From moral distress to burnout through work-family conflict: the protective role of resilience and positive refocusing

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Conflict of interest

The authors declared no potential conflicts of interest with respect to the study, authorship and publication of the present paper.

Data availability statement

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

Funding information

The authors did not receive a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

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This study analyses for the first time *whether* and *when* moral distress may be related to work-family conflict and burnout. Additionally, this study examines whether resilience and positive refocusing might protect healthcare professionals from the negative effects of moral distress. A total of 153 Italian healthcare professionals completed self-report questionnaires. Simple and moderated mediation models revealed that moral distress was positively related to burnout, directly and indirectly, as mediated by work-family conflict. Highly resilient professionals experienced low work-family conflict, regardless of moral distress levels. Moreover, professionals who frequently used positive refocusing were less vulnerable to burnout following moral distress.

Keywords: moral distress, work-family conflict, resilience, positive refocusing, burnout

Introduction

In today's healthcare organizations, workload pressures along with the emotional burden related to patient suffering may jeopardize professionals' health, leading to psycho-physical malaise and burnout (Almeida et al., 2020). This may also undermine employees' ability to maintain a healthy work-life balance, high-quality care, and patient safety (Hancock et al., 2020). Moreover, healthcare professionals are frequently confronted with challenging bioethical issues arising from divergence between their personal values and organizational practices, which may lead them to develop moral distress (Maffoni et al., 2019, 2020). More specifically, people perceive moral distress when they can identify the ethically appropriate behaviour based on their core values and personal beliefs, but they feel unable to perform it due to external restrictions (e.g., lack of time or support), institutional polices or personal constraints (Jameton, 1984; Morley et al., 2019). In the contemporary healthcare context, this phenomenon, which was originally analysed in nursing ethics, is often reported by healthcare professionals' groups, such as clinicians and occupational therapists (Ulrich & Grady, 2018; Goddard, 2021). According to the literature, moral distress is related to several negative work-related consequences, such as poor patients' family satisfaction with the quality of care (Lamiani et al., 2020), job dissatisfaction (Ando & Kawano, 2018), and turnover intentions (Hatamizadeh et al., 2018). In addition, moral distress may result in serious health consequences, including burnout (Fumis et al., 2017).

Burnout is defined as a psychological syndrome developing as a prolonged reaction to excessive interpersonal job stressors (Lamiani, Borghi, et al., 2017; Maslach & Leiter, 2016). Although several studies have revealed that moral distress is positively associated with burnout (e.g., Maffoni et al., 2020; Delfrate et al., 2018; Fumis et al.,

2017), to date, there is scarce healthcare literature on the relationships among moral distress, burnout, and work-family conflict.

Work-family conflict occurs when employees perceive incompatible demands from both the work and family domains and are unable to address them simultaneously (Greenhaus & Beutell, 1985). To date, the literature on work-family conflict among healthcare professionals has been mainly focused on quantitative job demands, such as shift work and extended hours of work (Karhula et al., 2017; Barnes-Farrell et al., 2008), while less emphasis has been placed on whether and how the effects of ethical issues (e.g., moral distress) raised by one's own work may extend beyond the boundaries of the work domain. As far as our knowledge goes, there is only research revealing a strong relationship between moral distress and work-family conflict among nurses (Ibrahim et al., 2017). Nevertheless, there is considerable evidence demonstrating the negative impact exerted by this kind of conflict on healthcare professionals' job-related outcomes, including job dissatisfaction (Peter et al., 2020), lower quality of the work life (Zandian et al., 2020), diminished work engagement (Martínez-Corts et al., 2021) and intentions to leave their profession (Peter et al., 2020). This is also due to the fact that, when healthcare professionals experience conflicting demands between work and non-work domains (e.g., family), they are more likely to report poor sleep quality (Cheng et al., 2019), stress (Terry et al., 2020), depression (Bukhari et al., 2020) and burnout (Grace & VanHeuvelen, 2019). Although a previous research demonstrated that work-family interference partially mediated the relationship between quantitative/emotional job demands (i.e., workload and emotional charge) and burnout among physicians (Montgomery et al., 2006), to the best of our knowledge, there are no previous studies analysing the mediating role of work-family conflict between moral distress and burnout among healthcare professionals. Since these variables represent widespread phenomena in today's health workforce, both in

Italy (Leuter et al., 2018; Bruschini et al., 2018; Battistelli et al., 2013; Simon et al., 2004) and worldwide (Carnevale, 2020; Woo et al., 2020; Grzywacz et al., 2006), the first aim of this research was to investigate whether moral distress would impact healthcare professionals' well-being (i.e., burnout), directly and indirectly, as mediated by work-family conflict.

Furthermore, given the several negative effects of moral distress and work-family conflict on healthcare professionals' health and work-related outcomes, it is of the utmost importance for researchers and practitioners to identify which personal characteristics may protect healthcare professionals facing these issues. According to the Conservation of Resource (COR; Hobfoll, 1989, 2018) theory, personal characteristics represent valuable resources which may determine how individuals react to stressful situations and protect them from their negative effects (Grandey & Cropanzano, 1999). Among these, resilience, which refers to a dynamic process that allows individuals to cope and successfully adapt to stressful circumstances (Bryan et al., 2019; Zanatta et al., 2020). Resilience constitutes a personal coping resource (Hobfoll et al., 2018) as it may sustain professionals in effectively handling the consequences of moral distress (Maffoni et al., 2020) as well as protect them from developing work-family conflict (Mache et al., 2015; Martinez-Corts et al., 2015; *Anonymous* et al., under review) and burnout (Clough et al., 2020; García-Izquierdo et al., 2018; Moon & Shin, 2018). Although some studies investigated resilience as a protective factor against moral distress, work-family conflict and burnout separately, as far as we know, there are no previous studies focusing on the role of resilience in protecting healthcare professionals, facing moral distress, from the development of work-family conflict and burnout. This may be of particular interest as resilience, unlike trait-like personality characteristics, may be improved through specific training (Rushton et al., 2021; Joyce et al., 2018).

Drawing on the COR theory (Hobfoll et al., 2018), besides resilience, personal coping strategies may be considered as personal resources which may be crucial in dealing with stressful situations, such as moral distress. Healthcare professionals often need to regulate their emotions to fulfil the emotional requirements of their own job (a process that is called emotional labour; Grandey, 2000) when facing distressing situations, such as interactions with patients who suffer from life-threatening conditions or need painful medical interventions (Gulsen & Ozmen, 2020). Other authors have identified two categories of coping strategies: problem-focused (i.e., the attempt to act on the stressor) and emotion-focused (i.e., the attempt to manage emotions related to the stressor; Compas et al., 1993). Emotion-focused coping strategies are considered the best strategies to adopt in situations whereby people feel that nothing can be done to change the stressor (Lazarus, 1993). In adopting these strategies, people can regulate their emotions by changing their behaviour (i.e., surface acting) or their cognitions (i.e., deep acting; Grandey, 2000, Badolamenti et al., 2017). Thus, since moral distress occurs when healthcare professionals are unable to act ethically due to factors that are perceived to be beyond their control, this study investigated the role of a specific emotion-focused coping strategy, namely positive refocusing. This coping strategy allows to regulate negative emotions by thinking about positive experiences instead of focusing on the actual critical event (Rusu et al., 2019). In this regard, a recent qualitative research study showed that nurses reported positive refocusing as a coping strategy helpful in dealing with ethical issues related to moral distress (Helmers et al., 2020). However, as far as we know, there are no quantitative studies analysing the efficacy of this type of coping strategy in protecting healthcare professionals dealing with moral distress from the development of work-family conflict and burnout. Therefore, given the need to strengthen healthcare professionals' ability to successfully manage work-related ethical issues (De Barros et

al., 2019), the second aim of this research was to investigate whether resilience and positive refocusing might be protective factors against work-family conflict and burnout.

By pursuing these goals, the present research aims to bring two important contributions to the literature on moral distress and personal resources. First, while several studies showed that quantitative job demands (Karhula et al., 2017; Barnes-Farrell et al., 2008) may lead healthcare professionals to experience work-family conflict, to date, to the best of our knowledge, there is only one healthcare study (Ibrahim et al., 2017) analysing whether moral distress may be related to this form of conflict. Thus, by empirically investigating whether moral distress may be related to work-family conflict and then to burnout, this study addresses a relevant gap in the moral distress literature.

Second, while the role of resilience in helping healthcare professionals deal with moral distress (Maffoni et al., 2020) and in protecting them from work-family conflict (Mache et al., 2015; Martinez-Corts et al., 2015; *Anonymous* et al., under review) and burnout (Clough et al., 2020; García-Izquierdo et al., 2018; Moon & Shin, 2018) is widely recognized, this is the first study to examine whether resilience would mitigate the relationships between moral distress and work-family conflict, on one side, and work-family conflict and burnout, on the other side. This is also the first quantitative research to analyse the protective role of positive refocusing against these negative effects of moral distress, which is of the utmost importance in helping professionals manage the negative emotions elicited by morally distressing situations. In doing so, this study adds to the literature on personal resources providing new, theoretically, and practically relevant knowledge on how to sustain healthcare professionals facing moral distress.

Theoretical Background and Hypotheses Development

The relationship between moral distress and burnout

Drawing on the COR theory (Hobfoll et al., 2018), performing behaviours or actions that contradict one's own ethical values may negatively affect psychological health. In fact, doing so threatens people's key resources (e.g., moral integrity; Maffoni et al., 2020), eventually leading to burnout. Indeed, according to the COR theory (Hobfoll et al., 2018), distress results from an actual or threatened loss of resources (i.e., objects, conditions, personal characteristics, energies of central value for people; Hobfoll et al., 2018) or a failure to gaining resources following significant resource investments (Hobfoll et al., 2018). Thus, when trying to handle the effects of moral distress, professionals need to invest additional resources (Hobfoll et al., 2018; Maffoni et al., 2020). When healthcare professionals are successful in doing it (e.g., regulating their inner negative feelings by effectively engaging in positive refocusing), they may restore the emotional resources that they lost following a morally distressing situation by reducing emotional dissonance and by gaining additional resources because of positive reactions from patients (Chou et al., 2012). Conversely, when healthcare professionals are not successful in effectively compensating the resource loss due to moral distress, for instance, through emotion regulation strategies (e.g., positive refocusing), they may gradually deteriorate their own resource reservoirs, activating loss spirals, which may engender even more serious health consequences (Maffoni et al., 2020). In such conditions of sustained resource drain, professionals may feel a lack of energies needed to effectively meet job demands, eventually developing emotional exhaustion. Emotional exhaustion, in this context, refers to a chronic state of depletion of emotional resources due to excessive job requests (Maslach & Leiter, 2016; Sommovigo et al., 2019). In such a context, healthcare professionals may also reduce their work efforts by adopting withdrawing behaviours (Maffoni et al., 2020), such as turnover intentions (Laurs et al., 2020; Prottas et al., 2013). Alternatively, they are likely to attempt to counterbalance the

loss of resources by emotionally detaching themselves from patients and by developing an uncaring attitude towards their own job (Maslach & Leiter, 2016; Sommovigo et al., 2019). Said differently, cynicism may occur, impairing the quality of the care provided and therapeutic effectiveness (Galletta et al., 2016). Extensive research has confirmed that moral distress is positively related to burnout (Maffoni et al., 2020; Ajoudani et al., 2019; Delfrate et al., 2018; Fumis et al., 2017; Larson et al., 2017; Johnson-Coyle et al., 2016). Thus, building on the theoretical argument and empirical results, we expected that moral distress would be positively related to burnout *(Hypothesis 1).*

The relationship between moral distress and work-family conflict

As people have a relatively limited number of resources (Xu & Cao, 2019), when they experience work strain, they may use their own resources to meet work demands and, therefore may find it difficult to fulfil family needs (Grandey & Cropanzano, 1999). Said differently, when healthcare professionals have to face morally distressing situations, they may experience a lack of resources which may threaten their ability to meet other demands, such as those derived from the family domain. In such a situation, they are likely to employ their cognitive, psychological, and emotional resources to manage negative emotions, such as powerlessness (Rivard & Brown, 2019), and think about the situation (e.g., possible reasons) deriving from the work domain. In addition, in light of the COR theory (Hobfoll et al., 2018), healthcare professionals may decrease their resource investments in the family domain to preserve their remaining resources. As a result, recovery-related demands could interfere with family needs, generating work-family conflict. To date, to the best of our knowledge, there is only one healthcare study (Ibrahim et al., 2017) showing a positive relationship between moral distress and work-family conflict among nurses. This relationship was, to some extent, confirmed by a study (Prottas, 2013) conducted on a nationally representative sample of American workers

analysing the way having to take actions, that went against employees' conscience, could lead them to experience work-family conflict. These studies suggest that healthcare professionals who experience moral distress at work could be more likely to develop work-family conflict than those who do not experience it. Hence, we hypothesized that moral distress would be positively associated with work-family conflict *(Hypothesis 2)*.

The mediating role of work-family conflict

According to the COR theory, when attempting to juggle work and family roles, professionals have to invest additional resources in order to protect their remaining emotional and cognitive energies (Grandey & Cropanzano, 1999). If individuals are unsuccessful in doing so, they may lose further resources, for instance, in the form of family stability, positive affect, and self-confidence as family members (Vieira et al., 2016). This may increase their risk of developing burnout (Wu et al., 2019). Indeed, previous studies found a positive relationship between work-family conflict and burnout among healthcare professionals (Recuero & Segovia, 2021; Williams et al., 2021; Mahendran et al., 2019; Yang et al., 2017). In other words, moral distress may deplete healthcare professionals' valuable resources, leaving them with fewer resources to fulfil family demands, which may make the occurrence of work-family conflict more likely. In such a situation, resource-depleted healthcare professionals may lack the resources needed to effectively meet job demands, and eventually may become emotionally drained by and cynical about their own work. Thus, we proposed that work-family conflict would mediate the relationship between moral distress and burnout symptoms *(Hypothesis 3)*.

The moderating role of resilience

Drawing on the COR theory (Hobfoll et al., 2018), when lowly resilient healthcare professionals experience moral distress, they may be more likely to develop work-family conflict and then burnout, being more susceptible to resource loss than their highly

resilient colleagues (Hobfoll et al., 2018; Maffoni et al., 2020). Conversely, resilient persons may be less vulnerable to resource loss and more capable of resource gains because of their tendencies to accumulate and enrich resources over time (Hobfoll, et al., 2018; Maffoni et al., 2020). Accordingly, previous studies revealed that resilience may buffer the negative effects of job demands on burnout symptoms (Al-Hawari et al. 2020) and work-related outcomes (Sarwar et al., 2020), including work-life conflict (Mache et al., 2015; Martinez-Corts et al., 2015). This may occur because resilient professionals may adapt strategies to effectively manage morally distressing situations. For example, they may proactively request support from their supervisors or colleagues sharing with them the negative emotions arising from these situations. In addition, since resilience refers to the ability to maintain a regular functioning and to effectively adapt to adversities (Bryan et al., 2019; Zanatta et al., 2020), resilient professionals may respond to morally distressing situations in an adaptive way by appraising them as challenges rather than threats (Rushton, 2017; Viotti et al., 2018). This may reduce the odds of a spill over of negative emotions related to moral distress from the work to the family domain. Resilience may also protect professionals from the loss of personal resources for dealing with family issues. Additionally, since resilience helps maintain a positive equilibrium, highly resilient professionals could be more capable of maintaining regular functioning even in presence of conflicting work and family demands, thereby reducing the risk of developing burnout. Given that resilience seems to be a personal resource helping employees effectively manage ethical and work-family issues (Maffoni et al., 2020; Viotti et al., 2018), we hypothesized that resilience would moderate the relationship between moral distress and work-family conflict (*a*) as well as the association between work-family conflict and burnout (*b*). Highly resilient healthcare providers facing moral distress

would be less likely to experience work-family conflict (a), in addition to being less likely to develop burnout (b) related to work-family conflict *(Hypothesis 4)*.

The moderating role of positive refocusing

According to the COR theory (Hobfoll et al., 2018), when employees face situations that represent a threat to their resources (e.g., moral distress), they may apply resource conservation strategies, whereby they use available resources to adapt as successfully as possible. Beside resource replacement (i.e., trying to re-establish the lost resource) and resource substitution (i.e., replacing a lost resource with another of equivalent value from a different resource domain), COR theory identifies re-appraisal as a resource conservation strategy through which individuals can re-appraise their resources by shifting their attention to the positives and by concentrating on what they may gain from a threating situation (Sommovigo, 2019). According to this view, positive refocusing may help healthcare professionals diminish their perceptions of loss by thinking about positive experiences (Rusu et al., 2019). Indeed, research has shown that deep acting (i.e., efforts to change workers' inner feelings through prospective taking or positive refocus to induce within themselves the actual feelings required by organizational display rules; Grandey, 2000) is often accompanied by high sense of authenticity among healthcare professionals, high patient satisfaction and increased sense of connection with patients (Funk et al., 2021; Golfenshtein & Drach-Zahavy, 2015; Hülsheger & Schewe, 2011; Martínez-Iñigo et al., 2007). Thus, we expect that using positive refocusing as an emotion regulation strategy will help healthcare professionals restore their emotional resources and then diminish their feelings of emotional exhaustion and their emotional detachment from patients. Additionally, since moral distress can be viewed as a state of cognitive-emotional dissonance (Berhie et al., 2020) that may produce a wide range of negative feelings (e.g., anger, frustration, guilt; Ohnishi et al., 2019),

positive refocusing might be a coping strategy particularly useful for the self-regulation of these negative emotional states (Lazarus, 2013). Indeed, some studies, which were conducted in the healthcare sector, showed that positive refocusing is an effective cognitive emotion regulation strategy (Bandadi et al., 2019; Wang et al., 2021). This may leave healthcare professionals with more emotional resources to fulfil work and family demands, reducing the likelihood of developing work-family conflict and burnout symptoms. We proposed that positive refocusing would moderate the relationship between moral distress and burnout (a) as well as the association between moral distress and work-family conflict (b), such that healthcare providers facing moral distress who utilize more frequently positive refocusing strategies would be less likely to develop burnout as well as work-family conflict *(Hypothesis 5)*.

Figure 1 shows our proposed conceptual model.

[Please insert *Figure 1* here]

Method

Sample and procedures

This cross-sectional research was conducted in a hospital in the Northern Italy between March 2019 and July 2019 in line with the ethical standards of the national research committee. In accordance with the local legislation and institutional requirements, ethical approval was not required for this research. The Medical Direction provided permission to conduct the study. All participants signed an informed consent form before taking part. By means of convenience sampling, 180 healthcare providers were invited to take part in this research by Master's students in Psychology working in the same hospital. During shift changes, a coordinator and a researcher informed professionals about the study objectives and ensured both the voluntary nature of their participation and the confidentiality of the responses. 158 healthcare professionals

volunteered to participate (response rate: 87.7%) and signed an informed consent form. Participants took approximately 20 minutes to fill out paper-and-pencil surveys. Respondents put the completed questionnaires in dedicated boxes placed in the staff chill-out zones. Furthermore, to reduce their evaluation apprehension (Podsakoff et al., 2003), participants were only required to provide information on a few socio-demographic characteristics. This was also useful for ensuring their anonymity and encourage honest responding. In addition, researchers assured participants that there were no right or wrong answers (Podsakoff et al., 2012). Participants answered questions about their perceptions of moral distress, work-family conflict, burnout, resilience and positive refocusing tendencies. Five participants were excluded because of incomplete responses (i.e., less than 60% of the questionnaire). Thus, the final sample size included 153 healthcare providers.

Measures

Moral distress

The fourteen-item Moral Distress Scale-Revised (MDS-R; Hamric et al., 2012; Lamiani, Setti, et al., 2017) was administrated to assess how frequently healthcare providers were confronted with potentially morally distressing situations, such as the provision of inopportune treatments (three items, e.g., *Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient*), the presence of misleading communications addressed at patients (three items, e.g., *Ignore situations in which patients have not been given adequate information to ensure informed consent*), the occurrence of morally questionable behaviours (five items, e.g., *Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report*) and the lack of collaboration among team members (three items, e.g., *Witness diminished patient care quality because of poor team communication*). This

scale requires participants to assess the situations described by each item in terms of frequency (i.e., how often the situation occur) and intensity (i.e., how disturbing the situation is), on a five-point Likert scale (0=*never*, 4=*very frequently* and 0=*none*, 4=*great extent* for the frequency and intensity scales, respectively). The total score, ranging from 0 to 16, is calculated by summing the products of multiplying the frequency score by the intensity score for each of the 14 items and by dividing the resulting total by the number of items. Higher scores indicate greater moral distress. A recent systematic review on instruments for detecting moral distress in nurses indicated that of the 16 available instruments, MDS-R was broadly validated and employed in different working or cultural settings (Tian et al., 2021). More specifically, the Italian version of MDS-R has been widely utilized in the Italian healthcare context consistently showing good reliability and adequate psychometric properties (e.g., Maffoni et al., 2020; Lamiani et al., 2020, 2017; Lusignani et al 2017). In this study, the internal consistency of this scale was satisfactory (α =.86), showing a reliability coefficient that was slightly better than that reported in the Italian validation (α =. 81; Lamiani et al., 2017). McDonald's ω was .96.

Resilience

The ten-item Connor-Davidson Resilience Scale (CD-RISC-10; Campbell-Sills & Stein, 2007; Di Fabio & Pallazzeschi, 2012) was adopted to measure resilience. Participants indicated the extent to which they agreed with each item regarding ways of managing stressful circumstances (e.g., *I am able to adapt to change*) on a five-point Likert scale (0=*almost always false*, 4=*almost always true*). A mean score is calculated, and greater scores reveal greater resilience. Numerous studies have shown that the CD-RISC 10 scale has sound psychometric properties as well as construct and longitudinal validity among hospital staff (e.g., Lauridsen et al., 2017). This instrument has been also used in the Italian healthcare setting (e.g., Maffoni et al., 2020). In the current study, the

reliability coefficient of this scale was good (α =.85) and exactly the same as that reported in the Italian validation (α =.85; Di Fabio & Pallazzeschi, 2012). McDonald's ω was .86.

Work-family conflict

Five items from the Work-Family Conflict scale (Netemeyer et al., 1996; Colombo & Ghislieri, 2008) were included to assess work-family conflict. Participants indicated the degree to which they agreed with each item describing situations of conflict from work to family (e.g., *My job produces strain that makes it difficult to fulfil family duties*) on a seven-point Likert scale (1=*completely disagree*, 7=*completely agree*). A mean score is calculated, and greater scores indicate greater work-family conflict. This scale appears particularly suitable for research on the work-family interface for several reasons: It is easily administrable because of its limited number of items; it measures the specific direction of work-to-family conflict; and it does not comprise indicators associated with the behavioral aspects of conflict that seem relatively weak (Colombo & Ghislieri, 2008; Tetrick & Buffaldi, 2006). Additionally, a recent systematic review of the link between resilience and work-family conflict has shown that Netemeyer et al.'s (1996) instrument has been the most utilised scale to assess this facet of the work-life interface construct (Anonymous et al., under review). In the present investigation, the internal consistency of this scale was adequate (α =.85) and in line with that of the Italian validation (α =.86; Colombo & Ghislieri, 2008). McDonald's ω was .88.

Positive refocusing

Two items from the Deep Acting Scale (Grandey et al., 2004) were employed to assess positive refocusing tendencies. Participants were invited to indicate how frequently they tended to regulate negative emotions, elicited by their own work, by focusing their attention on positive things (e.g., *I attempted to focus on happier things*) on a five-point Likert scale (1=*rarely*, 5=*always*). A mean score is calculated, and greater

scores indicate greater positive refocusing tendencies. To the best of our knowledge, this scale has been the only measure previously utilised in the Italian context to reveal deep acting strategies, including positive refocusing, while analysing moral distress and burnout symptoms (Lamiani et al., 2019). The reliability of this scale was good (α =.89). McDonald's ω was .89.

Burnout

Ten items from the Maslach Burnout Inventory-General Survey (Schaufeli et al., 1996; Borgogni et al., 2005) were adopted to evaluate burnout symptoms. Participants reported how frequently they suffered from burnout symptoms on a seven-point Likert scale (0=*never*, 6=*always*). Emotional exhaustion includes statements that examine perceived shortage of emotional resources due to the one's own job (five items, e.g., *I feel emotionally drained from my work*). Cynicism includes statements that refer to feelings of detachment from work (five items, e.g., *I doubt the significance of my work*). Although the complete version of this scale also evaluates reduced personal accomplishment, consistent with prior literature (e.g., Sommovigo et al., 2019), we did not include this dimension as it reflects a consequence rather than a separate symptom of burnout (Cordes & Dougherty, 1993). The content, criterion and construct validity of this scale have been demonstrated (e.g., Wickramasinghe et al., 2018). This well-established instrument has been utilized to assess burnout symptoms within the Italian healthcare context (e.g., Damico et al., 2020; Stocchetti et al., 2021) and has shown moderate correlations with moral distress (e.g., Maffoni et al., 2020). In the present investigation, the alpha coefficients of emotional exhaustion and cynicism scales were good (α =.91, α =.85, respectively) and slightly better than those reported in the Italian validation (α =. 85, α =.76; Borgogni et al., 2005). The alpha coefficient of the whole scale was .91 and the McDonald's ω was .91.

Control variables

We controlled for gender (0=male, 1=female) and nursing profession (0=other occupations, 1=nursing profession) as research showed that women and nurses were more vulnerable to the development of burnout (e.g., Messias et al., 2019). Additionally, we acknowledge that job tenure (measured in years) might be inversely related to burnout as some investigations indicated that healthcare professionals with more years of job experience were less likely to suffer from burnout (e.g., Xu et al., 2020).

Statistical analyses

To assess the constructs' reliability, item reliability, Cronbach's alpha, Composite Reliability (CR) and Average Variance Extracted (AVE) were calculated using IBM SPSS Statistics 20 (Morgan et al., 2012). Moreover, McDonald's omega were calculated in JASP (JASP Team, 2018). Descriptive statistics were calculated, and correlations were performed using IBM SPSS Statistics 20 (Morgan et al., 2012). Next, a moderated mediation model was run, while controlling for gender, job tenure and nursing occupation using the PROCESS macro (Hayes, 2017). These analyses, which were performed using bootstrapping tests and a bias-corrected 95% confidence interval (CI) with a resample procedure of 1000 bootstrap samples (Hayes, 2013; Preacher & Hayes, 2008), tested whether resilience and positive refocusing would moderate the moral distress-work-family conflict relationship, in addition to examining whether resilience would moderate the work-family conflict-burnout path and whether positive affectivity would buffer the moral distress-burnout path. To evaluate indirect and conditional effects as statistically significant, zero should not be comprised in the 95% CI. To plot the statistically significant interaction effects, we used Excel worksheets provided by Dawson (2014).

Results

Measurement reliability and validity

We analysed individual item reliability, internal consistency reliability, convergent validity, and discriminant validity. With reference to item reliability, the results showed that the factor loadings of all items on their corresponding constructs were above the 0.5 threshold (Hulland, 1999), indicating at least a medium correlation with the relevant construct (frequency of moral distress: 0.54-0.73; intensity scale of moral distress: 0.54-0.80; burnout: 0.68-0.87; work-family conflict: 0.79-0.89; resilience: 0.58-0.80: positive refocusing: 0.94-0.95). Additionally, the results indicated that composite reliability coefficients for the study's constructs ranged from 0.89 to 0.93, greater than the 0.70 cut-off (Hair et al., 2017). In support of convergent validity, the AVE values for the constructs ranged from .52 and .83, greater than the 0.5 threshold (Hair et al., 2017).

Descriptive Analyses and Harman's Test

Most participants (N=153) were female (79.1%) with an average job tenure of 18.09 (SD=11.62, min=1 year, max=41 years) years. Most respondents were nurses (55.6%) (see *Table 1*). All correlations among variables were in the expected direction (see *Table 2*). Contrary to our expectation, none of the demographics significantly correlated with burnout.

[Please insert *Tables* 1 and *2* here]

Harman's single-factor test (Harman, 1976) was conducted to identify common method variance. The results showed that the first factor explained only 20.04 % of the variance without rotation, and that both the dependent and independent variables loaded on different factors. Hence, no single factor had particularly significant exploratory power, suggesting that common method bias did not seem to have a substantial impact on our study.

The moderated mediation analysis

To check the appropriateness of our sample size, we performed a power analysis for a multiple regression analysis having seven predictors with the program G*Power (Erdfelder et al., 1996). The results from this analysis, which was calculated utilizing an alpha of 0.05, a power of 0.95, and a medium effect size, indicated that a sample of at least 153 subjects was required, suggesting that our sample size was adequate.

Moral distress was positively associated with both work-family conflict (β=.18, SE=.05, p<.001, 95% CI [.08, .28]) and burnout (β=.08, SE=.04, p<.05, 95% CI [.01, .15]; see *Figure 2*). Work-family conflict was positively related to burnout (β=.30, SE=.06, p<.001, 95% CI [.19, .40]) and partially mediated the relationship between moral distress and burnout (β=.05, SE=.02, 95% CI [.01, .09]). The indirect effect was positive suggesting that greater moral distress increased work-family conflict. This, in turn, led to greater burnout. Thus, *Hypotheses 1*, *2* and *3* were confirmed.

[Please insert *Figure 2* here]

Resilience moderated the association between moral distress and work-family conflict. The interaction effect was negative (β=-.21, SE=.08, p<.05, 95% CI [-.38, -.04]) suggesting that resilience protected from the negative effects of moral distress in terms of work-family conflict. Conversely, the interaction of work-family conflict and resilience (β=-.04, SE=.08, p=.62, 95% CI [-.21, .12]) was statistically insignificant. Resilience was not directly associated with burnout (β=-.30, SE=.16, p=.06, 95% CI [-.61, .02]) nor with work-family conflict (β=.12, SE=.24, p=.63, 95% CI [-.36, .60]). When experienced moral distress, health professionals who scored low (β=.29, SE=.07, p<.001, 95% CI [.14, .43]) and moderately (β=.17, SE=.05, p<.001, 95% CI [.07, .47]) on resilience (see *Table 3*) endorsed greater work-family conflict, while highly resilient professionals did not report work-family conflict (β=.04, SE=.07, p=.57, 95% CI [-.10, .18]). The index of moderated mediation was statistically significant and negative (β=-.06, SE=.02, 95% CI

[-.11, -.01]), supporting the buffering role of resilience. The moderated mediation effect of moral distress and resilience through work-family conflict on burnout was significant for professionals with low (β=.09, SE=.03, 95% CI [.05, .15]) or moderate (β=.05, SE=.03, 95% CI [.02, .09]) resilience, but not for those with greater resilience (β=.01, SE=.02, 95% CI [-.04, .06]). Hence, *Hypothesis 4a* was confirmed, whereas *Hypothesis 4b* was rejected. Examination of the interaction plot showed that professionals with lower resilience reported a significant increase in work-family conflict at high moral distress levels (see *Figure 3*). No change in work-family conflict was revealed for highly resilient professionals in the passage from low moral distress to high moral distress conditions.

[Please insert *Table 3* and *Figure 3* here]

The moderating role of positive refocusing in the relationship between moral distress and burnout was confirmed (β=-.08, SE=.02, p<.01, 95% CI [-.12, -.03]). The interaction term was negative suggesting that positive refocusing protected from the detrimental effects of moral distress in terms of burnout. Conversely, positive refocusing did not moderate the relationship between moral distress and work-family conflict (β=.02, SE=.04, p=.65, 95% CI [-.06, .09]). Positive refocusing was negatively related to burnout (β=-.24, SE=.08, p<.05, 95% CI [-.41, -.08]), but was not statistically significantly associated with work-family conflict (β=-.15, SE=.12, p=.23, 95% CI [-.39,.09]). Professionals who had low positive refocusing tendencies (β=.17, SE=.05, p<.05, 95% CI [.07, .26]) were particularly susceptible to the harmful consequences of moral distress in terms of burnout, while those who had moderate (β=.06, SE=.03, p=.09, 95% CI [-.01, .13]) or high positive refocusing tendencies did not experience burnout following moral distress (β=-.01, SE=.04, p=.73, 95% CI [-.10, .07]). Examination of the interaction plot revealed that professionals who had low positive refocusing tendencies reported a significant increase in burnout at high moral distress levels (see *Figure 4*). No change in

burnout was detected for professionals who tended to frequently adopt positive refocusing when passing from low moral distress to high moral distress conditions. Thus, *Hypothesis 4a* was supported, whereas *Hypothesis 4b* was rejected.

[Please insert *Figure 4* here]

Discussion

Healthcare professionals are frequently exposed to ethically challenging situations, which makes moral distress and burnout phenomena of increasing concern (Maffoni et al., 2020). Additionally, some features of the health work environment, such as high workload, shift work and extended hours of work, have often been related to a conflictual relationship between work and family life (Karhula et al., 2017), making work-family conflict a current issue.

This research significantly contributes to the existing literature by analysing *whether* and *how* moral distress experienced by healthcare professionals may lead them to develop work-family conflict and burnout. In addition, this study clarifies the boundary conditions for these relationships by analysing the protective role of resilience and positive refocusing. The findings showed that moral distress is related to burnout, both directly and indirectly, as mediated by work-family conflict. Additionally, this research identifies resilience and positive refocusing as personal resources that can protect healthcare professionals from the detrimental effects of moral distress.

Firstly, this research showed that moral distress was directly and positively associated with burnout. This is in line with previous findings (e.g., Maffoni et al., 2020; Delfrate et al., 2018; Ajoudani et al., 2019; Fumis et al., 2017; Larson et al., 2017; Johnson-Coyle et al., 2016). In light of COR theory (Hobfoll et al., 2018), experiencing moral distress may be particularly stressful as it may threaten critical healthcare providers' personal resources and deplete their energies (Maffoni et al., 2020) as they

attempt to face the resulting negative feelings, such as powerlessness (Rivard & Brown, 2019). This may trigger an escalating process of resource loss which progressively may drain healthcare professionals' resources, leading them to experience emotional exhaustion (Hobfoll et al., 2018; Maffoni et al., 2020). Meanwhile, professionals may try to preserve their remaining resources by emotionally distancing themselves from their patients, developing cynicism (Sommovigo et al., 2019). Thus, our study adds to a growing body of literature on moral distress (Maffoni et al., 2020; Ajoudani et al., 2019; Delfrate et al., 2018; Fumis et al., 2017; Larson et al., 2017; Johnson-Coyle et al., 2016) by confirming its positive relationship with burnout on a heterogeneous sample of healthcare professionals. This provides further evidence to support that moral distress represents a risk factor not only for nurses but also for other healthcare professionals (Ulrich & Grady, 2018; Goddard, 2021).

Secondly, we found that moral distress was positively related to work-family conflict which led, in turn, to burnout. As far as we know, this is the third study (Ibrahim et al., 2017; Prottas 2013) focusing on the relationship between moral distress and work-family conflict, suggesting that the consequences of moral distress extend beyond the confines of the workplace and affect the way that healthcare providers behave in the family role. Drawing on the COR theory (Hobfoll et al., 2018), when healthcare professionals experience moral distress, they are likely to spend a lot of time and considerable energies worrying about ethical issues and coping with resulting emotional consequences, which leaves them with limited personal resources to address family needs. This may also lead them to feel an interference of work demands in family life. When attempting to combine work and family roles, professionals may further lose resources, for instance, in the form of the quality of time with loved ones (*Anonymous* et al., under review; Hobfoll et al., 2018). This may increase their vulnerability to the

development of burnout. By confirming for the first time the mediating role of work-family conflict in the association between moral distress and burnout, this study provides new insights into the literature on moral distress and further evidence for the well-known relationship between work-family conflict and burnout (e.g., Recuero & Segovia, 2021; Williams et al., 2021; Mahendran et al., 2019; Yang et al., 2017).

Thirdly, resilience buffered the relationship between moral distress and work-family conflict. This finding provides further evidence of the importance of resilience as a personal resource protecting healthcare professionals' wellbeing (Zanatta et al., 2020). Thus, given their ability to thrive in challenging circumstances, highly resilient professionals can effectively deal with morally distressing situations by easily utilising available resources and by finding effective solutions to recover from work (Maffoni et al., 2020). Specifically, since highly resilient professionals can interpret these situations as opportunities for personal growth rather than as threats, they can feel less threatened by these situations and are better able to deal with them than their less resilient counterparts (Rushton, 2017; Viotti et al., 2018). Additionally, resilient professionals are more likely to engage in recovery activities, such as psychological detachment and relaxation (Ding et al., 2020). This may allow them to restore cognitive and emotional resources that they may have previously lost in dealing with a morally distressing situation (Ding et al., 2020). This may reduce the likelihood that the negative emotions related to moral distress could spill over into the family domain and then protect professionals from the loss of personal resources relevant to family issues. As such, they can preserve enough energies to fulfil their family needs, thereby perceiving lower work-family conflict. However, resilience did not moderate the relationship between work-family conflict and burnout probably because professionals facing work-family conflict following moral distress might have so few remaining resources that they could not draw

from their own resource reservoirs to meet job and family demands, thereby developing burnout. As far as we know, this is the first study that identifies resilience as a personal coping resource that can protect against work-family conflict in the face of morally distressing situations.

Fourthly, positive refocusing buffered the relationship between moral distress and burnout. This finding expands the COR theory (Hobfoll et al., 2018) by showing that positive refocusing is a personal coping resource helping healthcare professionals protect their wellbeing. More specifically, moral distress represents the cognitive-emotional dissonance arising when one has to act against one's own moral values and personal beliefs (Berhie et al., 2020; Schrepel et al., 2019). In such a situation, healthcare professionals may focus on the negative emotions (e.g., powerlessness; Rivard & Brown, 2019) arising from the morally distressing situation and consume their cognitive resources by worrying about such a situation as well as recalling and ruminating about this event outside of work (van Dam et al., 2018). In this regard, adopting positive refocusing may help them focus on clinical tasks and other job demands (e.g., relational aspects) (Helmers et al., 2020). This may allow healthcare professionals to preserve their own emotional and cognitive energies, reducing their vulnerability to burnout (Gabriel & Diefendorff, 2015; Grandey et al., 2013). Thus, positive refocusing may be an effective coping strategy for the regulation of negative emotions elicited by moral distress, probably because it may reduce emotional dissonance and increase positive affect (Schroevers et al., 2008). Indeed, on one hand, it has been demonstrated that deep acting strategies can reduce emotional dissonance (e.g., Fu et al., 2020) because people act to constantly revise their internal states to reach a congruence between their true emotions and their external behaviour. More specifically, professionals who adopt positive refocusing may think about events related to specific emotions or may engage in the

reappraisal of situations that lead them to modify their internal states according to what is expected from them (Park et al., 2019). On the other hand, positive refocusing may be associated with lower negative emotional states and increased positive affect (Southward et al., 2019; Schroevers et al., 2008). For instance, a previous study showed that positive refocusing may help healthcare professionals effectively deal with sadness (Southward et al., 2019). This is particularly interesting as sadness is a negative emotion that is frequently experienced in the face of morally distressing situations (Forozeiya et al., 2019). This suggests that positive refocusing may be an effective coping strategy for the regulation of negative emotions elicited by moral distress. This coping strategy may also help professionals restore their cognitive and emotional resources, thereby reducing their vulnerability to burnout (Deng et al., 2020). Conversely, positive refocusing does not protect professionals from work-family conflict. Indeed, morally distressed professionals might lose not only their emotional resources, but also their cognitive energies due to the emotional-cognitive dissonance elicited by a morally distressing situation. According to the COR theory (Grandey & Cropanzano, 1999), such a situation may lead professionals to experience a lack of energy needed to fulfil family demands, thereby eventually resulting in work-family conflict.

Limitations and future research recommendations

Despite the aforementioned contributions, this research has some limitations. The cross-sectional design of the present study does not allow us to draw conclusions on the causal relationships between the study's variables. Therefore, future studies should adopt a longitudinal design or utilize diary-based study methods. Our design was person-centred without taking into account variables at the team and organizational levels. Thus, future research should consider adopting a multi-level approach by collecting data at the individual, team, and system levels. This type of analysis could enable us to investigate,

for instance, whether organizational-level factors (e.g., institutional constraints) might induce a certain team ethical climate that could enhance vs. hinder the individual's capability of effectively addressing morally distressing situations.

Although we collected data in a real work context and included professionals working in different wards, we utilized a convenience sample limited to a single hospital in the Northern Italy. Thus, in order to increase the generalizability of these results, future studies should gather data on bigger and more nationally representative samples of healthcare professionals employed in diverse hospitals nationwide. Cross-national investigation is also recommended. Additionally, our data were collected using only self-report assessments which may imply common method bias (Podsakoff et al., 2003). Future studies should adopt different measures (e.g., interviews) and gain information from different sources from both the work context (e.g., colleagues or ward coordinators), and the family domain (e.g., spouses).

This study adopted the COR theory as a theoretical framework focusing on two personal resources, namely resilience and positive refocusing. Future studies should analyse the potential protective role of other coping strategies (e.g., work-family balance seeking), in addition to considering situational job resources (e.g., managerial support; Maffoni et al., 2019) as well as other personal characteristics, such as mindfulness (Montani et al., 2019) or coping self-efficacy (Sommovigo et al., 2018). Finally, it should be considered that this study was conducted before the COVID-19 outbreak. The health emergency arising from this pandemic required healthcare professionals to address new ethically demanding situations, due, for example, to the rationing of scarce resources (Miljeteig et al., 2021). Therefore, it would be particularly interesting for future research to analyse whether the COVID-19 pandemic influenced the variables under study.

Practical implications

Overall, our findings reveal several managerial and practical implications. Managers should promote environmental conditions that support, foster, enrich, and protect (Hobfoll et al., 2015) healthcare professionals' resources, thereby preventing the occurrence of morally challenging situations and the resulting negative outcomes. In doing so, healthcare organizations should allow healthcare professionals to rely on organizational resources to deal with ethical issues without draining their own resource pools (Sommovigo et al., 2019). To this end, interventions should be implemented at the individual, team, and organizational levels.

At the individual level, practitioners should consider providing professionals with emotion regulation training programs, including positive refocusing, to learn how to effectively regulate negative emotions resulting from moral distress (Jackson-Koku & Grime, 2019; Edelman & van Knippenberg, 2017). Since resilience represents a malleable resource that can be fostered through training (Joyce et al., 2018), healthcare professionals could also benefit from psychological resilience programs. This type of training could, for instance, include activities focused on improving the individual's ability to take time for self-reflection, document one's own achievements as well as improve one's own professional skills (McAllister & McKinnon, 2009). These training activities could be integrated with mentoring programs aimed at improving less experienced workers' emotion regulation strategies and capability to positively balance work and family life.

At the team level, practitioners could organize reflective debriefing groups whereby healthcare professionals are encouraged to foster flexibility in perspective-taking and reflect in groups on ethical experiences. This would help them better manage both the moral event and the resulting psychological distress (Morley & Horsburgh, 2021; Browning & Cruz, 2018). With this goal in mind, ethics huddles, namely confidential, unit-based small group meetings might be a useful tool for healthcare professionals to

discuss ethically troubling cases (Chiafery et al., 2018). It should also be noted that resilience could be fostered through team resilience-based training (i.e., the ability of a team to respond and bounce back from adversities; Hartwig et al., 2020) focusing on collective resilience elements, including collective efficacy, team cohesion and team adaptability (Montani et al., 2020). Additionally, since resilience may develop in supportive environments (Hobfoll et al., 2015), managers should create a positive workplace. As such, at the organizational level, hospital management should consider involving team leaders in creating a formal written ethical code of conduct that can help healthcare professionals navigate ethical conflicts and guide their practice by providing them with ethical procedures. Team leaders should also become the spokespersons for the organizational mission of maintaining high ethical standards to assure clinical excellence, patient safety and high-quality care. Moreover, managers may consider organizing "ethics rounds" - as an additional instrument or as an alternative to traditional ethics committees – wherein healthcare professionals from different disciplines can reflect on ethically difficult facets of patient's cases in order to increase their awareness of ethical issues and to support them in making independent decisions (Schmitz et al., 2018; Maffoni et al., 2020). In order to strengthen the worker's skills to identify, prevent, and solve ethics conflicts, ethics rounds may consist of multidisciplinary case presentations, interviews with patients and/or their families, discussions about difficult clinical-ethical decisions and presentations by ethicists (Schmitz et al., 2018). Managers could also promote sharing and debriefing sessions where healthcare providers are encouraged to freely talk about their negative emotions resulting from violations of core values and reflect together on how to promote a more ethical team environment (Maffoni et al., 2020). Furthermore, healthcare institutions could provide their staff with moral distress consultations, namely periodic meetings aimed at addressing morally distressing

situations by detecting the sources of moral distress, barriers to performing the right action(s), and strategies to overcome such obstacles (Hamric & Epstein, 2017). Thus, through this practice, healthcare professionals can be encouraged to voice their concerns and bring moral conflicts into the open for discussion within a psychologically safe setting wherein they can acquire tools to reframe the ethical issue in terms of professional obligations and take the right steps to improve the situation (Epstein et al., 2021). This would serve as a quality improvement mechanism that may be also useful for creating a moral community based on communication and cooperation among colleagues (Ulrich & Grady, 2018). Organizations could also consider introducing a counselling service or a psychological support service to adequately support morally distressed workers.

To prevent work-family conflict, healthcare organizations should create a family-friendly workplace by adopting measures aimed at facilitating healthcare professionals' conciliation of work and private life, such as part-time contracts and offering an on-site childcare facility. In doing so, supportive and caring management could also be promoted by providing supervisors with education and training sessions on how to help their workers cope with work and family pressures (e.g., through the sharing of information about recovery activities). Additionally, allowing healthcare professionals to negotiate with their supervisors about personalized changes in work, such as offering sufficient flexible scheduling to better fit family obligations, would make feel them supported and less overwhelmed by their own job. Moreover, hospital management should periodically monitor workers' mental health to identify signs of burnout before it becomes a significant issue and offer a counselling service to workers in order to support their wellbeing in the workplace and in their personal lives.

Conclusions

This study provides new insights into the existing literature on moral distress by clarifying *whether* and *when* moral distress may be positively associated with burnout. Moral distress is positively associated with work-life conflict which, in turn, may lead to burnout. Highly resilient professionals are less likely to experience work-family conflict regardless of moral distress levels. Additionally, the use of positive refocusing strategies may protect healthcare workers dealing with moral distress from the development of burnout. Thus, healthcare managers may sustain their workers by providing them with resilience-based and emotion regulation training programs in order to protect them from the negative effects of moral distress.

Conflict of interest

The authors declared no potential conflicts of interest with respect to the study, authorship and publication of the present paper.

Data availability statement

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

Funding information

The authors did not receive a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

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