A 60-year review of quantitative studies. *The Journal of Applied Behavioral Science*, 47(4), 461–524. https://doi.org/10.1177/0021886310396550
- Perrewé, P. L., & Zellars, K. L. (1999). An examination of attributions and emotions in the transactional approach to the organizational stress process. *Journal of Organizational Behavior*, 20(5), 739-752. https://doi.org/10.1002/(SICI)1099-1379(199909)20:5%3C739::AID-JOB1949%3E3.0.CO;2-C
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539-569. https://doi.org/10.1146/annurev-psych-120710-100452
- Rahaman, H. S., Camps, J., Decoster, S., & Stouten, J. (2020). Ethical leadership in times of change: the role of change commitment and change information for employees' dysfunctional resistance.

  \*Personnel Review, 50(2), 630-647. https://doi.org/10.1108/pr-03-2019-0122
- Rathi, N., & Lee, K. (2017). Understanding the role of supervisor support in retaining employees and enhancing their satisfaction with life. *Personnel Review*, 46(8), 1605-1619. https://doi.org/10.1108/PR-11-2015-0287
- Ravalier, J. M., McFadden, P., Boichat, C., Clabburn, O., & Moriarty, J. (2021). Social worker wellbeing: A large mixed-methods study. *The British Journal of Social Work*, 51(1), 297–317. https://doi.org/10.1093/bjsw/bcaa078

- Ravalier, J. M., Morton, R., Russell, L., & Fidalgo, A. R. (2018). Zero-hours contracts and stress in UK domiciliary care workers. *Health and Social Care in the Community*, 27(2), 348–355. https://doi.org/10.1111/hsc.12652
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15(2), 150-163. https://doi.org/10.2307/2391486
- Saksvik, PØ, Tvedt, S. D., NytrØ, K., Andersen, G. R., Andersen, T. K., Buvik, M. P., & Torvatn, H. (2007). Developing criteria for healthy organizational change. *Work & Stress*, 21(3), 243–263. https://doi.org/10.1080/02678370701685707
- Schilling, J. (2006). On the pragmatics of qualitative assessment: Designing the process for content analysis. *European Journal of Psychological Assessment*, 22(1), 28-37. https://doi.org/10.1027/1015-5759.22.1.28
- Schoonenboom, J., & Johnson, R. B. (2017). How to Construct a Mixed Methods Research Design. *Kolner Zeitschrift fur Soziologie und Sozialpsychologie*, 69(2), 107–131. https://doi.org/10.1007/s11577-017-0454-1
- Schulz-Knappe, C., Koch, T., & Beckert, J. (2019). The importance of communicating change: Identifying predictors for support and resistance toward organizational change processes.

  \*Corporate Communications: An International Journal, 24(4), 670-685.\*

  https://doi.org/10.1108/CCIJ-04-2019-0039
- Searle, B. J., & Auton, J. C. (2015). The merits of measuring challenge and hindrance appraisals. *Anxiety, Stress, & Coping*, 28(2), 121-143. https://doi.org/10.1080/10615806.2014.931378
- Selye, H. (1982). History and present status of the stress concept. In L. Godlberger & S. Brezruitz (Eds.), *Handbook of stress: Theoretical and clinical aspects* (pp. 7–17). Free Press.

- Senbeto, D. L., & Hon, A. H. (2020). Market turbulence and service innovation in hospitality: examining the underlying mechanisms of employee and organizational resilience. *The Service Industries Journal*, 40(15-16), 1119-1139. https://doi.org/10.1080/02642069.2020.1734573
- Shanock, L.R. & Eisenberger, R. (2006). When supervisors feel supported: relationships with subordinates' perceived supervisor support, perceived organisational support, and performance.

  \*Journal of Applied Psychology, 91(3), 689-695. https://doi.org/10.1037/0021-9010.91.3.689
- Shaw, J. B., Fields, M. W., Thacker, J. W., & Fisher, C. D. (1993). The availability of personal and external coping resources: Thier impact on job stress and employee attitudes during organizational restructuring. *Work* & *Stress*, 7(3), 229-246. https://doi.org/10.1080/02678379308257064
- Sirigatti, S., & Stefanile, C. (2002). OSI occupational stress indicator. O.S. Organizzazioni Speciali.
- Sommovigo, V., Bernuzzi, C., & Setti, I. (2022). Helping others not always helps ourselves: the relationship between victim incivility and emergency workers' burnout through work-to-family conflict. *International Journal of Workplace Health Management*. https://doi.org/10.1108/IJWHM-09-2021-0183
- Stephens, J. P., Heaphy, E. D., Carmeli, A., Spreitzer, G. M., & Dutton, J. E. (2013). Relationship quality and virtuousness: Emotional carrying capacity as a source of individual and team resilience. *The Journal of Applied Behavioral Science*, 49(1), 13-41. https://doi.org/10.1177/0021886312471193
- Tafvelin, S., Stenling, A., Lundmark, R., & Westerberg, K. (2019). Aligning job redesign with leadership training to improve supervisor support: a quasi-experimental study of the integration of HR practices. *European Journal of Work and Organizational Psychology*, 28(1), 74-84. https://doi.org/10.1080/1359432X.2018.1541887
- Tavakoli, M. (2010). A positive approach to stress, resistance, and organizational change. *Procedia-Social and Behavioral Sciences*, *5*, 1794-1798. https://doi.org/10.1016/j.sbspro.2010.07.366

- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology*, *54*, 416–423. https://doi.org/10.1037/0022-006X.54.4.416
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research*, 11(4), 522-537. https://doi.org/10.1177/104973201129119299
- Wood, S., Ghezzi, V., Barbaranelli, C., Di Tecco, C., Fida, R., Farnese, M. L., Ronchetti, M., & Iavicoli, S. (2019). Assessing the risk of stress in organizations: getting the measure of organizational-level stressors. *Frontiers in Psychology*, 10, 2776. https://doi.org/10.3389/fpsyg.2019.02776
- Yao, L., & Li, P. (2019). Moral leadership and employee work–family conflict: A moderated mediation model. *Social Behavior and Personality: an International Journal*, 47(12), 1-12. https://doi.org/10.2224/sbp.8642
- Yu, M. C., & Lee, M. H. (2018). Multilevel moderation analysis of change perception on change commitment. *Journal of Organizational Change Management*, 31(2), 371-384. https://doi.org/10.1108/JOCM-01-2017-0006
- Zaghini, F., Biagioli, V., Proietti, M., Badolamenti, S., Fiorini, J., & Sili, A. (2020). The role of occupational stress in the association between emotional labor and burnout in nurses: A cross-sectional study. *Applied Nursing Research*, *54*, 151277. https://doi.org/10.1016/j.apnr.2020.151277