OmniaScience

Intangible Capital

IC, 2025 – 21(1): 21-44 – Online ISSN: 1697-9818 – Print ISSN: 2014-3214

https://doi.org/10.3926/ic.2964

Management of safety and health at work: Emotional intelligence in university personnel

Marta Guimerà-Gallent[1], Jaume-Miquel March-Amengual[*2], Núria Arimany-Serrat[3]

[1]*Research Group on Methodology, Methods, Models and Outcomes of Health and Social Sciences (M3O), Faculty of Health Sciences and Welfare, Center for Health and Social Care Research (CESS), University of Vic-Central University of Catalonia (Uvic-UCC) (Spain)*

[2]*Institute for Research and Innovation in Life Sciences and Health in Central Catalonia (IRIS-CC) (Spain)*

[3]*Research Group Emprèn, Faculty of Business and Communication Studies, University of Vic-Central University of Catalonia (Uvic-UCC) (Spain)*

marta.guimera@uvic.cat

[*]*Corresponding author: jaume.march@uvic.cat*

nuria.arimany@uvic.cat

Received June, 2024

Accepted January, 2025

Abstract

Purpose: The purpose of this study is to assess the impact of an emotional education programme on the emotional intelligence of university employees, formed by both academic and administrative staff. The study also seeks to examine the relationships between work engagement and emotional intelligence.

Design/methodology/approach: This study includes an exploratory study and a pre-post quasi-experimental design with random assignment of participants into an experimental group and a control group. For data collection, a quantitative methodology has been used.

Findings: The results show that the emotional education programme increased participants' emotional intelligence, particularly in self-regulation and regulation of others' emotions, and was associated with reduced perceived stress and higher work engagement. For this reason, it is advisable to promote emotional education programmes for university personnel in order to increase their emotional intelligence and influence the well-being of staff, with reduced perceived stress and greater commitment to the institution.

Research limitations/implications: A limitation of the study is that it is carried out at a single university in a certain period and cannot be compared with other universities. In future research, the methodology will be extended to other universities to evaluate the results in different university institutions to draw conclusions in this regard in university higher education.

Practical implications: The findings of this research have practical implications for organisations by offering new insights into the importance of emotional education interventions in enhancing workplace well-being in university settings. These results provide a foundation for future implementations of such strategies. Furthermore, we recommend that all organisations address the psychosocial risks faced by their employees.

Originality/value: This study contributes to the existing literature by exploring the impact of an emotional education programme on university workers, shedding light on the intersection between

emotional intelligence, work engagement and perceived stress. Additionally, this study addresses the need to explore specific psychosocial risks faced by university personnel, a population that has received limited attention in emotional intelligence research.

Keywords: Psychosocial risks, Emotional intelligence, Perceived stress, Engagement, Occupational health and safety

Jel Codes: J24, M12

To cite this article:

Guimerà-Gallent, M., March-Amengual, J.M., & Arimany-Serrat, N. (2025). Management of safety and health at work: Emotional intelligence in university personnel. *Intangible Capital,* 21(1), 21-44. https://doi.org/10.3926/ic.2964

1. Introduction

The realm of occupational health and safety has evolved significantly, with a growing emphasis on measures to detect and eliminate potential risks (Kirsten, 2022). It recognises the influences of emotional factors on employee mental health, highlighting the importance of adapting work environments to accommodate individual psychological needs (Beck & Lenhardt, 2019; Chirico, Heponiemi, Pavlova, Zaffina & Magnavita, 2019; Schulte, Streit, Sheriff, Delclos, Felknor, Tamers et al., 2020). Consequently, mental health in the workplace and mitigating occupational stress have been recognised as important concerns (Kirsten, 2022).

With the growth of the service sector, workers are increasingly requiring emotional management skills to cope with the high emotional demands (Ha & Kim, 2021). These demands cause emotional dissonance as employees may be required to express emotions that differ from their existing feelings (Bhave & Glomb, 2016). Excessive emotional demands have been linked to negative consequences for workers' physical and psychological health, including burnout (Jeung & Chang, 2021).

In the workplace, emotional intelligence (EI) has emerged as an important aspect in job performance and well-being. Studies suggest that EI plays a significant role in reducing workplace accidents by supporting safe behaviours and risk management (Soriano-Vázquez, Cajachagua-Castro & Morales-García, 2023). According to Akanni, Kareem and Oduaran (2020), EI positively predicts employee well-being by assisting workers in regulating their emotions and actions. This enhanced emotional control can lead to improved decision-making and problem-solving abilities, both crucial for job security (Edmund, Suxia, Ebenezer & Kachie, 2023). Furthermore, research indicates that EI interventions can help workers cope with stress and anxiety (Saikia, George, Unnikrishnan, Nayak & Ravishankar, 2024). Therefore, EI can be developed through training, potentially leading to improved work environments and stronger decision-making skills in high-stress situations (Maamari & Salloum, 2023; Olalekan, Blessing, Taiwo, Fissha & Akinlabi, 2024).

University employees are not immune to harmful mental health outcomes (Jayman, Glazzard & Rose, 2022). There are two main groups in the university work environment: Teaching and Research Staff and Administrative and Service Staff. The complex nature of university work exposes employees to a wide range of stressors and responsibilities, demanding a comprehensive approach to addressing employee well-being (Morrish, 2019). According to UK charity Education Support, a significant portion (77%) of education personnel reported poor mental health and experienced emotional exhaustion (Wray & Kinman, 2021).

The university environment has become increasingly stressful due to rising academic and administrative demands, pressure to publish, increased responsibilities in mentoring, as well as the need to compete for research funding and professional recognition (Mátó, Tarkó, Lippai, Nagymajtényi & Paulik, 2020; Mohammed, Chan, Ahmad, Dusic, Boglarsky, Blessinger et al., 2020). The situation was exacerbated by the COVID-19 pandemic, which has led to a rise in disorders such as anxiety and depression among university employees (Gaspar, Paiva & Matos, 2021; Koren, Milaković, Bubaš, Bekavac, Bekavac, Bucić et al., 2023). Moreover, the transition to a

university environment characterized by the BANI concept (brittle, anxious, non-linear and incomprehensible) describes the uncertainty in which universities currently operate (Podolchak, Tsygylyk, Chursinova & Dziurakh, 2024). Universities are required to adopt a flexible and resilient approach, which calls for more effective human resource management, the promotion of well-being and mental health, and the implementation of psychosocial support programmes and emotional intelligence training (AON, 2023).

In the context of Spain, recent data highlights the significant emotional toll experienced by university staff. A study conducted by the Department of Research and Universities of the Government of Catalonia (Departament de Recerca i Universitats, 2023) reports that 54.2% of administrative staff and 56.1% of academic staff experience emotional exhaustion. Furthermore, the study reveals a higher incidence among women in both groups (p=0.008 for administrative staff and p<0.001 for academic staff) (Departament de Recerca i Universitats, 2023). However, this concern is not exclusive to Spain. A recent international study across 16 countries found that a significant proportion of university staff reported experiencing burnout and moderate to high levels of stress. The authors of this study emphasize the urgent need for implementing institutional practices to address this occupational stress and promote staff well-being (Rahman, Das, Lam, Alif, Sultana, Salehin et al., 2024).

In the changing world of higher education, the well-being of university employees is crucial to creating a healthy and effective work environment (Jayman et al., 2022). Universities, as institutions with a significant influence on societal health, bear substantial responsibilities in the realm of occupational health, positioning them as ideal entities for the application of health-promoting strategies (Martínez-Riera, Gallardo-Pino, Aguiló-Pons, Granados-Mendoza, López-Gómez & Arroyo-Acevedo, 2018). If emotional exhaustion is not adequately addressed, it may threaten both employee well-being and the institution's role in knowledge creation and societal development. While most of the literature about higher education focuses on students, employee's mental health is also at risk (Morrish, 2019). It is within this context that this article focuses on the unique environment of higher education, where workplace emotions remain a relatively underexplored topic (González-Rico, Guerrero-Barona, Chambel & Guerrero-Molina, 2022).

Given the increase in stress factors and the uncertain context in which universities operate, it is urgent to investigate how emotional intelligence can contribute to improving workplace well-being and emotional management among university employees. Moreover, given that emotional exhaustion can directly impact both personal well-being and the quality of academic work, addressing these issues is crucial for the sustained performance of academic staff and the overall educational outcomes within universities (Edmondson & Bransby, 2023). Therefore, this article examines emotional intelligence, perceived stress and engagement, recognising the pivotal role of organisations in fostering secure and healthy work environments. It contributes to the existing literature on occupational health and safety incorporating the role of emotions in higher education employees.

While research on emotional intelligence training in the workplace is growing in other sectors, there is a surprising lack of studies focusing specifically on university personnel (González-Rico et al., 2022; Morrish, 2019). This gap is particularly concerning given the unique stressors and emotional demands faced by this population, distinguishing it from other work factors (Mátó et al., 2020; Morrish, 2019). A recent systematic review on emotional intelligence interventions in workplace settings did not include any study focused on university employees (Mehler, Balint, Gralla, Pößnecker, Gast, Hölzer et al., 2024), despite evidence supporting their effectiveness in managing chronic stress and burnout (Kotsou, Mikolajczak, Heeren, Grégoire & Leys, 2019).

To address this issue, universities are becoming increasingly aware of the need to provide psychological support services for both students and staff (Raffio, 2024). However, there remains a lack of dedicated research evaluating the effectiveness of emotional well-being programs for university personnel. While some Spanish universities offer emotional intelligence courses for both students and staff, to our knowledge, no published research has evaluated the impact of these programs. Notably, one university in Catalonia is participating in a European project aimed at promoting emotional development among university staff.

The University of Vic was selected for this study due to its growing institutional focus on employee well-being. Recent psychosocial risk assessments have indicated high emotional demands among both academic and

administrative staff, highlighting the urgent need for specific interventions. In response, the university has implemented several emotional health initiatives, such as psychological support services and stress management programs, demonstrating its commitment to promoting a healthy work environment. Additionally, the university's accessibility and established institutional collaboration facilitated participant recruitment, data collection and effective implementation of the emotional intelligence intervention. Focusing on a single university ensures a more homogeneous organisational context, reducing variability related to institutional policies and workplace culture and allowing for more accurate assessment of the intervention's impact. Furthermore, the university's proactive approach to employee well-being creates an ideal environment to implement and evaluate additional emotional intelligence interventions. This study also serves as a pilot project to test the effectiveness of such interventions, with the intention of expanding the programme to other universities in future research. Lastly, the University of Vic is representative of mid-sized higher education institutions in Spain, making the findings relevant for similar universities facing comparable psychosocial challenges. The results of this study could also inform institutional policies aimed at improving staff well-being in the higher education sector.

This study aims to fill the gap by evaluating the impact of an emotional education programme on the emotional intelligence of both academic and administrative staff at a university, as well as its influence on stress and engagement. Thus, the purpose of this research is to demonstrate, through different emotional training sessions, the effect on emotional intelligence and work-related stress in the employees at one university. In addition, the study assesses the extent to which emotional intelligence may affect people's engagement. To achieve the aim of this project, in the first instance, a quantitative analysis of emotional intelligence, perceived work-related stress and engagement is carried out before and after the emotional education intervention.

The selection of the variables, such as emotional intelligence, perceived stress and work engagement, is based on prior literature (Mérida-López, Carvalho, Chambel & Extremera, 2023), which suggest that these dimensions are interrelated and particularly relevant in workplaces requiring high levels of emotional management, such as universities.

Unlike other studies that have mainly focused on emotional intelligence in sectors such as healthcare or schools, this research centres on university personnel, a workforce comprising two main groups with distinct characteristics: Teaching and Research Staff and Administrative and Service Staff. The study recognizes that the stress factors affecting these two groups may differ, even though both face emotionally demanding working conditions, a topic that has been underexplored in the existing literature (Coleman & Ali, 2022).

Additionally, this study employs a quasi-experimental design of an emotional education programme specifically designed for university employees, representing a unique contribution to research on psychosocial health in this area. It is also noteworthy that most studies focus on analysing stress and engagement as independent variables (Breaugh, 2021), while this study addresses the relationship between the two variables to understand how emotional intelligence can reduce perceived stress and simultaneously enhance university staff engagement.

This study responds the global challenge of occupational stress by examining the specific context of higher education, where employee well-being is closely linked to institutional performance and societal impact. By using a quasi-experimental design, this research aims to contribute to the field of emotional intelligence by focusing on a workforce that has received limited attention in existing studies. By differentiating between academic and administrative staff, this study provides insights into how emotional intelligence interventions may differ in effectiveness across diverse university roles. Additionally, it provides a better understanding of the relationship between stress and engagement, along with practical implications for developing interventions to improve workplace well-being in universities, a sector facing increasing emotional and professional demands. To the best of our knowledge, this study is one of the first in Spain to empirically evaluate the impact of emotional intelligence interventions in higher education staff, offering valuable insights into occupational health strategies.

Following the introduction, there are five sections to the article. The literature review is divided into many sections: occupational health and safety: psychosocial health, psychosocial hazards in higher education, emotional intelligence training in the workplace and emotional intelligence training in university personnel. It is followed by the empirical section, and the paper closes with the study's findings, discussion and conclusion.

2. Literature Review

2.1. Occupational Health and Safety: Psychosocial Health

According to the International Labour Organization (ILO), occupational health and safety is a broad commitment to promoting the overall well-being of workers (International Labour Organization, 2011). Psychosocial risks, such as work demands, management styles and emotional labor, significantly affect mental health (International Labour Organization, 2011; Schulte, Delclos, Felknor & Chosewood, 2019).

As the scenario of workplace risks in the twenty-first century has evolved, occupational hazards have moved beyond traditional physical risks to include psychosocial hazards. These risks include interactions between job content, management, environmental elements, organisational factors and individual workers' demands (International Labour Organization, 1986). Psychosocial risks damage mental health by influencing factors such as working hours, workplace characteristics and possibilities for professional development (International Labour Organization, 2022; Langenhan, Leka & Jain, 2013; Schulte et al., 2019),as well as increasing occupational stress (Stacey, Ellwood & Bradbroo, 2018). Some researchers hold similar views, establishing links between psychosocial hazards and both work-related stress and health issues (Bergh, Hinna, Leka & Zwetsloot, 2015; Jain, Torres, Teoh & Leka, 2022; Koren et al., 2023) and mental health (Kirsten, 2022), while also considering the COVID-19 pandemic a risk factor for workplace stress (Gaspar et al., 2021).

Work-related stress has significant implications for mental health, productivity, and overall well-being. According to the European Working Conditions Survey (EWCS), 25% of European workers say they have experienced occupational stress at some point during their working career. As a result, European agencies have created regulations, and European countries have implemented different strategies to assess and manage work-related stress effectively (European Agency for Safety and Health at Work, 2014). European Union data sheds light on the prevalence of work-related stress and the imperative need for effective measures to address this concern (Parent-Thirion, Macías, Hurley & Vermeylen, 2007). The growth of occupational health and safety is thus accompanied by an emotional component and has become a new work need in the service society. Emotional management at work can have a detrimental impact on worker health since it directly affects employee exhaustion and job satisfaction (Mira, 2022).

The International Organization for Standardization (ISO) introduced the Standard UNE-ISO 45003: 2021 to deal with the management of psychological health in the workplace. This publication gathers together procedures for the management of psychosocial risks in order to improve the physical and mental health of employees (International Organization for Standarization, 2021). Overall, organisations play a crucial role in creating a safe and healthy work environment that supports emotional well-being (Kirsten, 2022; Koren et al., 2023). Additionally, occupational health and safety has become an important aspect for organisation as a consequence of the changing nature of the workplace, the COVID-19 pandemic and the increased awareness of mental health (Jain et al., 2022; Kirsten, 2022).

This is supported by the Sustainable Development Goals (SDG) outlined in the 2030 Agenda. The preservation of workers' health and the provision of decent employment are essential to achieving these aims (UNESCO, 2017). The International Labor Organization also emphasises that protecting the basic human right to good health depends on enacting laws and taking other steps to promote mental health in the workplace (International Labour Organization, 2022). As the concept of occupational health and safety evolves to encompass well-being, it is particularly important to examine the situation in higher education institutions.

2.2. Psychosocial Risks in the Context of Higher Education

Studies reveal a decrease in mental health among higher education workers, who report higher stress levels and lower well-being compared to the general population (Morrish, 2019). The Covid-19 pandemic has further increased these concerns (Koren et al., 2023; Wray & Kinman, 2021). Mátó et al. (2020) found that university staff are exposed to a variety of psychosocial risk factors, which raises mental stress and the probability of mental health disorders (Mátó et al., 2020).

University personnel face high workloads, time pressure, burnout and lack of self-awareness regarding emotional management, creating a challenging work environment (Corpuz, 2023). Emotional intelligence emerges as a

critical component for effective university staff functioning due to the complex emotional demands of interacting with students (Muthuswamy, 2021).

There are two groups of university staff: Teaching and Research Staff and Administrative and Service Staff. Although both groups share the same community, various studies have demonstrated differences between them. In the case of the Teaching and Research Staff, they have to balance teaching, research and administrative roles (Jiao, Harrison, Chen & Butcher, 2021) and at the same time adapt to new teaching models (Koren et al., 2023), manage their workload and cope with the pressure to succeed (Plata, 2024). The study by Mátó et al. (2020) also highlights the presence of strict deadlines, workload overload and communication issues. The Administrative and Service Staff have been less studied (Coleman & Ali, 2022), and it is often not directly involved in teaching and research activities, instead, they carry out administrative tasks, provide support and offer user assistance (Departament d'Educació de la Generalitat de Catalunya, 2024). Despite these differences, psychosocial risks between the two groups show no significant variations (Universidad de Sevilla, 2023). Mental workload is higher among Teaching and Research Staff, while Administrative and Service Staff exhibits greater vulnerability to anxiety (Salazar, Palomo-Osuna, de Sola, Moral-Muñoz, Dueñas & Failde, 2021). This suggests a need for further in-depth research on these factors to develop interventions tailored to the specific characteristics of each group (González-Rico, Carvalho, Chambel & Guerrero, 2018).

According to the research of Education Support's research, many respondents showed signs of burnout, with more than six out of ten (65.3%) feeling emotionally exhausted from their work at least "once a week" (Wray & Kinman, 2021). Moreover, numerous researchers point out the frequency of work stress and its relationship with mental health problems among higher education personnel because of the high emotional expectations (Chirico, Giorgi & Magnavita, 2023; Mátó et al., 2020; Mudrak, Zabrodska, Kveton, Jelinek, Blatny, Solcova et al., 2018; Pujol, 2018; Schonfeld, Bianchi & Luehring-Stones, 2017; Wray & Kinman, 2021).

Some authors add that the university environment is affected by the BANI concept (brittle, anxious, non-linear and incomprehensible), characterized by its instability and complexity. This context increases the pressure on universities to respond quickly to the changing demands of the labor marker, technological advancements and student expectations (Podolchak et al., 2024). In this context, a need has arisen to foster a culture of resilience among university staff to equip them with emotional coping strategies for adverse situations (Coronado-Maldonado & Benítez-Márquez, 2023).

The World Health Organization and the International Labor Organization (2022) advise a comprehensive approach to workplace mental health management to address mental health concerns effectively and to safeguard the well-being of all employees. According to Cohen, Kamarck and Mermelstein (2083) systematic review, workers who receive workplace wellness interventions or other treatments aimed at reducing absenteeism report higher levels of productivity, which may lead to higher job satisfaction.

While data facilitated by the Union Representatives' Committee of the university where we focus the study, shows a sense of willingness to contribute among Teaching and Research Staff and Administrative and Service Staff (83.3% and 73.1%, respectively), a significant proportion (55.2%) also reported experiencing stress or anxiety. This points to a possible gap between employee engagement and well-being.

Historically, cognitive skills were considered the most important skills in the workplace. However, the recognition of the equal importance of emotional competencies has been growing (Kavyashree & Anupama, 2023). The literature has established a relationship between emotional intelligence and various psychosocial variables, such as stress and engagement. Emotional intelligence is defined as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990: page 189).

Several studies have shown that emotional intelligence has a significant influence on perceived stress (Akanni et al., 2020; Edmund et al., 2023; Podolchak et al., 2024). People with high levels of emotional intelligence possess more emotional resources to cope with stress, which allows them to have a lower perception of stress in high-pressure situations. This mechanism operates through emotional regulation, enabling people with high

emotional intelligence to manage negative emotions more effectively, thereby reducing their negative emotional response to stressful situations (Gohm, Baumann & Sniezek, 2001).

Another important concept is employee engagement, which refers to an employee's enthusiasm for their job and environment (Schaufeli & Bakker, 2011), which can lead to productivity and well-being and contribute to the organisation's success (Mansor, Mat-Jusoh, Hashim, Muhammad & Omar, 2023). Research indicates a substantial correlation between emotional intelligence and employee engagement (Selvi & Aiswarya, 2023). According to studies, emotional intelligence is connected with better communication skills and managing strategies (Jufrizen, Khair & Loviky, 2023).

Perceived stress and management are two related variables that can have opposing effects on workers' mental health and performance (Rahmi, Fitriana, Harding & Agustiani, 2021). According to Bakker and Demerouti's Job Demands-Resources Model (2007), perceived stress can be considered a factor that depletes energy and personal resources, potentially impacting engagement. Studies have shown that stress is one of the main contributors to mental health issues in universities as it reduces the ability to concentrate and affects the quality of interpersonal relationships, potentially leading to emotional exhaustion (Mátó et al., 2020; Mudrak et al., 2018; Pujol, 2018). Emotional intelligence can act as a moderator in the relationship between perceived stress and engagement. Workers with high level of emotional intelligence have more emotional resources to manage stress effectively (Gilar-Corbi, Pozo-Rico, Sanchez & Castejon, 2019).

As a result, universities are taking on tasks and responsibilities to enhance the health of their personnel and are the best places to apply initiatives targeted at their members' occupational health (Arroyo-Acevedo, Landazabal & Pino, 2015). Consequently, in order to lower healthcare expenses and improve productivity, higher education needs to implement policies that give the health and well-being of its personnel the highest priority (Jiao et al., 2021; Martínez-Riera et al., 2018; Mátó et al., 2020). However, despite the growing literature on mental health at work, as well as resources and recommendations, there is still a lack of evidence for the effectiveness and social validity of specific mental wellbeing interventions (Jayman et al., 2022; Wray & Kinman, 2021). Given the emotional demands of university staff and the potential benefits of emotional intelligence, the following section explores existing research on training programmes in the workplace.

2.3. Emotional Intelligence Training in the Workplace

Emotional well-being is no longer a secondary consideration in occupational health and safety (OHS). Organisations recognise its importance beside physical safety, prioritising emotional competence as a key aspect of employee well-being (Mira, 2022). Emotional intelligence is becoming increasingly recognised in the workplace, as evidenced by the World Economic Forum (Gray, 2016). Research consistently links EI to well-being, with benefits including reduced stress and improved mental health (Akanni et al., 2020; Bresó & Salanova, 2010; Kotsou et al., 2019).

Emotional intelligence training programmes can improve emotional regulation skills, leading to a safer work environment (Edmund et al., 2023; Ifelebuegu, Martins, Theophilus & Arewa, 2019). Additionally, higher emotional intelligence has been associated with increased job satisfaction, lower burnout rates, and improved employee engagement (Ceballos, Solarte & Ayala, 2017; Olalekan et al., 2024; Papoutsi, Drigas & Skianis, 2019). As high levels of emotional intelligence in employees can result in increased psychological well-being in the workplace, it stands to reason that employees who are more emotionally intelligent are more able and willing to contribute to advancing the company or institution (Sanchez-Gomez & Breso, 2019). This aligns with findings by Kotsou et al. (2019), where interventions based on emotional intelligence were successful in treating and preventing burnout and chronic stress (Kotsou et al., 2019).

Kotsou's systematic review examines the emotional intelligence interventions carried out in the workplace settings, and they found 46 studies with positive outcomes for groups receiving the intervention compared to control groups The analysed studies about emotional intelligence consider different aspects. Regarding the intervention, most of the studies followed a primary intervention, meaning that the intervention happens before the problem appears. Moreover, the study highlights the need for control groups and randomised controlled

designs. The majority of the studies were carried out in a student sample, considering that no study considered the higher education sector to be a workplace (Kotsou et al., 2019).

Emotional intelligence is necessary for managing emotions to lower stress and improve mental health outcomes (Mátó et al., 2020). The benefits of EI extend beyond the workplace, with some advocating the incorporation of empathy and emotional intelligence skills into the curriculum for health science students (Aguilar, Toledano-Moreno, Casas-Barragán, Albornoz-Cabello, Tapia-Haro & Correa-Rodríguez, 2024). Moreover, implementing emotional education strategies acts as a protective factor for employees by enhancing emotion regulation and understanding (García, Torrano & García, 2020). These programmes have been linked to lower stress levels (García et al., 2020; Gilar-Corbi et al., 2019; Saedpanah, Salehi & Moghaddam, 2016) and improved psychological well-being (Mikulic, Crespi & Radusky, 2015; Sánchez-Álvarez, Extremera & Fernández-Berrocal, 2016). This aligns with calls for business to establish training initiatives to improve emotional intelligence and assess employee well-being (Munir & Azam, 2017). Several studies support the positive impact of emotional intelligence training on employee's wellbeing (Gilar-Corbi et al., 2019; Hodzic, Scharfen, Ripoll, Holling & Zenasni, 2018; Jiao et al., 2021). Moreover, Kotsou et al. (2019) conclude in their study that it is necessary to test emotional intelligence interventions as a tool to prevent stress and burnout (Kotsou et al., 2019).

2.4. Emotional Intelligence Training in University Personnel

Research supports the benefits of improving emotional intelligence among university staff (Akanni et al., 2020). Akanni et al. (2020) found that individuals equipped with emotional intelligence skills can better manage workplace demands, improve coping mechanisms and enhance stress tolerance. Additionally, Maamari and Salloum (2023) emphasise the importance of emotionally intelligent lecturers for increasing teaching efficacy, suggesting that incorporating emotional intelligence training programmes for instructors can have a positive impact on the academic environment.

Despite the positive findings of emotional intelligence training in the workplace, a critical gap exists in research on interventions specifically designed for university personnel. Kotsou's systematic review which analysed studies on emotional intelligence interventions in various work settings, did not include any staff from higher education (Kotsou et al., 2019). While research on emotions at university remains limited, Muthuswamy (2021) highlights the need to integrate emotional intelligence into teacher preparation programmes and educational policy (Muthuswamy, 2021). This aligns with the growing recognition that universities should strive to improve emotional intelligence and engagement of their personnel to enhance overall productivity and performance (Corpuz, 2023; Gilar-Corbi et al., 2019).

The current study aims to analyse the initial state of emotional intelligence, engagement and stress in a Spanish university and examine the efficacy of an emotional intelligence training programme specifically designed for university personnel. Building on past research, we hypothesise that the training will improve emotional intelligence and reduce perceived stress among participants. The following hypotheses are developed:

H1. The emotional intelligence of participants in the emotional education programme will improve after training compared to the control group. This hypothesis assumes that emotional intelligence can be developed through emotional education programs. Previous studies have shown that specific training can effectively improve emotional intelligence (Kotsou et al., 2019; Maamari & Salloum, 2023). We expect that participants in the intervention group will show a significant improvement in their emotional intelligence, as measured before and after the training, compared to a control group.

H2. There will be a negative relationship between emotional intelligence and perceived stress, such that higher emotional intelligence will correspond with lower levels of stress. This hypothesis is based on evidence suggesting that individuals with higher emotional intelligence are better equipped to cope with stress due to their improved emotional regulation abilities (Akanni et al., 2020; Saikia et al., 2024). Therefore, we expect that participants with higher emotional intelligence levels will report lower levels of perceived stress.

H3. Emotional intelligence will be positively related to engagement, such that higher emotional intelligence will correspond with higher levels of engagement. Research suggest that emotional intelligence is linked to work

engagement by improving motivation, interpersonal relationships and resilience (Sanchez-Gomez & Breso, 2019). We hypothesize that participants with higher emotional intelligence will show higher engagement levels.

H4. Participants who receive the intervention will show a greater reduction in perceived stress and a greater increase in engagement compared to the control group. This hypothesis builds on findings that emotional intelligence training can reduce perceived stress and will increase work engagement by improving self-regulation and awareness (Ceballos et al., 2017). We expect the intervention group to demonstrate significant improvements in both stress management and work engagement compared to the control group.

3. Methodology

3.1. Study Design and Participants

There were two phases in the investigation. First, an exploratory approach was employed to determine the initial level of emotional intelligence, engagement and stress of the participants, as well as the relationships between them.

At the time of data collection, the University of Vic had 1,100 employees, of whom 615 met the inclusion criterion of having full-time employment at the university. Participation in the study was voluntary. The sample error obtained was 5.5% with a 95% confidence interval.

In the first exploratory phase, we distributed multiple questionnaires validated by the Research Ethics Committee to the entire institution (University of Vic – Central University of Catalonia) and received responses from 208 university personnel. Of these respondents, 102 belonged to the Teaching and Research Staff and 102 to the Administrative and Service Staff. Table 1 shows the progression of the participation over time among the two main groups.

	Population	Initial sample	Final sample
Job category			
Teaching and Research Staff	344	102	52
Administrative and Service Staff	271	106	46
All participants	615	208	98

Table 1. Sample and participation in the first phase

The second phase included a quasi-experimental pre-test/post-test design to determine the impact of emotional intelligence education on the research variables. The 208 participants were separated into two groups of 104 each (experimental and control), with the experimental group given the opportunity to receive emotional intelligence training. From this group, a total of 25 people completed the training. When the training was completed, we asked the participants to complete the questionnaires again, and we received 81 responses from the control group and 17 from the intervention group. Table 2 details this phase's sample and participation.

	Population	Initial sample	Final sample
Experimental group	104	25	17
Control group	104	81	81
All participants	208	208	98

Table 2. Sample and participation in the second phase

A quasi-experimental design was used as it allows the comparison of the effects of an intervention between an experimental and a control group. This method is common in social research where full random assignment is not possible due to organisational constraints and staff availability (Creswell, 2009). Similar designs have been used in studies evaluating the impact of interventions on psychological variables (Gilar-Corbi et al., 2019; Karimi, Leggat, Bartram & Rada, 2020).

The sample focused on the University of Vic for several reasons. First, employees of this university experience high emotional demands according to the results of a psychosocial risks assessment. Additionally, this institution has demonstrated a commitment to the health and well-being of its employees, which motivates staff participation in health education initiatives.

All participants received an information sheet explaining the study aims and procedures before completing an informed consent form. The study was approved by the University Ethics Committee (CER) under the reference 201-2022.

3.2. Measures

Data were collected at two time points: baseline questionnaire (Q0) and after the intervention (Q1) for both groups. An online questionnaire was used to collect all data.

3.2.1. Sociodemographic Characteristics

Sociodemographic information was collected, including gender, age, country of origin, level of education and job category (e.g. Teaching and Research Staff or Administrative and Service Staff).

3.2.2. Work Engagement

Work engagement was measured using the Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2011). The UWES is a validated 17-item questionnaire with a 6-point Likert scale ranging from 0=never to 5=every day. It assesses three dimensions of work engagement: vigor (vitality and high energy); dedication (sense of meaning in the job) and absorption (being fully immersed in the job) (Schaufeli & Bakker, 2011). The scale has shown adequate reliability in a sample of various occupations (Schaufeli & Bakker, 2011). In this study, the scale demonstrated good reliability and consistency in both questionnaires (Cronbach's α = .90; McDonald's Ω = .90) (Nunnally, Bernstein & González, 1995; Campo-Arias & Oviedo, 2008; Frías-Navarro, 2020).

3.2.3. Emotional Intelligence

Emotional intelligence was assessed using the Spanish adaptation of the Schutte Self-Report Emotional Intelligence Test (SSEIT) (Salavera-Bordás & Usán-Supervía, 2019; Schutte, Malouff & Bhullar, 2009). The SSEIT is a 33-item instrument with a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. The Spanish adaptation measures six factors of emotional intelligence: appraisal of one's emotions, appraisal of others' emotions, regulation of one's emotions, expressed emotion, regulation of others' emotions and emotions in problem solving. The reliability of this scale in the general population has been shown to be satisfactory (Salavera-Bordás & Usán-Supervía, 2019). In this study, the instrument demonstrated adequate reliability and consistency (Cronbach's α = .89; McDonald's Ω = .88).

3.2.4. Perceived Stress

Perceived stress was measured using the Perceived Stress Scale, adapted into Spanish (PSS) (Cohen et al., 1983; Torres-Lagunas, Vega-Morales, Vinalay-Carrillo, Arenas-Montaño & Rodríguez-Alonzo, 2015). The PSS is a 14-item questionnaire with a 6-point Likert scale ranging from 0=never to 5=very often. It assesses the degree to which individuals perceive their life events as stressful. The reliability of this scale with a sample of teachers is adequate (Jorquera & Guerra, 2023). In this study, the instrument demonstrated good reliability and consistency (Cronbach's α = .88; McDonald's Ω = .88).

3.3. Intervention

The intervention programme consisted of 14 hours of emotional intelligence training. It included a 2-hour online session, a 4-hour in-person session and a final 8-hour in-person session. The intervention was carried out by emotional intelligence specialists. All intervention group participants finished the 14-hour programme. The control group did not get any training.

Q0	Online intervention (2 hours)	First in-person session (4 hours)	Second in-person session (8 hours)	Q1

Q0=Baseline questionnaire; Q1=after the intervention questionnaire

Table 1. Intervention and data collection

All the sessions focused on developing some of the emotional intelligence competencies:

- Appraisal of one's emotions
- Appraisal of others' emotions
- Regulation of one's emotions
- Regulation of others' emotions

The training programme included a combination of didactic instruction, interactive exercises, theoretical foundation, role-playing activities and group discussions.

3.3. Data Analysis

We used descriptive statistics to show participants' demographic characteristics, emotional intelligence scores, the prevalence of stress and engagement scores, with direct scores in each test. This included calculating means and standard deviations for quantitative variables and frequencies and percentages for categorical variables. The chi-square test was used for the comparison of two variables and linear-by-linear association for more than two categories; the Kolmogorov– Smirnov test and the Shapiro Wilk test were tests of normality used; the Mann-Whitney U test was used for comparisons of two means with no normal distribution, and the Student-t test was used to compare means of two groups; the Kruskal-Wallis test was used for the comparison of more than two averages with no normal data; and Pearson's correlation coefficient was used to analyse the association between two variables. Data analysis was performed using SPSS v.29.0.2.

4. Results

4.1. Exploratory Study

In a first study, we obtained a sample of 208 (33.8%) of a total of 615 full-time employees, which represents having an error sample of 5.5%, NC 95%. Table 2 includes a descriptive analysis of the sample. Most participants were female (66.3%), between the ages of 46 and 55 (34.1%), Administrative and Service Staff (51%) and had university studies (48.1%). Almost all the sample had Spanish nationality (96.6%).

Gender	***n* (%)**
Female	138 (66.3)
Male	70 (33.7)
Age	
18-25	3 (1.4)
26-35	34 (16.3)
36-45	54 (26.0)
46-55	71 (34.1)
56-65	46 (22.1)
Country of origin	
Spanish	201 (96.6)
Another EU country	5 (2.4)
British	1 (0.5)
An African country	1 (0.5)
Level of education	
Primary	3 (1.4)
Secondary	19 (9.1)
University	100 (48.1)
PhD	86 (41.3)
Job category	
Teaching and Research Staff	102 (49.0)
Administrative and Service Staff	106 (51.0)

Table 2. Baseline sociodemographic characteristics of participants (n=208)

Among respondents, 140 (67.3%) expressed high or very high engagement. Regarding perceived stress, 135 (64.9%) reported having stress occasionally, whereas 44 (21.2%) indicated experiencing stress frequently.

Table 4 shows the mean scores of the variables with their confidence interval. The analysis revealed a relatively high level of emotional intelligence in the sample, with an average score of 129.7 (out of a maximum of 160). The U Mann-Whitney test revealed significant differences in gender, where women have higher scores (U Mann-Whitney=3391.0; p=0.001). In the other sociodemographic variables, no significant differences were found.

Engagement	***n* (%)**
Very low	4 (1.9)
Low	10 (4.8)
Medium	64 (30.8)
High	75 (36.1)
Very high	55 (26.4)
Perceived stress	***n* (%)**
Never or almost never	26 (12.5)
Sometimes	135 (64.9)
Often	44 (21.2)
Very often	3 (1.4)

Table 3. Mean and percentage of engagement and perceived stress

Variables	**M (SD)**	**95% CI**
EI	**129.70 (0.86)**	**[127.99 – 131.41]**
Appraisal of one's emotions	24.36 (0.21)	[23.95 – 24.77]
Appraisal of others' emotions	14.38 (0.18)	[14.01 – 14.74]
Regulation of one's emotions	29.01 (0.21)	[28.58 – 29.44]
Expressed emotion	18.32 (0.17)	[17.98 – 18.66]
Regulation of others' emotions	23.98 (0.20)	[23.58 – 24.37]
Emotions in problem solving	19.66 (0.16)	[19.33 – 19.98]

Table 4. Mean and confidence interval of emotional intelligence

In the first exploratory phase, we investigated the relationships between emotional intelligence, perceived stress and engagement. The Kruskal-Wallis test for continuous data showed that employees with higher emotional intelligence scores reported lower perceived stress (Kruskal-Wallis 27.44, p<0.001) and higher engagement (Kruskal-Wallis 11.85; p=0,008). Regarding emotional intelligence factors, we found significant results with engagement in regulation of one's emotions (Kruskal-Wallis 19.92; p<0.001), and regulation of others' emotions (Kruskal-Wallis 15.546; p=0.001). Additionally, a chi-square test, for categorical data suggested potential connections between engagement and perceived stress (Pearson Chi-square 8.40; p=0.038).

Comparison	**Test**	***p*-value**
Emotional intelligence vs engagement	11.85*	0.008
Emotional intelligence vs perceived stress	27.49*	<0.001
Engagement vs perceived stress	8.40**	0.038

*Kruskal-Wallis; **Pearson chi-square

Table 5. Comparison between emotional intelligence, engagement and perceived stress

Pearson correlation analysis revealed significant relationships between emotional intelligence, engagement and stress. Employees with higher emotional intelligence scores reported greater engagement (r=0.264, p< 0.001) and lower perceived stress (r=–0.413, p<0.001). Additionally, a moderate negative correlation (r=–0.237, p<0.001) indicated that higher engagement was associated with lower perceived stress.

Variable	Emotional intelligence	Engagement	Perceived stress	*p*-value
Emotional intelligence	–	0.264	–0.413	<0.001*
Engagement	–	–	–0.237	<0.001*
Perceived stress	–	–	–	–

*Significant results

Table 6. Pearson correlation coefficient between emotional intelligence, engagement and perceived stress

4.2. Quasi-Experimental Study

208 participants answered the initial questionnaire (questionnaire 1). These individuals were randomly allocated to two groups: an experimental group (n=23) and a control group (n=81). Following that, questionnaire 2 was distributed and 17 people in the experimental group answered that.

Variables	Intervention group (n=17)	Control group (n=81)
Gender n (%)		
Female	15 (88.2)	46 (56.8)
Male	2 (11.8)	35 (43.2)
Age		
18-25	–	2 (2.5)
26-35	1 (5.9)	11 (13.6)
36-45	2 (11.8)	21 (25.9)
46-55	10 (58.8)	24 (29.6)
56-65	4 (23.5)	23 (28.4)
Country of origin		
Spanish	17 (100)	77 (95.1)
Another EU country	–	2 (2.5)
British	–	1 (1.2)
An African country	–	1 (1.2)
Level of education		
Primary	–	3 (3.7)
Secondary	4 (23.5)	6 (7.4)
University	9 (52.9)	32 (39.5)
PhD	4 (23.5)	40 (49.4)
Job category		
Teaching and Research Staff	12 (70.6)	34 (42)
Administrative and Service Staff	5 (29.4)	47 (58)

Table 7. Baseline sociodemographic characteristics of participants

The following table shows the comparison between the intervention and control group in each questionnaire. It shows a higher score of emotional intelligence before starting the intervention, which means that the groups were not homogeneous.

	Q0			Q1		
	Control group	Intervention group		Control group	Intervention group	
	M (SD)	M (SD)	*p*	M (SD)	M (SD)	*p*
EI	128.69 (1.31)	137.47 (13.14)	0.007**	129.22 (1.31)	137.29 (14.90)	0.016**
Appraisal of one's emotions	24.01 (0.32)	25.65 (2.97)	0.047*	24.21 (0.31)	25.47 (3.20)	0.072*
Appraisal of others' emotions	14.16 (0.30)	15.71 (3.23)	0.016*	14.54 (0.28)	16.12 (2.52)	0.042*
Regulation of one's emotions	29.02 (0.35)	30.71 (2.84)	0.035*	29.10 (0.35)	29.82 (3.10)	0.530*
Expressed emotion	17.85 (0.28)	19.88 (2.42)	0.003*	17.81 (0.27)	19.24 (2.99)	0.108*
Regulation of others' emotions	23.94 (0.29)	25.47 (2.58)	0.053*	23.62 (0.34)	25.41 (3.06)	0.050*
Emotions in problem solving	19.70 (0.24)	20.06 (2.97)	0.292*	19.94 (0.23)	21.24 (2.56)	0.070*
Engagement	**5.03 (0.09)**	**4.85 (0.87)**	**0.464***	**4.87 (0.08)**	**5.04 (0.57)**	**0.452***
Vigour	5.04 (0.10)	4.78 (1.09)	0.400*	4.87 (0.09)	5.07 (0.56)	0.669*
Dedication	4.83 (0.10)	4.60 (0.96)	0.419*	4.73 (0.08)	4.80 (0.87)	0.457*
Absorption	5.30 (0.08)	5.35 (0.83)	0.636*	5.09 (0.08)	5.33 (0.41)	0.268*
Perceived stress	**22.46 (0.87)**	**19.29 (6.56)**	**0.126****	**23.49 (0.79)**	**21.94 (8.08)**	**0.426****

*Mann-Whitney U test. **Student t test

Table 8. Comparison between groups for questionnaire 0 and questionnaire 1

Since the comparison between each group in different times did not result in any significant change, the Student t test was calculated in Table 9, which shows the comparison means and 95% confidence interval for variables in the intervention group at the beginning (Q0) and after the intervention (Q1). However, no significant differences were found between the two times, except for emotions in problem solving (p=0.040).

Intervention group	Q0		Q1		*p*-value
	M	CI (95%)	M	CI (95%)	
EI	**137.47**	**[130.71 – 144.23]**	**137.29**	**[129.63 – 144.96]**	**0.466**
Appraisal of one's emotions	25.65	[24.12 – 27.18]	25.47	[23.82 – 27.12]	0.389
Appraisal of others' emotions	15.71	[14.04 – 17.37]	16.12	[14.82 – 17.41]	0.672
Regulation of one's emotions	30.71	[29.24 – 32.17]	29.82	[28.23 – 31.42]	0.090
Expressed emotion	19.88	[18.64 – 21.13]	19.24	[17.70 – 20.77]	0.116
Regulation of others' emotions	25.47	[24.15 – 26.80]	25.41	[23.84 – 26.99]	0.453
Emotions in problem solving	20.06	[18.53 – 21.58]	21.24	[19.92 – 22.55]	0.040*
Engagement	**4.85**	**[4.40 – 5.30]**	**5.04**	**[4.74 – 5.33]**	**0.068**
Vigour	4.78	[4.22 – 5.34]	5.07	[4.78 – 5.36]	0.073
Dedication	4.59	[4.10 – 5.09]	4.80	[4.35 – 5.25]	0.127
Absorption	5.35	[4.92 – 5.78]	5.33	[5.12 – 5.55]	0.552
Perceived stress	**19.29**	**[15.92 – 22.67]**	**21.94**	**[17.78 – 26.10]**	**0.097**

Table 9. Means and confidence interval and significant differences between questionnaire 0 and questionnaire 1 for each variable in the intervention group (n=17)

The control group did not show significant changes in emotional intelligence (EI) or in its subcategories following the intervention. Engagement, however, showed a statistically significant decrease (p=0.002). Specifically, both the vigour (p=0.005) and absorption (p=0.001) aspects of engagement decreased.

Control group	Q0		Q1		*p*-value*
	M	CI (95%)	M	CI (95%)	
EI	**128.69**	**[126.09 – 131.29]**	**129.22**	**[126.62 – 131.82]**	**0.501**
Appraisal of one's emotions	24.01	[23.37 – 24.65]	24.21	[23.60 – 24.82]	0.482
Appraisal of others' emotions	14.16	[13.56 – 14.76]	14.54	[13.98 – 15.11]	0.203
Regulation of one's emotions	29.02	[28.33 – 29.72]	29.10	[28.39 – 29.80]	0.565
Expressed emotion	17.85	[17.30 – 18.40]	17.81	[17.27 – 18.36]	0.678
Regulation of others' emotions	23.94	[23.37 – 24.51]	23.62	[22.95 – 24.28]	0.184
Emotions in problem solving	19.70	[19.24 – 20.17]	19.94	[19.49 – 20.39]	0.233
Engagement	**5.02**	**[4.84 – 5.20]**	**4.87**	**[4.71 – 5.03]**	**0.002***
Vigour	5.03	[4.83 – 5.24]	4.86	[4.67 – 5 05]	0.005*
Dedication	4.82	[4.63 – 5.02]	4.73	[4.57 – 4.89]	0.109
Absorption	5.29	[5.13 – 5.46]	5.08	[4.93 – 5 24]	0.001*
					p*-value*
Perceived stress	**22.46**	**[20.71 – 24.20]**	**23.49**	**[21.92 – 25.07]**	**0.102****

*Wilcoxon test. **Student t test

Table 10. Means and confidence interval and significant differences between questionnaire 0 and questionnaire 2 for each variable in the control group (n=81)

5. Discussion

The literature review highlights several theoretical gaps that have yet to be adequately explored in the field of emotional intelligence and workplace well-being within the university setting. Most studies on emotional intelligence focus on sectors such as healthcare, management or business (Kotsou et al., 2019), while there is a lack of research aimed at examining the impact of emotional intelligence on university staff (Akanni et al., 2020; Wray & Kinman, 2021). In addition to addressing these gaps, this article adds value by considering new scenarios in universities that are increasingly relevant to the fields of workplace health and safety, as well as mental health. While previous studies have primarily focused on emotional intelligence interventions in other sectors, this study emphasises the unique role universities play in supporting the well-being of their staff. Specifically, it addresses this gap by investigating how emotional intelligence interventions can reduce perceived stress and enhance engagement among university personnel, a workforce comprising distinct groups with unique characteristics and challenges.

In our study, we conducted a two-phase investigation, first determining the prevalence of emotional intelligence, engagement and stress among university personnel. After that, we examined the effectiveness of an emotional intelligence intervention and its relationships with perceived stress and engagement. Higher education is chosen due to the lack of research on the management of emotions and the impact of emotional intelligence on personnel in the educational sector.

It should be noted that employee well-being is influenced by emotional intelligence, perceived stress and work commitment. In this research, the comparison of the results of the two groups allows us to assess whether the independent variable has a significant effect on the other variables because of the intervention. During the initial exploratory phase, our study found that 22,59% of the sample experienced stress, similar to the results from European Working Conditions Survey (EWCS), which indicated that 25% have experienced stress at some point (European Agency for Safety and Health at Work, 2014). However, we found that university personnel with greater emotional intelligence do not perceive as much stress and have greater commitment to the institution.

The study also demonstrated a moderate positive association between emotional intelligence and work engagement (r=0.264, p<0.001), suggesting that people with higher levels of EI tend to be more committed to their work. This connection strengthens the notion that the ability to recognise and regulate one's own and others' emotions can positively influence involvement and dedication in the workplace (Ceballos et al., 2017; Olalekan et al., 2024; Papoutsi et al., 2019; Selvi & Aiswarya, 2023). Regarding emotional intelligence, we observed higher levels of emotional intelligence in women.

Additionally, we observed a moderate negative connection between emotional intelligence and perceived stress (–0.237*, p<0.001), which refers to the idea that the ability to manage emotions can lower stress (Akanni et al., 2020; Bresó & Salanova, 2010; Kotsou et al., 2019; Maamari & Salloum, 2023; Olalekan et al., 2024; Saikia et al., 2024). Moreover, the positive correlation between emotional intelligence and both work engagement and perceived stress highlights the ongoing need to support emotional well-being in this population. This aligns with previous research highlighting the mental health challenges faced by university staff (Muthuswamy, 2021; Wray & Kinman, 2021).

With these results in the first phase, it is evident that training emotional intelligence with appropriate interventions, in higher education institutions, favours the perceived stress and engagement of university personnel. The effectiveness of the research is demonstrated by the differences in the follow-up scores between the Q0 and Q1 in each group, in line with previous studies, such as Kotsou et al's (2019) systematic review, which concluded that the groups that received these interventions showed improvements, in contrast to those who did not. This contributes to prior research indicating that emotional intelligence training can help people improve their emotional self-regulation and awareness abilities (Akanni et al., 2020). Our findings suggest that universities should consider integrating emotional intelligence training programs for their staff, as such interventions can improve emotional well-being and work engagement.

In the research, the experimental group and the control group do not differ significantly in age, gender, level of studies and job category. The initial exploration, through validated questionnaires of emotional intelligence, perceived stress, and work commitment, shows a relatively high level of emotional intelligence in the sample under study. Likewise, the sample reflects a high degree of commitment, with no differences between gender or in the other demographic variables.

Thus, we observed significant improvements in the intervention group in work engagement, particularly in vigour and absorption, suggesting that the programme's focus on enhancing self-regulation skills can equip individuals with the ability to maintain focus and persist in challenging situations (Sanchez-Gomez & Breso, 2019). An unexpected finding was the slight increase in perceived stress levels following the training, which could be attributed to several factors such as heightened awareness of stress during the training, the demands of the training itself, or external stressors unrelated to the programme.

Our study contributes to the existing literature on emotional intelligence training programmes, highlighting the need to prepare interventions for specific organisational contexts and emphasising particular aspects of emotional intelligence. While overall scores may not change significantly, as seen in some other studies, our findings show positive trends in areas like emotional regulation and appraisal for the intervention group. Additionally, the intervention group showed higher emotional intelligence scores in the baseline, which allows us to explore the effectiveness of the training at improving even existing skills. Moreover, the positive correlation between emotional intelligence, stress and engagement highlights the need for more research into interventions with long-term follow-up.

As highlighted in the introduction, there is a limited body of research on the impact of emotional intelligence training programmes on university personnel. Emotional intelligence can enhance emotional well-being and engagement in an academic environment, which presents unique stressors stemming from academic and administrative pressures. Organisations may greatly improve their workers' mental health and job performance by equipping them with appropriate stress management solutions and emotional regulation techniques (Munir & Azam, 2017).

Our results suggest that emotional intelligence is not only an effective tool for reducing perceived stress but also acts as a moderator in the relationship between stress and engagement. This means that individuals with high emotional intelligence can remain committed to their tasks despite the high emotional demands they experience. This moderating role of emotional intelligence provides new insights into how to manage stress in the workplace and how to enhance work engagement in high-pressure situations.

This study has several limitations. The research was conducted in a single university, with interventions in only two academic years. Furthermore, while no substantial changes were detected in the experimental group following the intervention, further longitudinal research is required to assess the long-term influence of such

treatments on well-being and work performance. One of the main limitations of this study is the numerical imbalance between control and experimental groups, which may hinder the generalization of the results in other contexts or university environments. Future research should consider a more balanced and representative sample. Furthermore, the lack of complete random assignment of participants limits the ability to control for all variables that could influence the results. Although the quasi-experimental design has proven to be suitable for this type of environment, future studies could consider other experimental designs with random assignment.

Moreover, there was a low retention rate in the experimental group, which can be explained by voluntary withdrawal, other work commitments, changes in staff availability and sick leave. Periodic reminders were carried out, and different channels were used to encourage the sample to participate. Future studies should consider more intensive follow-ups as well as understanding the reasons for withdrawal from the study.

Therefore, in future studies we will add a fourth phase of intervention for the sample. The results of this research serve as a pilot study and can be replicated in universities with similar characteristics. This is why we will try in future studies to extend the study to other universities, with interventions in more academic courses to subsequently proceed to the appropriate comparison. For future studies, it is proposed to delve into the specific differences between the two studied groups to better identify their particular stressors and tailor interventions according to their specific needs.

Finally, it will be interesting in future studies to include other analysis variables that can be found within the organisation, such as work climate, specific professional categories, organisational culture or the hierarchical structure of the participants.

In summary, this study provides promising evidence that emotional intelligence training for university staff can improve emotional well-being and work engagement. Our findings have important implications for higher education institutions' occupational health management, highlighting the need for emotional intelligence interventions to support staff well-being. Given the growing emphasis on staff well-being in universities, our research suggests that prioritising emotional intelligence development and prevention of stress can be a successful strategy to promote a positive working environment.

6. Conclusions

Once the research has been carried out, it becomes evident that, according to the results obtained, EI has a direct relation to engagement and stress among university personnel (Akanni et al., 2020). On the other hand, while overall scores did not show a significant difference after the EI training of academic and non-academic university personnel, it is important to highlight the positive trends of the intervention group (Coleman & Ali, 2022).

The research aimed to evaluate the effectiveness of an emotional education programme on emotional intelligence, perceived stress and engagement among university employees. The results show that the emotional education programme had a positive impact on both the reduction of perceived stress and the increase in engagement among university staff. These findings highlight the importance of integrating emotional education programmes to improve employee well-being and reduce the negative effects of stress. They also provide a solid foundation to advocate for university labour policies to include training in emotional intelligence for their employees.

This study contributes to the theoretical understanding of emotional intelligence in higher education, a context that has received limited attention in previous research. By examining the interplay between emotional intelligence, stress and engagement, it sheds light on the moderating role of emotional intelligence in maintaining workplace engagement under high-stress conditions. Moreover, the findings extend existing literature by addressing the interdependence of these variables, offering a more holistic perspective on workplace well-being. These contributions provide a basis for future research on psychosocial risks and emotional education intervention in organisational contexts.

The results have significant practical implications for higher education institutions. Emotional education programs can serve as effective tools for reducing stress and increasing engagement among university staff. By teaching employees emotional regulation skills, universities can foster a positive work environment, enhancing both individual well-being and institutional productivity. The findings also advocate for integrating emotional

intelligence training into occupational health policies, aligning with broader efforts to address mental health challenges in academic settings. Moreover, the observed differences between academic and administrative staff, emphasise the need for tailored interventions that consider the distinct stressors faced by these groups. While further research is needed to confirm these findings on a larger scale, the programme demonstrates promise for improving the well-being and performance of university staff.

In conclusion, this study provides a foundation for expanding emotional intelligence training programs in universities. These programs offer an opportunity to empower their staff, enhance well-being, and navigate the complexities of the modern educational landscape. Further research should validate these findings and explore additional variables that can be found within the organisation, such as work climate, specific professional categories, organisational culture or the hierarchical structure of the participants. This would provide a deeper understanding of the multifaceted impact of emotional intelligence interventions and their potential to foster sustainable improvements in workplace well-being.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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