WORKPLACE ETHICAL CLIMATE AND WORKERS' BURNOUT: A SYSTEMATIC REVIEW

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Abstract

Objective: Workplace ethics is a central theme in occupational health; an ethical climate aims to implement and uphold standards of integrity and fairness. Furthermore, the correlation between ethical climate and burnout has been highlighted in several studies, and the impact of a negative ethical climate in the workplace has been reported to affect workers' mental health and job performances, resulting in increased burnout incidence. The aim of this systematic review is to assess the relationship between ethical climate and burnout in the workplace.

Method: This review was conducted following the PRISMA statements. Three databases were screened, including research articles written in the English language during the last 10 years, investigating the relationship between burnout and ethics in the workplace. The quality of articles was assessed with the Newcastle-Ottawa Scale.

Results: 1153 records were found across three databases; after duplicate removal and screening for title and abstract, 46 manuscripts were screened by full text, resulting in 13 included studies. The majority of the included studies were performed on healthcare workers (n=7, 53.8%), and with a majority of female participants (n=9, 69.2%). Most of the included studies (n=9, 69.2%) evaluated the correlation between ethical climate and burnout, while the other four (n=4, 30.8%) evaluated ethical leadership. Four studies reported a positive correlation between ethics and work engagement. Two studies highlighted that an ethical workplace climate reduced turnover intention.

Conclusions: Ethical climate plays an important role in burnout mitigation in workers and in improving work engagement, thus helping to reduce turnover intentions. Since all of these variables have been reported to be present in clusters of workers, these aforementioned factors could impact entire workplace organizations and their improvement could lead to a better work environment overall, in addition to improving the single factors considered. Further studies are needed to investigate the role of ethical climate in the workplace.

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Introduction

Workplace ethics represents values and principles that regulate, morally, the behavior of an individual or a group of people (Sexty, 2014). Ethical climate is described as the shared perceptions of ethically correct behaviors and ways of handling ethically deviated behaviors. Ethical climate is referred to as the perception of

the atmosphere that increases ethical thoughts, trust and mutual respect in the organization and allows for questioning and expression of different views.

Ethical climate in the occupational context aims to apply standards of integrity and fairness in the relationships between employees and patients (Draft, 2010). The analysis of the ethical climate of the workplace is fundamental to assess the influence of ethics on workers' health (Denison & Mishra, 1995; Kotter & Heskett, 1992) and their performance (Appelbaum et al., 2005; Majstorović & Vidaković, 2020): if workers cannot act according to their ethical values, due to lack of support from management or coworkers, the ethical climate may have a negative effect on their wellbeing.

A brief description of each questionnaire used to evaluate ethical climate or leadership in the workplace will be presented for the tools used in the selected studies, as emerged from this review.

Multidimensional models have been developed to assess ethical climate. Cullen et al. (Cullen et al., 1993) developed the Ethical Climate Questionnaire to measure types of ethical climates within organizations. These initial tools to investigate Ethical Climate showed the multidimensional nature of ethical climate. The Corporate Ethical Virtues (CEV) model is another multidimensional questionnaire developed and validated to evaluate Ethical Climate, which distinguishes between eight virtues: clarity, congruency of supervisors, congruency of senior management, feasibility, supportability, transparency, discussability and sanctionability (Kaptein, 2007; Tannorella et al., 2022).

The ethical behavior of the organization has gained importance in social scientific research throughout every branch and sector of the workplace. The Ethical Climate is also affected by the administration of power in the organizational hierarchy. According to this lens Ethical Leadership influences the behavior of the employees and can generate an atmosphere of trust, integrity and fairness (Mendonca & Kanungo, 2006).

Brown et al. (Brown et al., 2005) defined ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making:", highlighting that Ethical Leadership has gained a the position of a distinct leadership construct. Ethical leadership plays a fundamental role in establishing a fair and safe work environment, in reducing the risk of burnout, influencing deviant behavior and task performance (Franczukowska et al., 2021; Mo & Shi, 2017).

There are several questionnaires to analyze the Ethical Climate such as the tri-axial model of values developed and validated by Dolan and Richley (Dolan & Richley, 2006) and the Qu-Bo Test (De Carlo et al., 2008; Falco et al., 2012). The Hospital Ethical Climate Survey (HECS) is one the most utilized questionnaires to investigate Ethics in the Health workplace. It consists of 5 subscales, which examine the relationships between the respondents and their peers, patients, managers, hospital and physicians. The higher the total result, the more positive the ethical climate of the organization.

Moreover, different questionnaires and scales have been developed to specifically assess ethical behavior and ethical leadership and to determine the level of ethical competence; the Ethical Leadership Scale was developed by Brown et al. in 2005 (Brown et al., 2005) to improve the theoretical representation of ethical leadership.

The correlation between ethical climate and burnout has been highlighted in several studies and the impact of a negative ethical climate in the workplace has been reported to affect workers' mental health and job performances, resulting in higher burnout incidence (Cerit & Özveren, 2019; Rivaz et al., 2020).

Burnout is a psychological condition that affects how people perceive themselves and others at work. Burnout is characterized by exhaustion, cynicism, and ineffectiveness (Maslach & Leiter, 2016). Unidimensional and multidimensional models have been developed to define and study burnout. The single dimension models are defined through the exhaustion dimension. These models measure burnout as a single factor, although some models distinguish between psychological and physical exhaustion (Kristensen et al., 2005). The exhaustion dimension is defined as the sustained drain on employees' emotional reserves, which they experience at work. This leads the employees to emotionally distance themselves from their work and worsens both their health and performance at work (Maslach & Jackson, 1981).

The multidimensional burnout model comprises three dimensions: emotional tiredness, depersonalization, and decreased personal accomplishment (Maslach et al., 1997). Depersonalization is defined as the gradual detachment of the worker from the clients/patients, which leads to reduced empathy. Personal accomplishment is the level of contentment employees feel about their work performances. Depersonalization and emotional exhaustion both have positive correlations with burnout, therefore having high scores in either of these factors corresponds to high levels of burnout. High personal accomplishment is inversely connected with burnout, with high scores translating into reduced burnout levels (Maslach et al., 1997).

A brief description of each questionnaire used to evaluate burnout in workers will be presented for the tools used in the selected studies.

The first questionnaire to evaluate burnout was developed in 1981 by Maslach et al. (Maslach et al., 1997). The Maslach Burnout Inventory measures the level of burnout in three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. Many other instruments have been developed and validated to evaluate burnout presence and level.

The Professional Quality of Life Scale (ProQOL), is a self-reported questionnaire designed to measure compassion fatigue, work satisfaction and unidimensional burnout in helping professions (Stamm, 2010). Similarly, the Well-being Index assesses different types of psychological distress, including depression, anxiety, stress, fatigue, and burnout (unidimensional measure) (Dyrbye et al., 2016). The Shirom-Melamed Burnout Measure (SMBM) is another tool that identifies four burnout subscales: physical fatigue, cognitive weariness, tension and listlessness (Michel et al., 2022). The Bergen Burnout Inventory (BBI) is another common questionnaire used to measure burnout, reflecting its three components - emotional, cognitive and behavioral (Feldt et al., 2014). The Qu-Bo test is a complex instrument that can be used to detect burnout, although initially designed to detect risk factors concerning the psychological wellbeing of workers (De Carlo et al., 2008; Falco et al., 2012).

The aim of this systematic review was to study the correlation between ethical climate and burnout.

Methods

This systematic review was performed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statements (Page et al., 2021). Three databases were searched: PubMed, ISI Web of Knowledge, and Scopus. A query was

developed following the PICO model, establishing the Population (P) as workers, the Exposure (E) as measuring workplace ethics, and the Outcome (O) as burnout. Comparison (C) was not applicable due to the aim of the performed review.

The query used to perform the bibliographic search was: burnout AND ethics. Results were filtered by language (English language only) and time period (records published within the last 10 years only).

The research was restricted to articles investigating the relationship between Ethics and Burnout in the workplace up until December 2022, when the initial search was performed. Manuscripts were included in the review if they were written in English. Studies were excluded from the review if they did not use validated questionnaires to measure Ethics or Burnout. Non-research articles (i.e.: commentaries, letters, and editorials) were also excluded from the systematic review. The initial screening by title and abstract was performed through the website Rayyan (Ouzzani et al., 2016).

The protocol for this systematic review was registered on the International prospective register of systematic reviews (PROSPERO), with the ID: CRD42023394107.

A quality assessment was performed for the included studies using the Newcastle-Ottawa Scale (NOS) (GA Wells et al., 2014).

Data was extracted and reported in an Excel sheet and results were presented quantitatively.

Results

The initial systematic search resulted in 1153 records found across the three databases (PubMed, ISI Web of Knowledge, and Scopus). After removing 219 duplicates, 934 manuscripts resulted as eligible for screening. The screening by title and abstract resulted in 46 articles; 33 were excluded based on full text. Thirteen studies were included in this systematic review (**figure 1**).

The main results from this systematic review are summarized in **table 1**.

The majority of included studies were performed on Healthcare Workers (HCWs) (n = 7, 53.8%); of these, 3 (23.1% of all included studies) were performed on HCWs in general, 3 (23.1%) on nurses, and one (7.7%) on nurses and midwives. Two studies (15.4%) were conducted in Finland, two in Italy, and two in Iran, while one study (7.7%) was conducted for each of the following countries: Australia, Austria, Canada, China, the Netherlands, Spain, and South Africa. Concerning sample size, 4 (30.8%) had a sample size smaller than 250, 5 studies (38.5%) had a sample size between 251 and 500, two (15.4%) were between 501 and 1000, and two (15.4%) studies had a sample size of over 1001. The majority of the included studies had a sample with a majority of women (n = 9, 69.2%).

Concerning tools used to measure workplace ethics, the Hospital Ethical Climate Survey was used in 4 (30.8%) studies performed on HCWs, the Ethical Leadership Scale was used on 4 (30.8%) of the included studies (one performed on HCWs, the other 4 on non-HCWs), and the Corporate Ethical Virtues Scale was used in two (13.3%) studies performed on non-HCWs. The Ethics Environment Questionnaire and the Tri-axial model of values questionnaire were each used in one study (6.7%) performed on HCWs, while the Qu-Bo test was used in one study on non-HCWs.

In regards to tools used to measure Burnout, the

Maslach Burnout Inventory was used in 6 (46.1%) included studies (3 performed on HCWs and 3 on non-HCWs); the Bergen Burnout Inventory was used in two (15.4%) studies performed on non-HCWs. The Burnout Measure questionnaire, the Professional Quality of Life Scale, the Expanded Well-being Index, and the Shirom-Melamed Burnout Measure, were each used in one study performed on HCWs. The Qu-Bo was used in one study performed on non-HCWs.

A quality evaluation was performed using the Newcastle-Ottawa Scale (*Ottawa Hospital Research Institute*, n.d.). All the included studies were of a good quality level on the scale (7 points) (**table 2**).

Ethical climate and burnout

Nine of the included studies (69.2%) evaluated the correlation between ethical climate and burnout, 6 of which were performed on HCWs. Five of the studies performed on HCWs and all three of the studies performed on non-HCWs found that ethical climate negatively correlated with burnout, indicating that a more ethical work environment resulted in a lower burnout risk in employees.

Rivaz et al. (Rivaz et al., 2020) used the Hospital Ethical Climate Survey and the Maslach Burnout Inventory in a survey administered to Iranian nurses, highlighting ethical climate as a protective factor for burnout in nurses (p<0.01). The authors reported that ethical climate correlated negatively and significantly with frequency and intensity of burnout; furthermore, the authors reported that ethical climate explained 5.9% of burnout. The study highlighted that the highest rate of burnout in nurses was founded in women with rotating shifts, and in wards where nurses were responsible for complicated tasks, such as the Intensive Care Units (ICUs). The authors calculated the minimum sample size and the number of responses exceeded it, granting scientific soundness concerning the sample size; as a limitation to this study, the authors highlighted that the questionnaires were administered after the nurses' shifts, so the stress of the workday may have influenced the answers.

Maffoni et al. (Maffoni et al., 2022) used the same questionnaires in a sample of Italian HCWs, and reported that an ethical view of patients was a protective factor against burnout (p<0.01). The authors showcased that HCWs resilience was positively associated with wellbeing and professional self-efficacy, both directly and when the correlation was mediated by an ethical vision of patient care. Managerial support also acted as a mediator: when it was higher, HCWs with a positive ethical vision of patient care reported higher wellbeing. This study was conducted in multiple medical centers located in Northern and Central Italy, thus the study was not limited to a single center but rather included HCWs from different geographical areas; as a limitation, this study only included workers from neuro-rehabilitation medicine and palliative care specialties, which are highly stressful work environments, with no controls for other occupational categories.

Barr et al. (Barr, 2020) administered a survey using the Hospital Ethical Climate Survey and the Burnout Measure questionnaire in a sample of Australian nurses and midwives, reporting that ethical climate was protective against for burnout (p<0.001). The study investigated the intention to leave work in a population of neonatal intensive care unit (NICU) nurses; it was the first study of its kind investigating intention to leave, burnout and ethical climate in NICU nurses.

Table 1. *Main characteristics of included studies. Studies are sorted according to profession (Healthcare workers first and non-Healthcare workers after), then Questionnaire used to investigate Ethics (most frequently used first, least frequently used after), and lastly by Questionnaire used to investigate Burnout (most frequently used first, least frequently used after)*

Author (year)	Country	Occupation	Study timeframe	Sample Size	Gender	Ethics Questionnaire	Burnout Questionnaire	Correlation between Ethics and Burnout	p Value
Rivaz et al. (2020)	Iran	Nurses	2019	193	M: 67 (34.7%) F: 126 (65.3%)	The Hospital Ethical Climate Survey	Maslach Burnout Inventory	Negative	<0.01
Maffoni et al. (2021)	Italy	Healthcare professionals	NR	315	M: 104 (33.0%) F: 211 (67.0%)	The Hospital Ethical Climate Survey	Maslach Burnout Inventory - General Survey	Negative	<0.01
Barr et al. (2020)	Australia	Nurses and midwives	2019	136	M: 0 F: 136 (100.0%)	The Hospital Ethical Climate Survey	Burnout Measure	Negative	<0.001
Tehranineshat et al. (2020)	Iran	Nurses	2018 - 2019	400	M: 160 (40.0%) F: 240 (60.0%)	The Hospital Ethical Climate Survey	The Professional Quality of Life Scale	Positive	0.02
Franczukowska et al. (2021)	Austria	Healthcare professionals	2016 - 2017	458	M: 156 (34.0%) F: 302 (66.9%)	Ethical Leadership Scale	Maslach Burnout Inventory	Negative	<0.01
Plouffe et al. (2021)	Canada	Healthcare workers	NR	1362	M: 92 (6.8%) F: 974 (71.5%)	Ethics Environment Questionnaire	Expanded Well-Being Index	Negative	<0.001
Bao et al. (2013)	Spain	Nurses	2009	234	M: 20 (8.5%) F: 214 (91.5%)	Tri-axial model of values	Shirom-Melamed Burnout Measure	Negative	<0.05
Akanni et al. (2019)	South Africa	Bank workers	NR	226	M: 121 (53.5%) F: 105 (46.5%)	Ethical Leadership Scale	Maslach Burnout Inventory for Human Service - Emotional Exhaustion Items	Negative	<0.05
Vullinghs et al. (2020)	Netherlands	Retail employees	NR	386	M: 174 (45.0%) F: 212 (55.0%)	Ethical Leadership Scale	Maslach Burnout Inventory - General Survey	Negative	<0.001
Mo and Shi (2017)	China	Pharmaceutical retail	NR	292	M: 199 (68.2%) F: 93 (31.8%)	Ethical Leadership Scale	Maslach Burnout Inventory	Negative	<0.05
Huhtala et al. (2020)	Finland	Technical and commercial Leaders	2009 - 2015	567	M: 386 (68.0%) F: 181 (32.0%)	Corporate Ethical Virtues Scale	Bergen Burnout Inventory	Negative	<0.001
Huhtala et al. (2014)	Finland	Public employees	2011	2146	M: 322 (25.0%) F: 1824 (85.0%)	Corporate Ethical Virtues Scale	Bergen Burnout inventory	Negative	NR
Dal Corso et al. (2019)	Italy	Safety representatives	NR	439	M: 348 (79.3%) F: 91 (20.7%)	Qu-Bo test	Qu-Bo test	Negative	<0.01

Table 2. *Quality assessment of included studies through the Newcastle-Ottawa Scale*

Authors	Study Design	Newcastle Ottawa Scale			Overall Quality Assessment
		Selection	*Comparability*	*Outcome*	
Rivaz et al. (2020)	Cross sectional	3	2	2	7
Maffoni et al. (2021)	Cross sectional	3	2	2	7
Barr et al. (2020)	Cross sectional	3	2	2	7
Tehranineshat et al. (2020)	Cross sectional	3	2	2	7
Franczukowska et al. (2021)	Cross sectional	3	2	2	7
Plouffe et al. (2021)	Cross sectional	3	2	2	7
Bao et al. (2013)	Cross sectional	3	2	2	7
Akanni et al. (2019)	Cross sectional	3	2	2	7
Vullinghs et al. (2020)	Cross sectional	3	2	2	7
Mo and Shi (2017)	Cross sectional	3	2	2	7
Huhtala et al. (2020)	Cross sectional	3	2	2	7
Huhtala et al. (2014)	Cross sectional	3	2	2	7
Dal Corso et al. (2019)	Cross sectional	3	2	2	7

As a limitation, the study had a small sample size, and the authors pointed out that it had a relatively low participation rate (23% response rate). Burnout and the hospital ethical climate were found to be predictors of turnover intention. Moral distress was not a direct significant predictor of turnover intention, but the correlation became significant when ethical climate and burnout acted as mediators.

Plouffe et al. (Plouffe et al., 2021), using the Ethics Environment Questionnaire and the Expanded Well-Being Index on Canadian HCWs, highlighted an ethical workplace climate as protective against ~~for~~ burnout (p<0.001). This study was bolstered with the strength of a very large sample of HCWs, however, it contained the limitation of being a sample composed mostly of women (71.5% of the sample). The study was conducted during the COVID-19 pandemic, and aimed to investigate the organizational response to the pandemic situation, evaluating moral distress among workers. The authors' results showed that ethical work environments negatively predicted moral distress. COVID-19 risk perception positively predicted moral distress, which in turn predicted symptoms of depression, anxiety, post-traumatic stress disorder, and burnout.

Bao et al. (Bao et al., 2013) used the Tri-axial Model of Values and the Shirom-Melamed Burnout Measure on a sample of Spanish nurses, and also reported a negative correlation between ethical climate and burnout (p<0.05). The authors investigated emotional, economical, and ethical value incongruence. Concerning the relationship between value incongruence and individual or organizational well-being outcomes, the study highlights the importance of targeting specific axes of values when discussing value incongruence in organizations. The study was performed controlling for important variables, such as gender, age, tenure, and work status. However, the study participants were self-selected, which the authors acknowledge as a limitation, and the response rate was low.

Regarding non-HCWs, Huhtala et al. (Huhtala et al., 2022) performed a study in 2020, using the Corporate Ethical Virtues Scale and the Bergen Burnout Inventory among a population of Finnish technical and commercial leaders, and found that ethical climate was protective against burnout (p<0.001). The authors evaluated ethical climate in leaders from different workplaces; from this study it emerged that leaders who

were working with the strongest ethical culture had the highest work engagement and reported the lowest ethical conundrums and stress over time, while leaders with the weakest ethical culture reported more ethical dilemmas, stress, and burnout over time. In this study, the authors attempted to implement a design focused on the individual worker, in order to investigate the ethical culture changes over time, although the authors recognized that as a result statistical power is low, due to the nature of comparison between small subgroups.

Huhtala et al. (Huhtala et al., 2015) performed a previous study in 2014, using the same questionnaires among a population of Finnish public employees, and showcasing similar results (p value not reported). The results of this study demonstrated that similar ethical organizational culture values ~~in~~ among colleagues were related to lower burnout and higher work engagement; furthermore, ethical organizational culture was related negatively to burnout and positively to work engagement. This study was strengthened by the inclusion of a very large sample of public employees, and although the sample was comprised of 85.0% women, the authors controlled for gender; however, results from this study cannot be generalized to the private sector. Although the sample size was large, only a small number of workers for each unit completed the questionnaire, therefore the authors point out that the results may not be representative of every unit included in the study.

Dal Corso et al. (Dal Corso et al., 2019) also found a positive correlation between ethical climate and burnout, using the Qu-Bo test on a population of Italian safety representatives, reporting a positive correlation between ethical conflict and burnout (p<0.01). The authors also investigated work engagement, which is positively associated with self-evaluated performance and training satisfaction, and negatively associated with burnout and conflict with co-workers. The authors reported that work engagement has a partial mediation role in the relationship between conflict with co-workers and self-evaluated performance, and a total mediation role in the relationship between conflict with co-workers and burnout. The study by Del Corso et al. was strengthened through containing a sample representative of all geographical areas of Italy. However, the study population was composed only of safety representatives, therefore the results may not

apply to a more heterogeneous sample.

In regards to ethical workplace climate as a predictive factor for burnout, Tehranineshat et al. (Tehranineshat et al., 2020) used the Hospital Ethical Climate Survey and the Professional Quality of Life Scale on a sample of Iranian nurses, and found a direct, significant relationship between ethical climate and burnout (p=0.02). The authors also highlighted a positive correlation between ethical climate and the indexes of compassion satisfaction, as well as secondary (post-?) traumatic stress. Furthermore, the authors investigated professional values, and found a statistically significant and positive correlation with ethical climate, indexes of compassion satisfaction, burnout, and secondary (post-?) traumatic stress. The study was conducted by investigating a population of nurses from only two hospitals and without taking into consideration important variables which could have helped strengthen the results of the study. However, the sample included HCWs from different wards, both surgical and non-surgical, suggesting the results may apply to different types of HCWs.

Ethical leadership and Burnout

Four of the included studies (30.8%) investigated the relationship between ethical leadership and burnout, three of which were performed on non-HCWs. All four studies used the Ethical Leadership Scale to evaluate ethical leadership and the Maslach Burnout Inventory to assess burnout. All studies highlighted ethical leadership as a protective factor against burnout.

Franczukowska et al. (Franczukowska et al., 2021) performed a study on Austrian HCWs, reporting ethical leadership as a protective factor against of burnout (p<0.01). The authors highlighted a positive and significant correlation between ethical leadership and job satisfaction, as well as affective commitment, showcasing the importance and influence of an ethical workplace on workers' personal lives. Furthermore, the authors reported that frustration tolerance and emotional stability acted as moderators in the relationship between ethical climate and burnout: the higher emotional stability or frustration tolerance reported, the less ethical leadership influenced burnout. The sample was recruited throughout different occupational groups (doctors, nurses, midwives, physiotherapists, speech therapists, etc) from various organizations; however, the authors reported that the sample was not demographically diverse nor selected randomly, impacting the generalizability of the results.

In non-HCWs, Akanni et al. (Akanni et al., 2019) performed a study on South African bank workers, while Vullinghs et al. (Vullinghs et al., 2020) performed a study on retail employees from the Netherlands, and Mo and Shi (Mo & Shi, 2017) performed a study on Chinese pharmaceutical retailers; all of these studies highlighted a negative correlation between ethical leadership and burnout.

The study conducted by Akanni et al. (Akanni et al., 2019) selected a sample of bank workers through the stratified random sampling technique, resulting in a representative study population. Akanni et al. also evaluated work engagement, reporting that emotional intelligence and ethical leadership predicted work engagement. Moreover, emotional intelligence a was found to be negatively correlated to job burnout. Interestingly, the authors reported that job burnout had a mediating role on the relationship between ethical leadership and emotional intelligence: the correlation

between the two was higher if the burnout score was low. However, the authors only recruited employees in the 22-34 years age range, therefore the sample was not representative of the population in terms of age.

The research designed by Vullinghs et al. (Vullinghs et al., 2020) selected a sample of bank workers through stratified random sampling technique, which provided a more representative study population. After investigating different dimensions of ethics, the authors found that ethical leadership correlated negatively with role overload, which in turn correlated positively with burnout; ethical leadership also correlated positively with role clarity, which relates negatively to burnout. Role clarity and role overload also correlated with passive leadership (negatively and positively, respectively) and acted as moderators in its relation to employee burnout. Although the this study collected data in regards to ethical leadership from company leaders as well as their subordinates, it only assessed the burnout outcome in the employee subordinates, and did not report the presence of burnout in the leaders included in the study.

In the study conducted by Mo and Shi (Mo & Shi, 2017), data from leaders and subordinates was collected three months apart, in order to separate the assessment of predictors and mediators from the outcome; during the first evaluation workers reported their demographic characteristics and their perception of ethical leadership. During the second evaluation they reported on their trust in leaders and burnout levels (among other variables). The authors reported that ethical leadership was positively correlated with trust in leaders, which in turn was negatively correlated with burnout; ethical leadership also correlated negatively with surface acting, which positively correlated with burnout. However, the authors remarked that further evaluation about burnout levels in workers after investigating trust in leaders may have produced better results.

Discussion

This systematic review investigated the relationship between workplace ethics and burnout. All the included studies investigating ethical climate reported a negative correlation with burnout, except for one. The study conducted by Tehranineshat et al. highlighted a positive correlation between ethical climate and burnout. However, despite the discordance of this paper with the current scientific consensus, the authors did not elaborate on these results ; and did not offer any possible explanations for these results in the discussion.

Two ethical climate dimensions in our review were shown to significantly influence burnout in employees: role overload and role clarity. Role overload has been highlighted as significantly related to burnout, especially in younger low-ranking employees, possibly due to the stronger ability of the older and more experienced employees to develop and implement the appropriate resilience mechanisms (Huang et al., 2022). Furthermore, work overload has been reported to be positively associated with all burnout dimensions (emotional exhaustion, depersonalization, lack of personal accomplishment) as well as with the overall burnout measure (Jamal, 2005). Role clarity has been reported to be negatively associated with burnout, particularly in terms of the emotional exhaustion and depersonalization dimensions of burnout (Blumenthal et al., 1998). In regards to leadership, role clarity has also been highlighted as a mediator in the relationship between transformational leadership and burnout (Chen

et al., 2022). Clearly defining the employee's role within the organization ; and outlining precise and appropriate tasks for each role, helps to ensure role clarity as well as avoid role overload, which are both essential factors in burnout prevention. Employers should clearly define their employee's role and responsibilities. Since ethical climate has been reported to be self-sustaining, these responsibilities should be agreed upon prior to the prospective employee's commencement of work for the company. This discussion and agreement on role and responsibilities is particularly pertinent at this initial stage of the employee's relationship with the organizationsince role overload has been reported to correlate with burnout most strongly in younger employees.

In this systematic review, ethical conflict has been highlighted as a factor in increasing burnout in employees. : In a study performed by Kammeyer-Mueller et al. on lawyers, the authors underscored that ethical conflict was associated with emotional exhaustion. The authors highlighted that all employees involved in the study were distressed due to their desire to act more ethically in the workplace, while not a single employee reported feeling constricted by an overly ethical management (Kammeyer-Mueller et al., 2012). Interestingly, frequency of ethical conflict has been reported by Wlodarczyk and Lazarewicz as being associated with burnout, while burden of ethical conflict was only associated with the emotional exhaustion dimension. The authors also reported that being exposed to ethical conflict increased the risk of developing burnout even if the participants did not report feeling burdened by it (Wlodarczyk & Lazarewicz, 2011).

The relationship between ethical conflict and burnout underscores the importance of a fair ethical climate in the workplace, which is instrumental in reducing burnout. As highlighted by Rivaz et al, ethical climate could explain 5.9% of burnout in participants (Rivaz et al., 2020). Furthermore, ethical climate has been shown to improve work engagement and could be a useful factor in ensuring the psychological wellbeing of workers (Bakker et al., 2006). Furthermore, ethical climate in the workplace has also been reported to be self-maintaining: a favorable ethical climate tends to improve even further over time, whereas low ethical standards in the workplace tend to gradually worsen over time (Huhtala et al., 2022). For this reason, building and maintaining ethical standards in the workplace is essential for ensuring the psychological wellbeing of employees throughout the course of their employment, and to prevent burnout in workers.

As emerged from this systematic review, ethical climate and ethical leadership have been reported to increase work engagement in workers (Akanni et al., 2019; Dal Corso et al., 2019; Huhtala et al., 2015, 2022). This finding is consistent with previous studies, which have highlighted work engagement as dependent on workplace climate (Bakker et al., 2006, 2007; Mauno et al., 2011). Work engagement has been reported to be stronger in certain categories of workers, concentrating in clusters of employees, in a similar fashion as burnout (Bakker et al., 2006). These results seem to suggest that, as with burnout, work engagement appears to develop at both an individual and a work-team level ; and is more commonly observed in among employees belonging to the same team. As ethical climate is defined as the perception of moral values in the workplace, and is therefore shared amongst coworkers, the role that ethics play in strengthening work engagement or causing burnout in clusters of employees seems all the more relevant.

Furthermore, work engagement has been reported to decrease turnover intention in employees (Bakker et al., 2006; Schaufeli & Bakker, 2004). The relationship between ethical climate and turnover intention has also emerged from this systematic review, as burnout has been reported to increase intention of leaving in workers, while ethical workplace climate has been reported to be associated with lower turnover intention (Bao et al., 2013; Barr, 2020). This is consistent with previous studies, as ethical climate has been reported as a protective factor against intention to leave (Hart, 2005; Ulrich et al., 2007), while burnout has been shown to increase turnover intention (Kim et al., 2019; Van der Heijden et al., 2019). Emotional exhaustion has also been reported as to be associated with burnout (Scanlan et al., 2020). The effect of job stressors on turnover and turnover intention has been investigated in a recent study: the authors reported that emotional exhaustion, work-life conflict, and reduced job satisfaction contributed to turnover intention (Fukui et al., 2020). Moreover, job demands have been underlined as a mediating factor in the relationship between burnout and intention to leave (Van der Heijden et al., 2019). The detrimental effect of workload on mental health has been well documented in the scientific literature (Győrffy et al., 2016; Park et al., 2020), and the effect of role overload on employees' burnout has been discussed in this review. Mental health has an important effect on turnover intention; in order to reduce employee turnover, workplace mental health prevention programs should be improved to ensure all workers are better equipped to effectively manage the stressors that most frequently lead to turnover.

Ethical climate plays an instrumental role in burnout mitigation in workers, as well as in improving work engagement, which subsequently reduces burnout; workplace ethics, work engagement, and low burnout help reduce turnover intentions in workers. Workplace ethics could play a fundamental role in ensuring that the employees remain engaged in their daily tasks and in their work in general; by reducing ethical conflict and creating a better ethical climate workers are more likely to embrace their role within the company. Moreover, since all of these aspects have been reported to be present in clusters of workers, they could interact in groups of coworkers and their improvement could lead to a better work environment. For this reason, ethical leadership is essential to ensure that the same ethical standards are shared within the work team, and in turn each employee is comfortable with the ethical standards adopted by the team and the leaders and evaluates workplace ethics as fair. Workplace ethics and work engagement contribute to reducing burnout and therefore help to ensure that work climate does not detrimentally impact employees' mental health.

Nearly all of the studies included in this review were performed before the COVID-19 pandemic. During the COVID-19 pandemic, the prevalence of employee burnout has risen, particularly in healthcare workers (Buonomo et al., 2022; Conversano et al., 2020). Further studies are needed to investigate the relationship between ethical climate and burnout, particularly in healthcare workers, during the COVID-19 pandemic.

All the studies performed on HCWs investigated ethical climate. Likely because when investigating ethics in HCWs, the studies focused on the relationship between employees and patients, or the effects of ethical dilemmas caused by working in a hospital, rather than the relationship with employers or leaders. The variable turnover intention was only assessed in studies performed on HCWs.In further studies ; it would be interesting to assess the effect of ethical climate, work

engagement, and burnout ; on turnover intention in non-HCWs.

As showcased by this systematic review, workplace ethical climate has a significant effect on the mental wellbeing of workers. This review highlights the necessity to develop better interactions between clinical psychology and psychiatry and occupational medicine, in order to compare the subjective experience of workers as reported to the mental health specialists and the objective measurements performed during occupational surveillance, to better understand the role that workplace environment has on workers' mental health. Future research should be aimed to investigate how workplace ethics and general climate relate to workers' mental health, not only concerning burnout – which is a complex syndrome – but also in relation to mental health symptoms of stress, anxiety and depression, in order to recognize psychological distress as early as possible through the appropriate screening tools and enact prevention strategies to ensure workers' wellbeing.

The results highlighted by this systematic review showcase the importance of promoting prevention strategies to ensure that workplace ethical climate and leadership have a positive effect on workers' psychological wellbeing. Ensuring an ethical workplace climate, as well as providing adequate support to workers with training and information programs, could be instrumental interventions towards the prevention of burnout in workers. Furthermore, when prevention strategies cannot be appropriately implemented, improving workplace ethical climate may result in burnout mitigation for workers.

Prevention only partially represents the professional risk management process; it would be appropriate and interesting to develop workers' clinical monitoring systems to be able to detect clinical issues in the early stages. The main problem of clinical diagnostics in the workplace is to limit the cost and time they require. In our opinion, more interdisciplinary studies between psychiatrists and occupational physicians should be conducted in order to establish the proper use of simple diagnostic tools. These tools can then be made available to occupational physicians, in order to identify workers that may need a psychiatry consultation for further investigations. Enhancing the sharing of data between occupational physicians and psychiatrists would also be useful to for implementing psychological risk management policies in the workplace which would be effective in preventing the onset or worsening of clinical issues which are often unrecognized until serious clinical symptoms appear.

This review has some key strengths: it was performed using a systematic methodology and following PICO and PRISMA guidelines, it included reports over an extended time period of ten years, and it only included structured questionnaires assessing burnout (excluding qualitative measures). However, it also contained a few limitations. The review was performed on cross-sectional studies, therefore the effect of ethical climate on burnout in the long term could not be assessed. Furthermore, the heterogeneity of the tools used in the included studies to assess ethics and burnout did not allow for a meta-analysis to be performed.

Conclusions

Positive ethical climate and leadership in the workplace were reported to be a protective factor against burnout in all the included studies, with the exception for of one. Ethical climate was found to be positively associated with work engagement, which in turn reduced burnout. Lower burnout, combined with a positive ethical climate and high work engagement were associated with lower turnover intention. The evaluation of workplace ethical climate should be implemented as a routine evaluation in every workplace, to ensure the wellbeing of employees through the implementation of a fair ethical climate and ethical leadership in the workplace. Workplace ethics have been demonstrated to increase work engagement and reduce burnout in workers, therefore the evaluation of ethical standards is key to ensuring the psychological wellbeing of workers and should be used as a preventive measure. Furthermore, improving ethical climate and reducing burnout could help in preventing employees' turnover.

This systematic review should be used as a starting point for further research concerning the effect of ethical climate on burnout. Moreover, the association between ethical climate and work engagement, the relationship of both of these factors with burnout in employees, as well as the effects that these three variables have on turnover intentions, should be studied. In further research, ethical climate and the influence it has on all the aforementioned factors should be investigated in clusters of coworkers to further understand the dynamic of these associations. Furthermore, future research should investigate how workplace ethics relate to workers' mental health, in order to recognize psychological distress as early as possible through the appropriate screening tools and enact appropriate prevention strategies.

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