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Neuroleadership: Affective experiences in the workplace and their influence on employees' evaluative judgements

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ABSTRACT

Neuroscience-based approaches have had little presence in studies in the field of hotel firms. The literature indicates that neuroleadership behaviors can change the employees' perceptions of their work environment. The purpose of this study is to analyze how affective events in the workplace influence employees' evaluative judgements of certain organizational factors. The paper presents the results of a six-month study involving 150 lower-level employees and 25 middle managers of a hotel tourism chain. The study was carried out by a staff member of the company in question, a characteristic that is beyond the scope of most research. The results show that the affective events significantly improve employees' evaluative judgements of different organizational variables, highlighting the importance of neuroleadership skills in managing emotions and improving employee well-being.

1. Introduction

In the tourism industry, particularly in the field of hotel firms, human resources play a key role (Griessmair et al., 2022; Shehawy, 2022). As part of their daily work, hotel employees need to interact with other individuals, especially with customers (Alipour et al., 2021). Therefore, the performance of hotel firms largely depends on the attitudes and behaviors of their staff members (Luu, 2021). However, these workers frequently present emotional exhaustion, lack of recognition, job stress, or interpersonal tension, which have a negative impact on service delivery (Huertas-Valdivia et al., 2019). In this scenario, it is important to use human resource management policies and practices that improve employee satisfaction, not only to increase their personal well-being, but also to achieve optimal organizational results (Khan et al., 2020).

Previous research shows that using mainly incentives and threats to manage people has only short-term effects (Berraies and Zine El Abidine, 2019; Rock, 2009; Zak, 2017). Management based on outdated mindsets about human motivation and working relationships wastes large amounts of energy, time, and money, without achieving the desired results (Cooper, 2000). Today, organizations need to build an employee-centered culture that fosters trust and teamwork and reduces stress and turnover (Le et al., 2023; Zhe and Yazdanifard, 2015), which means that organizations have to better understand employees' underlying perceptions, antecedents, and consequences (Itzkovich et al., 2022).

In a complex and changing environment, managers need new knowledge and skills that can modify conventional thinking about human potential, and neuroscience may hold the key to achieving this goal (Cooper, 2000). The application of cognitive neuroscience techniques has revealed that human behavior in the workplace does not function the way many managers thought it did, which helps to explain why many leadership efforts and organizational change initiatives fail (Rock, 2009). Work environments produce all kinds of pressures and conflicts, and so managing employees' emotions and moods is a key challenge for leadership (Chiang et al., 2021). Moreover, service companies particularly require an innovative leadership style that fosters the leader's ability to create a positive work climate (Pittman, 2020).

Learning how the mind works and how to foster new work habits is a priority for anyone who wants to manage people (Santamaría, 2019). Managers must be aware that their forms of leadership, both constructive and destructive, influence the emotions of their subordinates and, consequently, their attitudes towards the organization (Glasø et al.,

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2018). In this regard, the integration of psychology (the study of the human mind and behavior) and neuroscience (the study of the anatomy and physiology of the brain) has allowed scientists to gain a new and much more precise view of human nature (Rock, 2009). This cognitive neuroscientific approach makes it possible to understand how neurochemicals are produced in the human body, and managers can use this biological knowledge to create an organizational culture that improves the mood, commitment, resilience, and job satisfaction of employees in the workplace (Pittman, 2020; Zhe and Yazdanifard, 2015). This concept gives rise to neuroleadership, an approach that is based on neuroscience and applied to the functioning of the emotions and their management by leaders (Santamaría, 2019; Zwaan et al., 2019). Despite the increasing attention paid by the social sciences to neuroscientific findings and methodologies, very little research has incorporated neuroleadership approaches into studies on human resource management and development (Lim et al., 2019; Nakamura et al., 2022).

Drawing on the social exchange theory and affective events theory as a theoretical framework, this study adds to the existing body of literature exploring the application of neuroleadership methods in the workplace. Social exchange theory states that interactions between two parties must involve reciprocal interdependence (Blau, 1964). Thus, when individuals feel respected and valued in their workplaces, they show positive work attitudes and reciprocal behaviors (Loi et al., 2015). In turn, based on the literature on moods and emotions, Weiss and Cropanzano (1996) developed a theory of the affective experience at work. According to these authors, people react emotionally to events in work environments, and these affective experiences have a direct influence on their behaviors and attitudes.

Empirical studies that explore how specific workplace stimuli influence the emotions and behaviors of service employees in the tourism and hospitality sector are rare (Alipour et al., 2021). The present study describes a real-life experience where a tourism professional uses affective events to influence the mood of the employees in a hotel chain. To our knowledge, no previous study has investigated the effect on employees of the use of affective experiences in the workplace carried out by an in-house professional.

The aim of this study is to assess the influence of neuroleadership strategies on employees' evaluative judgements about factors in the work environment where they perform their tasks. Specifically, the objective is to find out how certain affective events influence employees' mood and their perception of organizational variables such as the leadership style, work climate, or performance, analyzing whether there are significant differences in employees' evaluative judgements before versus after participating in the events. In addition, their responses are compared with those of other employees who did not participate in these affective events.

2. Literature review

2.1. Neuroscience in the organizational setting

Emerging technologies make it possible to study brain function in unprecedented detail, expanding the knowledge about how the body's most mysterious organ works and how relationships are established between the brain and behavior (Edelson et al., 2018). Thus, the neurological perspective helps to increase our understanding of people's behavior, allowing HR professionals to establish a desirable organizational culture by implementing effective policies that influence employee motivation and job satisfaction (Jang et al., 2022).

In general, cognitive neuroscience studies the relationship between the mind and the brain, that is, between human thought and grey matter. In particular, the focus of organizational cognitive neuroscience involves its application to the study of behavioral processes in the workplace (Lee et al., 2012). Thus, organizational research, from a neuroscientific perspective, helps leaders to understand the underlying biological and cognitive activities of their staff, customers, and other stakeholders, which in turn leads to better decision-making and greater organizational performance (Lee et al., 2008).

Biochemical processes occur in living organisms in the form of interactions between organic compounds that have different implications for the human body and, consequently, for the behavior of individuals (Nicolaou et al., 2021). Zhe and Yazdanifard (2015) highlight four neurochemicals that play an important role in the human body and determine the reactions of employees in the workplace. Hence, dopamine regulates mood, among others; cortisol is released when a person faces stress; serotonin produces a sense of well-being; and oxytocin influences the establishment of social bonds. According to the authors, although the effects of neurochemicals are individual, the collective stimulation of serotonin and oxytocin helps the organization to create a good corporate culture.

Moreover, as humans remain active and learn new behaviors, their brains have the capacity to create new neuronal circuits (Santamaría, 2019). These new neuronal connections have the potential to improve individuals' mental resources, which makes it possible to overcome the brain's resistance to change, favoring, among others, the acceptance of new habits in the workplace (Lim et al., 2019; Rock, 2009). Therefore, managers who understand these neuroscientific advances can lead an organizational transformation that takes into account the ways the brain predisposes employees to accepting these changes.

2.2. Social exchange theory

Social exchange theory (Blau, 1964) argues that social interaction involves the exchange of tangible and intangible resources between individuals or other social entities. In the work context, this exchange could be reflected in an employee's tendency to use extra-role behaviors to reciprocate for the treatment received when a leader prioritizes meeting the employee's needs (Ghalavi and Nastiezaie, 2020; Kilroy et al., 2022). Reciprocity norms predict that employees will reward organizations with desired behaviors when they feel valued and appreciated because they perceive that the working conditions are favorable and that the leaders fulfil their commitments (Ghalavi and Nastiezaie, 2020; Kilroy et al., 2022) (Liao et al., 2022; Moin et al., 2021).

Adopting social exchange theory as a framework, several studies analyze workplace relationships in tourism companies and their influence on job satisfaction and organizational performance. Shehawy (2022) finds that positive emotions of social collaboration produce a favorable work environment that boosts employee satisfaction and commitment and reduces burnout, absenteeism, and turnover intention. Likewise, according to Fan et al. (2021), hotel firms should strive to establish a high-quality social exchange relationship, for example, by listening to employees' suggestions or involving them in the decision-making process, as a way to improve their perceived psychological harmony with the organization. Furthermore, Meira et al. (2021) emphasize that mutual trust is fundamental in establishing quality workplace relationships.

2.3. Affective events theory

Affective events theory, developed by Weiss and Cropanzano (1996), focuses on the causes and consequences of affective experiences in the workplace. For these authors, these experiences influence employees' general feelings about their work as well as their workplace behaviors. According to this theory, the everyday events that people experience in the workplace influence their affective state and determine the way they perceive their work, their employers, and their co-workers (Lambert et al., 2022).

Managers can improve work climate by facilitating positive workplace events that promote employees' positive affect and decrease their negative affect (Park et al., 2021). Positive and negative affect are separate and distinguishable constructs, such that low positive affect does not imply high negative affect and vice versa (Lan et al., 2022).

Previous research indicates that, although positive and negative affect are independent and can be felt simultaneously, positive affective events may not only have a positive affective impact, but they can also buffer negative affect (Peng and Huang, 2022; Zhu et al., 2022). Moreover, emotional reactions are also affective events that, in turn, influence emotional experiences, thus establishing a cyclical process in which positive affective events tend to be contagious (Zhu et al., 2022). Likewise, certain leader attitudes represent negative affective events that can trigger counterproductive behaviors in subordinates, producing a ripple effect throughout the organization (Reynolds Kueny et al., 2020). Examples of these negative affective events in the workplace include lack of feedback, unfair interpersonal treatment, or abusive supervision (Boulter and Boddy, 2021).

2.4. Leadership styles oriented toward the relationship

Socially responsible organizations are characterized by fulfilling not only their economic and legal obligations, but also their ethical responsibilities towards their employees (Luu, 2021). In this regard, the behavior displayed by managers when performing their duties provides a representation of organizational values and policies (Moin et al., 2021). Specifically, middle managers are key mediating agents between the human resources policies established by top management and the actual practices carried out in the workplace (Kilroy et al., 2022).

Leadership is associated with having the responsibility of making far-reaching decisions that affect the leader's own well-being and that of the employees and the whole organization (Edelson et al., 2018). To classify leadership styles, the literature has distinguished between "task orientation" and "relationship orientation" or, in other words, "concern for the task" versus "concern for people" (Li et al., 2016; Parra et al., 2021). Although they are still used in many organizations, task-oriented leadership models are rarely successful in the long term (Post, 2019; Zak, 2017). These types of leadership, characterized by pressure and instruction towards subordinates (Casimir, 2001), tend to create a work climate of emotional suppression, which produces a high level of emotional exhaustion and has a negative effect on performance (Chiang et al., 2021). However, many managers find it easier to erect barriers that create distance from the other members of the company, rather than trying to understand under what circumstances these people could contribute much more to the organization's performance (Cooper, 2000).

In contrast, relationship-oriented leadership, or socio-emotional leadership, is characterized by the leader's commitment to developing effective communication, maintaining a climate of mutual trust, supporting people's needs, motivating people, and recognizing teamwork (Li et al., 2016; Parra et al., 2021; Pittman, 2020). For managers with employee-oriented values, producing collective results is a key part of their function (Boone et al., 2022).

There are different relationship-oriented leadership models, which, although they have their own theoretical basis, often overlap with each other (Liu et al., 2018; Nakamura et al., 2022). They include the authentic model, based on promoting positive psychological capabilities (Liu et al., 2018; Teng and O-Yang, 2022); the ethical model, characterized by leader behaviors of morality and integrity (Nakamura et al. (2022); the empowering model, which enhances employee satisfaction (Shehawy, 2022); the democratic model, which emphasizes decision-making based on subordinates' input (Anastasiou and Garametsi, 2021); or the service model, with a high service orientation and concern for others (Huertas-Valdivia et al., 2019; Ghalavi and Nastiezaie, 2020).

In recent decades, transformational leadership theory has been one of the most dominant theories in the organizational psychology literature (Anastasiou and Garametsi, 2021; Görgens-Ekermans and Roux, 2021). Previous research highlights transformational leadership as a style that focuses primarily on building relationships with subordinates (Lambert et al., 2022; Moin et al., 2021). This type of leadership emphasizes emotional aspects and points out how leaders can transform people and organizations by fostering trust, motivation, intellectual stimulation, and individualized consideration (Bass et al., 2003; Berraies and Zine El Abidine, 2019).

Like transformational leadership, neuroleadership uses authentic engagement to develop relationships, but based on neuroscience, which makes it a more advanced approach to the study of organizational performance (Pittman, 2020). The information that technological advances provide about the biological base for social interaction makes it possible to better understand work engagement (Zwaan et al., 2019). The fusion of leadership and neuroscience opens up new avenues for managers to learn how to adapt their leadership methods in order to become professionals who are capable of influencing employee motivation, engagement, and performance (Gkintoni et al., 2022).

Cognitive science views human behavior as dominated by a set of cognitive schemas that classify and organize information and, thus, govern responses to environmental stimuli, a process that can be altered when interacting with emotions (Yu et al., 2022). Therefore, the leadership style displayed by supervisors can profoundly influence the emotional states of subordinates and, ultimately, the way they respond to the leader (Li et al., 2016). Pittman (2020) refers to neuroleadership as a tool for improving leadership skills. For this author, focusing on the workforce through a neuroleadership model empowers workers and promotes a healthy and resilient culture and climate. In the same vein, Zak (2017) uses a neuroscientific approach to develop a framework for creating a culture of trust in order to build a happier, more loyal, and more productive workforce.

The behavior exhibited by leaders in carrying out their role is closely linked to the employees' moods. Moods are affective states that have "tuning effects"; that is, thought processes and behavior must adjust to the information provided by moods so that people can adapt to an environment and function effectively (George and Zhou, 2007). Watson et al. (1988) developed a scale of positive and negative affect to measure the two dimensions of mood. High positive affect is a state of high energy, total concentration, and pleasurable engagement, whereas high negative affect is a reflection of subjective distress that involves a variety of aversive mood states, such as anger, contempt, guilt, fear, and nervousness. Consequently, affect represents a signal in making judgements about the work environment. Thus, positive affect indicates to the individual that there is an absence of threat, and it unleashes cognitive processes that facilitate commitment to the work, whereas negative affect is a sign of a threat and motivates the individual to change the current situation (George and Zhou, 2007; Sawhney and Michel, 2022).

The study by Sandrin et al. (2020) suggests that promoting the satisfaction of employees' psychological needs helps to improve the intensity of positive affect and decrease the intensity of negative affect. In the same vein, Zigarmi and Roberts (2017) find that, when people observe a match between the leadership behaviors they need and the leadership behaviors they receive, positive job affect increases and negative job affect decreases. Given that a basic principle in the hospitality industry is the spirit of "customer service" (Huertas-Valdivia et al., 2019; Lee et al., 2020), negative affective states such as discomfort or guilt will influence the quality of the service provided and, thus, the organizational outcomes. In contrast, creating a supportive environment for employees by addressing aspects such as concern for their well-being and other strategies that alleviate physical and psychological pressure will help to achieve happier workers that are more involved with the organization (Qiu et al., 2022).

Additionally, the philosophy and behavior of leaders determine the work climate of an organization, which affects the psychological well-being of its members (Liu et al., 2018). Work climate refers to the individual perceptions of members of the organization about their personal well-being (Pittman, 2020). In this regard, support and attention from leaders can shape employees' attitudes and motivate them to transmit similar positive energy to both customers and co-workers, thus improving the work climate (Xu et al., 2022).

3. Hypothesis development

The hypothesis under study is developed based on the neuroscientific perspective, social exchange theory, and affective events theory. Neuroscience is seen as an effective tool that leaders can use to manage their organization, taking into account discoveries about the human brain and how neurochemicals drive individuals' behavior (Zhe and Yazdanifard, 2015). Social exchange theory highlights the importance of providing appropriate levels of organizational support in order to enable people to respond by performing their job responsibilities effectively (Nachmias et al., 2022). Finally, according to affective events theory, the work environment represents a set of events that workers perceive, comparing them to some set of standards such as values or needs, which gives rise to evaluative judgements that can be positive or negative (Weiss and Cropanzano, 1996).

Neuroscience research shows that exposure to certain environmental factors produces changes in the structure of the brain, which can shape the behavior of individuals (Jang et al., 2022; Lim et al., 2019). Thus, a major event or occurrence that takes place in the workplace for a period of time triggers emotions that determine the way employees think and feel (Lambert et al., 2022; Weiss and Cropanzano, 1996). In this regard, previous studies address questions related to a work environment that offers sufficient time and space for employees to express their emotions or engage in demonstrations of affect and recognition. Alipour et al. (2021) focus on elements of the physical environment, such as air quality, ventilation, noise, architecture, color, smell, texture, or functionality, as determinants of employees' emotions and behavior. Along the same lines, Park et al. (2021) argue that companies should establish means to boost employees' positive affect, such as having a break room with entertainment or a comfortable environment in which to rest. Likewise, Chiang et al. (2021) recommend breaks in private spaces and team meetings designed to share and discuss emotions as therapy to help reduce stress and release emotions. For Weiss and Cropanzano (1996), a pat on the back or receiving a bonus or an award at a dinner makes employees feel recognized.

To the best of our knowledge, previous research has not addressed the planned implementation of affective events that produce considerable modifications in the employees' routine. Studies have mainly focused on evaluating typical workplace events that occur with some frequency in the organizational setting, such as those that interfere with the daily routine, or stressful, challenging, or unexpected situations. Chen et al. (2021) show that the novelty and critical nature of the events in the workplace interact to foster employees' improvisation and creativity. Kim et al. (2023) analyze employees' behavioral reactions to unsatisfactory events in the workplace, and they show that authentic leadership and the quality of the employee-organization relationships influence these reactions. Anjum et al. (2022) test a model to explain how affective events in the workplace, such as workplace ostracism and workplace incivility, affect the emotions and work effort of the employees. Yang et al. (2021) investigate the relationship between on-the-job shocks experienced by employees and their intention to stay, and they highlight the importance of workplace events when investigating employee retention. Yao et al. (2020) conclude that negative events in the workplace, such as mobbing, influence employees' knowledge-withholding behaviors.

Based on these approaches, this study explores planned affective events implemented in the workplace and their influence on the evaluative judgements of the employees (Fig. 1), proposing the following research hypothesis:

Hypothesis H1. : Affective workplace events improve employees' evaluative judgements about 1) the perceived leadership style, 2) mood, 3) work climate, 4) degree of satisfaction, and 5) performance.

4. Method

This study was carried out in four 3- and 4-star hotels located on the island of Gran Canaria that belonged to the same hotel chain. The island of Gran Canaria (Canary Islands, Spain) has about 853,000 inhabitants and received 1.8 million visitors in 2021, mostly from Germany (22.7%), the rest of Spain (21.8%), the Nordic countries (15.3%), and the United Kingdom (10.5%) (Istac, 2022).

The events and data collection for this study were carried out by a professional who was a staff member of the hotel chain. The director of the hotel chain hired this tourism professional, trained in neuroscience, with the aim of reversing the conflictive work climate that existed in some of the hotels. A total of 300 lower-level employees (150 as a control group) and 25 middle managers, all with permanent employment contracts, participated in the study. A stratified random sampling method was used to select the employees who participated in the events and those who formed part of the control group. To do this, the number of employees in the different departments of the hotel establishments was verified, and a number was assigned to each employee, separated by department. Next, the selected employees were randomly assigned in order to obtain proportionality between the people who were to take part in the study and the total number of employees in each department, thus avoiding differences in the representation of the different departments. Employees in departments that have direct contact with customers were included, as well as employees who perform tasks that do not necessarily involve direct interactions with customers (see Table 1).

A key aspect of the research was to assure employees that the answers could not be linked to any specific employee. After informing them about the purpose of the study and guaranteeing that their participation would be voluntary and confidential, they were asked to complete a 17-item questionnaire (pre-questionnaire) developed by the company's neuroscience expert. The items on the questionnaire are listed in Table 4. All the variables were measured using a 5-point Likert scale where 1 indicated strongly disagree and 5 indicated strongly agree. It should be noted that these items were not chosen based on a literature review, but rather following the criteria of the professional who coordinated the study. The order of the items has been modified in order to facilitate the reader's understanding because, as Table 4 shows, based on the literature, the 17 items can be grouped in five categories: leadership style (1−3), affect (4−9), work climate (10−15), personal satisfaction (16), and performance (17). This grouping does not mean that the items make up a measurement scale of the variables. Moreover, as can be seen, the items sometimes ask about positive aspects (enthusiastic, motivated, companionship, etc.) and sometimes about negative aspects (authoritarian, depressive, tension, etc.), which should be taken into account when analyzing and comparing the means.

After answering the first questionnaire, a series of events were held over a period of six months, and they are described in Tables 2 and 3. In

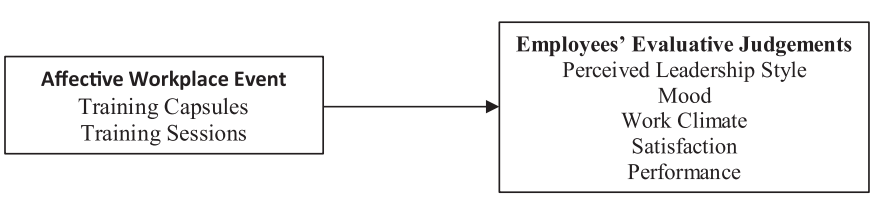

Fig. 1. Conceptual framework.

Table 1
Descriptive statistics.

Department	Num. Lower-level employees		Sex of Lower-level employees				Num. of managers	Sex of managers	
	Participants	Control group	Participants		Control group		participants	M	F
			M	F	M	F			
Rooms	44	44	5	39	6	38	9	0	9
Restaurant	30	30	18	12	18	12	2	1	1
Maintenance	20	20	20	0	20	0	3	3	0
Kitchen	20	20	18	2	18	2	4	4	0
Bar	10	10	8	2	8	2	1	1	0
Gardening	5	5	5	0	5	0	1	1	0
Service	14	14	12	2	8	6	3	3	0
Laundry	4	4	1	3	0	4	1	0	1
Reception	3	3	2	1	2	1	1	1	0
Total	150	150	89	61	85	65	25	14	11

Table 2
"Training capsules" Event.

TRAINING CAPSULES	
Duration:	10/15 min
Objectives:	1. Positively modify the attitude of each employee before starting work 2. Create a positive work atmosphere 3. Enhance collegiality and progressively reduce and/or eliminate intra-departmental conflicts. 4. Improve the relationship between rank-and-file staff and middle management through neuro-emotional tools, music, and games.
Activities:	Release your genius: in groups, through music, participants will have to complete dialogues in English, learning to unleash their genius Short Restorative Circles: two topics are chosen, with 5 min allocated for each. In the final 5 min, a decision is made by everyone (15 min in all) The messenger of truth: each participant has to describe a co-worker on a card. The cards are then mixed up and handed out to people other than the author, to be read and, finally, to discuss together what is true and what is not The gossip that flies: participants line up in a row. The moderator shows some gossip to the last one, who must then pass it on to the next in line and so on until the message reaches the first person in line. Finally, the first one tells the last one out loud what he/she understood The magic carpet: groups of 4 people stand on a piece of cloth with two different sides. They must manage to turn the cloth over without any of them touching the ground with their shoes Wooden shoes: groups of 5 people on two planks of wood must walk a path using the planks and without stepping on the ground. Stealing the water: in groups of two, hugging each other from behind, they must pick up a bottle of water from the floor. There is one bottle of water less than the set number of couples. Morning dance: participants listen to a lively, current, and well-known song that everyone has to dance to Football match: two teams have to play a 10-minute match. Musical chairs: the members of the group form a circle, sitting on chairs, except for one, who sits in the middle. Music is played, and everyone has to change positions. The person in the middle must try to steal a seat Drawing blind: group of 4 people. One person, blindfolded, has to reproduce the drawing given to him/her on a card, following the indications of his/her companions. The reproduced drawing is compared to the one on the card Cat and mouse: all but two participants form a circle to try to defend the person inside the circle (mouse) from the one who must enter (cat) to catch him/her

Table 3
"Training sessions" Event.

TRAINING SESSIONS	
Duration:	30/45 min
Objectives:	1. Explain the effect of the emotions on the body and on health 2. Understand the power of positive and negative beliefs 3. Be aware that the creation of positive atmospheres depends on everyone's efforts 4. Re-establish personal and corporate values: honesty, collegiality, collaboration, etc. by strengthening mutual trust 5. Learn to resolve conflicts through dialogue, active listening, and empathy. 6. Offer tools for self-control and emotion regulation. 7. Increase self-confidence through emotional awakening: we are true geniuses 8. Understand that we are more than the problems and situations around us, in order to avoid emotional hijacking and destructive behaviors 9. Incorporate neuro-leadership tools (soft skills): neuroplasticity, neuro-learning
Activities:	Neuro-meditation: neuro-meditation sessions are carried out to promote intra- and inter-emotional control The chair of hugs: each person must sit on a chair, and the rest of the companions, individually, tell him/her what they find positive about him/her, accompanied by physical expressions (patting, hugging.) Conscious color regressions: the members are made to relive painful past episodes that they are trying to modify, as if in a painting, rewriting the episode in very large, colored, capital letters Emotional talks: talks on limiting and empowering beliefs, feelings, basic emotions, and how positive and negative emotions affect the body Restorative circles: an unresolved issue is raised and discussed for 20 min. The final 10 min are summarized, and a consensual decision is made (30 min in all)

all, 150 of the 300 employees who completed the survey participated in these events, with the remaining 150 being considered a control group. In addition, 25 middle managers participated in these events, mainly in those described in Table 3. Some of the events were held separately, whereas on other occasions, the two categories, lower-level employees and middle management, were combined. These activities were well planned, in agreement with the general manager of the hotel chain, in order to avoid interrupting the service process of the different departments involved. The number of people participating in each event and the frequency of the events were different for each hotel, depending on its size, complexity, and internal problems. Thus, the number of participants ranged from 11 to 30, and attendance at the different sessions could be weekly or fortnightly. Once the affective events were over, the 300 lower-level employees again answered the same questionnaire (post questionnaire).

5. Results

To test the hypothesis, mean difference tests were carried out using SPSS version 22. Previously, using the Kolmogorov-Smirnov test, it was verified that the variables did not follow a normal distribution, and so non-parametric tests were used to perform the statistical tests.

First, a Wilcoxon test of differences in means for dependent samples was performed to compare the responses employees gave before and after participating in the affective events. As Table 4 shows, for all 17 pairs of variables, the significance level is less than 0.001, indicating that the employees' responses before and after the events differed

significantly on all the items. When asked about positive aspects, the highest mean responses correspond in all cases to those given by employees after participating in the events. In contrast, on the items assessing negative aspects, the responses with the highest means correspond to those given before the affective events. This result indicates that, after participating in the events, the assessment made by the employees improves when evaluating positive aspects, and the perception of the negative items also improves, given that the employees' scores are significantly lower.

In addition, a Wilcoxon test of difference in means between dependent variables was performed to compare the responses of the control group at the beginning of the study to the responses they gave at the end of the study, taking into account that they did not participate in any events. Table 4 shows that there are no differences in means between the responses. As the table reveals, although the mean on 11 of the 17 items improves slightly, this change is not significant. It is worth highlighting that there was no significant improvement on any of the items, even though some of the middle managers attended the events and we can assume that there was a change in the way subordinates were treated. One possible explanation would be that the middle managers who attended the events did not reach 50% of the total, so that, overall, the perception was still negative. Likewise, some lower-level employees who did not participate in the events expressed their discontent because they mistakenly felt that there was favoritism in the selection of the participants. This belief may have produced dissatisfaction among these employees, which kept them from evaluating or perceiving the improvements in a positive way. Therefore, it is necessary to approach such events in a holistic way, that is, with the participation of all the members of the organization.

Subsequently, a Mann-Whitney U test of difference in means for independent samples was performed to compare the responses given by the group of employees after participating in the affective events to the responses of the control group that had not participated in any events. As Table 4 shows, the highest (lower) means correspond to the responses of the employees who participated in the events when they were asked about positive (negative) aspects. The test of differences in means for independent samples reveals that the means of the participant group and the control group after the events differ significantly (<0.001 in all cases). These results make it possible to accept H1.

6. Conclusions and implications

This study compares the evaluative judgements expressed by hotel employees before and after participating in affective events. It also compares the responses of employees who took part in the affective events with those of employees who did not participate in the affective events. Verbal communication with the participating employees after the affective events ended showed a high level of acceptance of these events. The results show that the affective events significantly improved the evaluative judgements of the employees about different organizational variables.

The results of this study provide useful information for both researchers and hotel company professionals who are responsible for managing people. From a theoretical perspective, the theories of social exchange and affective events are combined to provide a framework that serves as a basis for future studies on how to improve employees' work environment. In this regard, the results show that leaders oriented toward the relationship with and attention to employees, which can be expressed through affective experiences in the workplace, have a positive impact on the employees' mood and their assessment of both the leader and the work environment. Regarding the originality of the proposed theoretical model, in our literature review, we found no previous studies that analyze employees' evaluative judgements before and after participating in affective experiences and use a control group to compare the responses obtained. We hope that this study will contribute to further research based on the relationship between neuroscience and

Table 4
Difference in means between dependent samples.

Items	Participants N 150			Control group N 150		
	M pre	M post	Sig.	M pre	M post	Sig.
1. Do you think your immediate boss and the rest of the chain of middle management and bosses in your company are enthusiastic?	1.47	4.71	< 0.001	1.36	1.41	0.446
2. My boss holds regular meetings where we can freely express our opinions about his/her leadership style in order to discover our degree of satisfaction.	1.51	4.77	< 0.001	1.31	1.41	0.162
3. Do you think your immediate boss and the rest of the chain of middle management and bosses in your company use an authoritarian leadership style?	4.52	1.33	< 0.001	4.64	4.65	0.922
4. The way my boss addresses me and gives me instructions makes me feel motivated.	1.39	4.70	< 0.001	1.22	1.30	0.240
5. I can state that the team leadership policy applied by my company, through senior and middle management, makes me feel proud to belong to it.	1.49	4.74	< 0.001	1.37	1.50	0.101
6. The way my boss addresses me and gives me instructions makes me feel depressed.	4.44	1.31	< 0.001	4.51	4.34	0.127
7. In my company, my boss's leadership style is hostile and makes me feel unacknowledged and disliked.	4.48	1.45	< 0.001	4.63	4.58	0.454
8. The relationship among the colleagues in the department, fomented by my boss's leadership style, makes me feel embarrassed.	4.57	1.32	< 0.001	4.71	4.65	0.260
9. My immediate boss makes me feel guilty about mistakes made in the department.	4.54	1.29	< 0.001	4.56	4.65	0.259
10. Does the leadership style carried out by middle and senior management in your company foster camaraderie within your department and in the rest of the company?	1.41	4.71	< 0.001	1.21	1.30	0.162
11. Do you think your immediate boss and the rest of the chain of middle and senior management in your company foster a positive working environment?	1.59	4.74	< 0.001	1.39	1.37	0.837
12. Does the leadership style carried out by middle and senior management in your company favor job	4.54	1.55	< 0.001	4.58	4.53	0.922

(continued on next page)

Table 4 (*continued*)

Items	Participants N 150			Control group N 150		
	M pre	M post	Sig.	M pre	M post	Sig.
tension within your department and in the rest of the company?						
13. Do you think your immediate boss and the rest of the chain of middle and senior management in your company foster an atmosphere of general work dissatisfaction?	4.56	1.32	< 0.001	4.65	4.61	0.451
14. In my company in general, and in my department in particular, there are inequalities due to favoritism that produce irritation and dissatisfaction among the staff.	4.51	1.35	< 0.001	4.57	4.61	0.632
15. The general atmosphere in the department and the hotel is one of loss of trust in the company.	4.54	1.37	< 0.001	4.63	4.66	0.814
16. 16. In my opinion, and based on the comments I hear from other colleagues in the department and in the hotel, the staff is fully satisfied with the treatment they receive from the company.	1.41	4.76	< 0.001	1.30	1.33	0.938
17. The negative working atmosphere in my department in particular, and in the hotel in general, leads to a decrease in the staff's work performance, which in turn leads to low quality customer service.	4.55	1.30	< 0.001	4.71	4.73	0.959

human resource development. This line of research will help leaders to establish organizational employee-management methods and practices that can improve employee well-being, satisfaction, and job performance.

In terms of practical implications, it is vital to know how employees perceive the attitudes and behaviors of their leaders because they influence the employees' mood and the characteristics of the work environment. The results also suggest that leaders have the ability to influence the mood of their subordinates, so that when a leader prioritizes the emotional well-being of the employees, they are more enthusiastic and more willing to make a greater effort to achieve collective goals.

The study also shows that employees who did not participate in the affective events did not notice any improvement in the attitudes of their middle managers, even though some of them had attended the events. The findings seem to indicate that dissatisfaction in the workplace keeps them from perceiving any improvement in the attitude or behavior of their bosses. In contrast, for the employees who participated in the events, the existence of personal interactions outside the strict work context may have helped them to perceive both the leader and other organizational factors more positively. The fact that they attended some affective events together allowed them to share fun experiences, which probably changed the lower-level employees' negative perception of middle management. These results are consistent with Boyatzis (2011), for whom findings from neuroscience research suggest that inspiring and supportive relationships help to activate a more social orientation toward others. Therefore, it would be desirable to carry out affective events in the workplace by involving the organization as a whole and planning some events where different hierarchical levels interact.

The results indicate that a leader's orientation toward people provides an effective way to improve organizational performance. Therefore, for managers, concern for the well-being of employees should be as much of a priority as their other responsibilities, such as the strategy, the customers, the market, or the competition. Particularly in the case of managing people, technical knowledge is not sufficient. Soft skills, such as emotional intelligence, empathy, or the ability to relate to others, represent core values and critical elements of effective people management.

Therefore, we highlight the importance of understanding and attending to the moods, perceptions, and evaluative judgements expressed by employees. The findings of this study show that hotel firms need to rethink the way they manage their human resources and pay attention to neuroscientific advances that can help them to exercise leadership in a different way. This requires implementing training and development actions for managers in order to eliminate negative behaviors that hinder a high-quality human relationship with subordinates.

Although we have shown that neuroleadership is beneficial, we know how difficult it is to implement in companies. On the one hand, many leaders may feel that they will lose authority in the eyes of employees if they use these methods. On the other hand, it is difficult to implement changes in managers who deal with demanding schedules and challenging objectives every day. It is a process with a cost in terms of time, for both managers and the rest of the staff. However, companies should be aware of the benefits of developing affective experiences in the workplace and view their implementation as an investment that will result in a better psychological and emotional state in employees, leading to better alignment with the company's policies. This greater willingness on the part of employees will lead them to make a greater effort in providing the service and in meeting the organizational objectives.

We hope that the findings of this study help hotel firms to implement changes in the way they manage people in the workplace. Dehumanized leadership styles do not achieve sustainable results in the long run. Many employees feel increasingly invisible and devalued in the workplace, while managers demand more effort from them. In reality, it is a question of moving away from the depersonalized treatment that many managers still display, and moving towards a more people-oriented leadership. In sum, companies need to better understand employees' underlying perceptions and listen to their evaluative judgements about their work environment. A leadership style oriented towards achieving high levels of psychological well-being in employees should be the hallmark of any company that cares about the health and happiness of its employees and, consequently, the success of the organization.

Limitations and future research

There are some limitations of this study that provide opportunities for future research. First, the items on the questionnaire were formulated by an industry professional who included questions about which he wanted to know the employees' opinions. Future research could use measurement scales previously validated in the literature. The research shows some aspects that offer future lines of analysis. On the one hand, the results of the control group are surprising, given they did not perceive significant changes in the leadership style of their bosses, even though some of them had participated in the events. On the other hand, only middle management and lower-level staff were included because top management declined to participate in the study. Covering the organization as a whole in future research could broaden our

understanding of the topic addressed. Moreover, analyzing the duration of the positive effects of the tools used without periodic support would provide insight into the appropriate frequency for maintaining a positive working atmosphere over time. Furthermore, extending the research by analyzing how the employees' psychological well-being influences their work performance may provide clearer guidelines about how to produce a more conducive work climate and achieve more successful management. In addition, based on the research by Lan et al. (2022), future studies could assess employees' reactions to events by distinguishing between their affective state, which is a situational characteristic, and their affective trait, which is the stable dispositional tendency that characterizes individuals. Finally, it is possible to explore the emotions and moods of individuals by objectively measuring bodily reactions using neuroscientific techniques such as face reader, electroencephalography, or pupillometry. These types of techniques allow us to obtain psychophysiological responses that are not subject to self-interpretation biases and can be a complement, or an alternative, to traditional techniques.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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