

# Educational institutions as healthy working environments: well-being and stress management in education professionals

## Las instituciones educativas como ambientes laborales saludables: bienestar y manejo del estrés en profesionales de la educación

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### ABSTRACT

The present study explores how a healthy working environment affects the well-being of education professionals and the role of stress management skills in mediating this relationship. A total of 405 education professionals took part, 69.6 % of whom were female. Of these, 36 % were under the age of 39, while 64 % were aged 40 or over. The Ecosystems of Healthy Work (EATS) instrument was used to assess the work environment, comprising 62 items in nine dimensions based on the World Health Organisation model. The results show a relationship between well-being, stress management skills, and the perception of a healthy work environment. Differences emerged according to gender and job stability. The mediation model revealed a relationship between a healthy work environment and the well-being of professionals, mediated by stress management skills. The study recommends strategies to promote well-being and healthier working conditions for education professionals.

### KEYWORDS

Ecosystems; education; wellness; professionals; stress management.

### RESUMEN

El presente estudio explora cómo un entorno de trabajo saludable afecta el bienestar de los profesionales de la educación y el papel de las habilidades de gestión del estrés en la mediación de esta relación. Participaron 405 profesionales de la educación, de los cuales el 69,6% eran mujeres. De ellos, el 36 % tenía menos de 39 años, mientras que el 64 % tenía 40 años o más. Para evaluar el entorno laboral se utilizó el instrumento Ecosystems of Healthy Work (EATS), compuesto por 62 ítems en nueve dimensiones basadas en el modelo de la Organización Mundial de la Salud. Los resultados muestran una relación entre el bienestar, las habilidades de gestión del estrés y la percepción de un entorno de trabajo saludable. Surgieron diferencias en función del sexo y la estabilidad laboral. El modelo de mediación reveló una relación entre un entorno de trabajo saludable y el bienestar de los profesionales, mediada por las habilidades de gestión del estrés. El estudio recomienda estrategias para promover el bienestar y unas condiciones de trabajo más saludables para los profesionales de la educación.

### PALABRAS CLAVE

Ecosistemas; educación; bienestar; profesionales; manejo del estrés.

Recibido: 31/07/2024; aceptado: 01/10/2024

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## Introduction

Organisations are currently facing a series of new demands in order to remain competitive, such as increasing globalisation, new technologies, more demanding consumers, changing expectations of professionals, the need to control costs, the increased importance of knowledge capital or the changing demographics of professionals, which will increase the need to manage the health and performance of their workers (Burke, 2016). It is therefore important to guarantee well-being in the workplace, which concerns all aspects of working life, from the quality and safety of the physical environment to the way professionals feel about their work, their working environment, the climate at work and the organisation of work (International Labour Organisation [ILO], 2009). Thus, by establishing an empirical link between workplace practices, employee well-being and organisational improvements, the development of the concept of healthy organisations becomes relevant (Grawitch et al., 2006). Healthy workplaces are characterised by a group of professionals who collaborate in a process of continuous improvement in order to protect and promote the health, safety and well-being of all workers and the sustainability of the workspace (Burton, 2010).

In this sense, since health is a state of complete physical, mental and social well-being and not just the absence of disease or infirmity (World Health Organisation), the promotion of healthy workplaces should be based on the identification of various needs: (i) health and safety concerns in the physical work environment; (ii) health, safety and well-being concerns

in the psychosocial work environment, including work organisation and workspace culture; (iii) personal health resources in the workspace; (iv) ways of participating in the community to improve the health of workers, their families and other community members (Burton, 2010). The well-being of workers makes a decisive contribution to the long-term effectiveness of an organisation, so there is a direct relationship between productivity levels and general health and well-being (ILO, 2009). According to the Organisation for Economic Co-operation and Development (OECD) (2017), the concept of work environment is understood as a combination of workplace characteristics that define the context in which workers carry out their professional activity and involve the nature of the work tasks assigned to each worker, the physical and social conditions in which the tasks are carried out, the characteristics of the organisation where the work is carried out, the scheduling of working time, the prospects that the workplace offers workers and the intrinsic rewards associated with the work.

As a result of this concept, the OECD Guidelines for Measuring the Quality of the Working Environment (OECD, 2017) were developed, namely: (i) the quality of the working environment should be measured taking into account results and not procedures; (ii) the focus should be on the results obtained by workers at an individual level and not on what is observed at a broader level; the measures should capture, as far as possible, objective aspects of the workplace and not subjective evaluations of it. Given the growing interest in aspects related to individual health, the perspective on healthy

workplaces has expanded beyond traditional models related to physical health and safety to include the psychosocial aspects of well-being at work (Day & Randell, 2014). It is thus recognised that workplace characteristics can affect not only the physical health but also the mental health of workers, resulting in lower performance and productivity (Burton, 2010). With regard to mental health, there are several factors that can trigger greater fragility in this area (family history, health-related behaviours, gender, genetics, life history and personal experience, access to support and coping strategies). The characteristics of the workplace can trigger or amplify problems such as depressive mood, anxiety or burnout (Burton, 2010), alcohol and drug abuse, bullying or conflict (ILO, 2009). It is thus recognised that work-related stress is a determining factor in health and well-being (Burke, 2016) and although it is not experienced in the same way, there are cross-cutting categories that can increase stress, such as work overload, the roles assumed (ambiguity or conflict), career concerns, working hours, interpersonal relationships or the content of the work (Day & Randell, 2014), discrimination and harassment or poor leadership (Burke, 2016). On the other hand, it is known that a global crisis can cause disruption at work, so the COVID-19 pandemic has meant that organisations have had to adapt and implement new safety procedures, in addition to the emotional and stressful experiences that have been intensified by uncertainty, despair and isolation, leading to burnout on a global scale (Gabriel & Aguinis, 2022). There are various models that explain the development of healthy workplaces. The model presented by

Kelloway and Day (2005) is based on a holistic approach that includes psychosocial and physical factors that are predictors of a healthy workplace: (i) employee safety, (ii) health and safety, and (iii) health and safety work environment; (iv) work-life balance; (v) supportive, respectful and fair culture; (vi) professional involvement and development; (vii) work content and characteristics; (viii) interpersonal relationships at work. Healthy workplaces can thus be characterised as those that incorporate practices, programmes, policies or work design that promote or reinforce the positive health and well-being of workers or that remedy or prevent their workers' stress or other negative aspects of health and well-being (Day & Randell, 2014). Improving the quality of the working environment has been recognised as a political priority in recent years, and the operationalisation of the OECD Guidelines for Measuring the Quality of the Working Environment in a recent study confirmed the relevance of non-remunerative work characteristics to workers' physical and mental health and well-being, as well as motivation and job satisfaction (OECD, 2022).

This study aims to understand and characterise how a healthy working environment affects the well-being of education professionals and how stress management skills can mediate this relationship.

## **Method**

### ***Participants***

A total of 405 participants took part in the study, 69.6% female. Regarding the age of the participants, 36% were aged up to 39 years and 64% were 40 years or older.

### Instruments

To measure Healthy Work Environment was used Healthy Workplace Ecosystems instrument (EATS) (Gaspar et al., 2022) that comprises a total of 62 items organized into 9 dimensions based on the Healthy Workplaces model proposed by the World Health Organization (Burton, 2010). The Ethics and Values dimension has 8 items ( $\alpha = .91$ ), the Commitment to Leadership has 6 items ( $\alpha = .95$ ), the Worker Involvement has 7 items ( $\alpha = .89$ ), the Psychosocial Risks at Work related to Work Content and Relationships with Leadership has 12 items ( $\alpha = .91$ ), the Psychosocial Risks at Work related to Well-being and Mental Health has 5 items ( $\alpha = .86$ ), the Physical Environment has 5 items ( $\alpha = .92$ ), Teleworking has 3 items ( $\alpha = .82$ ), the Community Involvement has 12 items ( $\alpha = .90$ ) and Resources for Personal Health has 4 items ( $\alpha = .83$ ). All questions have a 5-point Likert-type scale. The Cronbach's alpha levels obtained for each factor show that they have adequate internal consistency (between .82 and .95) and Cronbach's alpha of the total scale is .91.

The 4-item version of the Stress Perception Scale (EPS) was used to assess the degree to which an individual evaluates their life situa-

tions as stressful which in the present study revealed adequate internal consistency ( $\alpha = .77$ ). All questions have a 5-point Likert-type scale where 1 represents strongly disagree and 5 represents strongly agree. A higher score obtained in the scale reveals a less positive perception of stress management.

Well-being was measured using the WHO-5 scale (Portuguese version) (Coelho et al., 2022). The WHO-5 Well-Being Index consists of 5 items with 6 responses categories ranging from "All the time" to "At no time" with an internal consistency ( $\alpha = .87$ ), range 1 (less well-being) to 25 (more well-being).

The characterisation of the variables is presented in Table 1.

### Procedure

The study was submitted to and approved by the Ethics Committee of the Prof Fernando Fonseca Hospital, reference EPE 031/2021. Sampling was by convenience. Higher education institutions that agreed to participate received the instrument via a link and disseminated the link internally to academic community. The link gave access to an explanation of the study, contact details for the researchers to

Table 1  
*Characterisation of variables*

	Min.	Máx.	Range
Lack of well-being	5.00	28.00	< 9.4 high wellbeing 9.5- 18.5 moderate wellbeing >18.6 low wellbeing
Perceived Stress Scale	4.00	17.00	< 5.5 low stress 5.6- 13.4 moderate stress >13.5 high stress
Healthy Work Environment (EATS)	32.00	95.00	< 31.5 low EATS 31.6- 63.4 moderate EATS > 63.5 high EATS

clarify any doubts, information on confidentiality, anonymity and the voluntary nature of participation. The participant only had access to the instrument after signing the informed consent form.

## Results

In terms of household composition, 28.4% of participants reported living alone while 71.6% lived with others. Regarding their employment status, 53.4% had a fixed-term contract and 46.6% had a permanent contract.

The participants showed moderate risk values in relation to wellbeing and perceived stress, and showed low risk in relation to Healthy work Environmental (Table 2).

The correlations between the scales are statistically significant, indicating the presence of a high positive correlation between perception of lack of well-being and the Perceived Stress Scale ( $r=.568$ ) and a high negative correlation between perception of lack of well-being and the healthy work environment ( $r=-.620$ ) as well

as between the Perceived Stress Scale and the healthy work environment ( $r=-.568$ ) (Table 3).

Regarding sex differences, according to Table 4, the lack of well-being perception of female professionals ( $M=16.40$ ;  $SD=5.76$ ) was higher than that of male professionals ( $M=13.49$ ;  $SD=5.32$ ), and this difference was statistically significant ( $t(405)=3.224$ ;  $p=.002$ ,  $d=.52$ ). The stress perception of female professionals ( $M=10.13$ ;  $SD=2.98$ ;  $n=105$ ) was higher than that of male professionals ( $M=8.97$ ;  $SD=2.75$ ), and this difference was statistically significant ( $t(405)=2.501$ ;  $p=.013$ ,  $d=.40$ ). Finally, the perception of a healthy work environment among female professionals ( $M=65.93$ ;  $SD=9.81$ ) was lower than that of male professionals ( $M=69.36$ ;  $SD=11.52$ ), and this difference was statistically significant ( $t(405)=-2.033$ ;  $p<.044$ ,  $d=-.33$ ).

With respect to the type of contract, according to Table 5, the perception of a healthy work environment among professionals with a fixed-term contract ( $M=69.03$ ;  $SD=11.22$ ) was higher than that of professionals with a permanent

Table 2  
*Descriptive statistics*

	Min.	Máx.	<i>M</i>	<i>SD</i>
Lack of well-being	5.00	28.00	15.33	5.74
Perceived Stress Scale	4.00	17.00	9.71	2.93
Healthy Work Environment (EATS)	32.00	95.00	67.22	10.54

Table 3  
*Correlations between scales*

	Lack of well-being	Perceived Stress Scale	Healthy Work Environment
Lack of well-being	1	.568***	-.620***
Perceived Stress Scale		1	-.568***
Healthy Work Environment			1

\*\*\*  $p<.001$

Table 4  
Comparison between groups regarding sex

	Female		Male		t/sig
	M	SD	M	SD	
Lack of well-being	16.40	5.76	13.49	5.32	3.224**
Perceived Stress Scale	10.13	2.98	8.97	2.75	2.501*
Healthy Work Environment	65.93	9.81	69.36	11.52	-2.033*

\*  $p < .05$ ; \*\*  $p < .01$

Table 5  
Comparison between groups regarding the type of contract

	Fixed-term contract		Permanent contract		t/sig
	M	SD	M	SD	
Lack of well-being	14.68	5.45	16.04	6.00	-1.534
Perceived Stress Scale	9.68	2.94	9.74	2.95	-.130
Healthy Work Environment	69.03	11.22	65.25	9.44	2.348**

\*\*  $p < .01$

contract ( $M=65.25$ ;  $SD=9.44$ ), and this difference was statistically significant ( $t(405)=2.348$ ;  $p=.020$ ,  $d=.36$ ). No statistically significant differences were found between groups regarding the perception of lack of well-being and the perception of stress.

With the aim of verifying a potential mediating effect of perception of stress in the predictive relationship between the perception of a healthy work environment and the perception of lack of well-being, a mediation model was developed (Figure 1). The results indicate that in the tested mediation model, the assessed indirect effect is significant, with the perception of stress acting as a mediating factor in the relationship between the perception of a healthy work environment and the perception of lack of well-being ( $b = -.18$ ;  $SE = .05$ ;  $IC\ 95\% = [-.29; -.08]$ ). The model explains 67% of the variation. Therefore, it is evident that the perception of a healthy work environment influ-

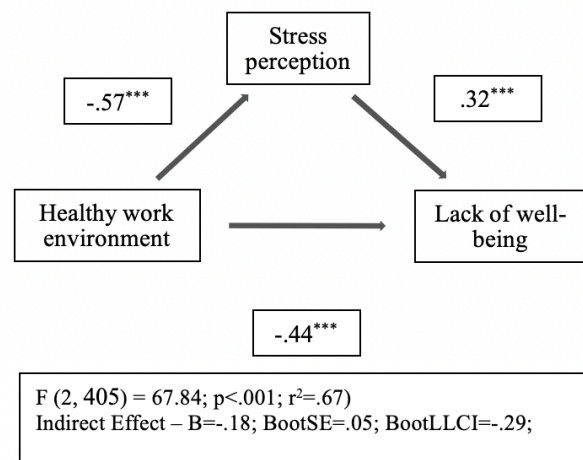


Figure 1. Mediation model

ences the well-being of professionals, and the promotion of stress management skills can be considered a protective factor for well-being.

### Discussion

In response to our study objective: how a healthy working environment affects the well-being of education professionals and how stress management skills can mediate this relationship, we found that education profes-

sionals showed moderate levels of well-being, stress management and perception of a healthy work environment. According to Shen and Slater (2021) most studies show that academics experience moderate to high level of stress, with the heavy workload being one of the main stressors. In a study by Kolomitro et al. (2019), the authors found that characteristics and actions of the director/manager and of colleagues, leadership instability, misalignment of actions with organizational values, limited resources, demanding workloads, workplace scheduling, and the precarious nature of educational development appointments were pointed by the professionals as factors related to the work environment that influenced negatively their well-being. Also in a study carried out by Rahoo et al. (2017) the authors found that there are several factors of the work environment that contribute to the experience of stress of administrators and teachers in higher education institutions, namely time overload, infrastructure, student indiscipline and prospects of low salaries.

We found that there is a strong correlation between the variables under study: the perception of a healthy work environment is negatively correlated with a lack of well-being and with the perception of stress. Lack of well-being is positively correlated with perceived stress. In a study carried out by Zábrowská et al. (2014), the authors discovered that the well-being of academic faculty is specifically related to certain variations associated with the work environment, such as autonomy, involvement in decision-making, low pressure to produce and a strong social community. On the other

hand, they also found that emotions related to stress and burnout were associated with environmental characteristics related to the perception of lack of influence and the existence of high quantitative demands. According to the literature, occupational stress has been constantly rising among academics in universities globally (Shen & Slater, 2021), which affects their health and well-being (Mensah, 2021; Shen & Slater, 2021).

When comparing men and women, we found that women are at greater risk, as they express less well-being, more stress and a more negative perception of the work environment when compared to men. These results are in line with other studies that have demonstrated that women show less well-being in the work environment and more job stress when compared to men (Mensah, 2021; Wilks & Neto, 2012). In a study carried out by Machado-Taylor et al. (2014) the authors found that women were less satisfied with aspects of the work environment carried out such as personal and professional development, especially the balance between work and family when compared to men.

When we compare professional stability, there were no statistically significant differences in the well-being of the professionals, despite the scientific literature indicating that fixed-term professionals' well-being tends to be lower when compared to professionals with permanent contracts due to heightened job insecurity (Dawson et al., 2014; Schumann & Kuchinke, 2019). Nevertheless, we found that professionals with lower professional stability show a more negative perception of the work

environment when compared to professionals with a more stable situation.

It was found a mediating effect of perception of stress in the predictive relationship between the perception of a healthy work environment and the perception of lack of well-being. The results indicate that the perception of a healthy work environment influences the well-being of professionals, and the promotion of stress management skills can be considered a protective factor for well-being. In this way, this study is in line with a study conducted by Marck et al. (2014), that demonstrated the importance of providing a stable and safe workplace and improve the workplace culture in order to promote the well-being and mental health of the education professionals. This study also demonstrates the importance of promoting stress management skills in the professionals, in order to promote their well-being, which is in line with a study of Kolomitra et al. (2019), that states the relevance of helping education professionals implement strategies to cope with stress, anxiety, and burnout. These strategies may include engaging in activities, promoting social connection, embracing self-care and seeking for help.

The performance of academic staff has a direct impact on student learning and on the quality of higher education institutions. Therefore, is critical to improve their satisfaction in order to promote an effective functioning of the higher education institutions (Machado-Taylor et al., 2014). Our study highlighted the importance of promoting a healthy work environment and workers' ability to manage stress,

with the aim of contributing to their well-being.

The translational implications of our study suggest a twofold action, from one side upon individuals providing resources such as workshops or bootcamps where professionals and students can be training on how to manage stress and other self-care skills that may help them achieving a better well-being perception. From another side organisational managers could be motivated to provide a safe and sheltering work environment where stress sources may be addressed and dealt with (ex. matching the load of duties with individual capacities and schedules), with a special concern for female situation. Finally, at a macrolevel, the study highlights the importance of cheering public policies that care about the quality of workplaces, both from a human point of view but also when targeting productivity and professional success.

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