Contents lists available at ScienceDirect



International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhm



## It's worth it! High performance work systems for employee job satisfaction: The mediational role of burnout



Daniel Dorta-Afonso<sup>a,b,\*</sup>, Laura Romero-Domínguez<sup>c</sup>, Claudia Benítez-Núñez<sup>b</sup>

<sup>a</sup> Department of Economics and Business Management, Universidad de Las Palmas de Gran Canaria, Canary Islands, Spain

<sup>b</sup> IDeTIC, Universidad de Las Palmas de Gran Canaria, Canary Islands, Spain

<sup>c</sup> Faculty of Social and Legal Sciences, Universidad del Atlántico Medio; Department of Economics and Business Management, Universidad de Las Palmas de Gran

Canaria; Canary Islands, Spain

## ARTICLE INFO

Keywords: High performance work systems Job satisfaction Burnout Human resources management

#### ABSTRACT

This study aims to analyse the mechanisms through which high performance work systems (HPWSs) affect employee job satisfaction in hospitality firms. A sample of 202 hotel employees working on Gran Canaria (Spain) was surveyed, and partial least squares structural equation modelling was applied to analyse the data. The results confirmed both the direct positive effect of HPWSs on job satisfaction and the indirect effect through a reduction in burnout. This study provides the first evidence of burnout as a mediating mechanism in the so-called black box that relates HPWSs to employee outcomes in the context of tourism and hospitality, and it contributes to the field with important theoretical contributions, as well as managerial recommendations.

## 1. Introduction

Since the first cases were detected by the end of 2019, the ongoing COVID-19 pandemic has had unprecedented effects on all economic sectors, generating an overall business context characterised by uncertainty, complexity and ambiguity (Collings et al., 2021). Specifically, the hospitality industry has been severely affected by this crisis (Bufquin et al., 2021). The decrease in tourist activity has inevitably led to wage cuts, reductions in employment hours, layoffs, furloughs, etc. (Nemteanu and Dabija, 2021). Furthermore, as hospitality is essentially a frontline service, coexisting with the virus increases employee concerns about contagion as well as the need to quickly adapt to the continuous changes required by the 'new normal' (Ayachit & Chitta, 2021; Kang et al., 2021). This uncertain and highly stressful context has aggravated the problem of burnout (Ayachit & Chitta, 2021), which was customary among hotel employees even before the pandemic (Tsui, 2021; Wong et al., 2019). At the same time, job satisfaction, which is a crucial factor for aspects such as performance, commitment and effectiveness (Dorta-Afonso et al., 2021; Kong et al., 2018), has also been affected (Nemteanu and Dabija, 2021).

This situation is fundamentally considered to be a human crisis, which positions human resource management (HRM) as a key factor capable of dealing with the challenges generated by COVID-19 (Collings

et al., 2021). In hospitality firms, employees are one of the most important assets (Choi et al., 2019; Huertas-Valdivia et al., 2021), so there is a need for developing strategies that enhance their health and well-being. According to Agarwal (2021), HRM can provide employees with the necessary tools to face the new challenges and demands stemming from the COVID-19 crisis, thus ensuring their well-being and ultimately highlighting the fundamental role of human capital and management in organisational success (Collings et al., 2021). In this vein, Adikaram et al. (2021) advocate the application of a softer HRM approach in these pandemic times. Soft HRM implies the application of HRM practices such as participation, motivation, etc. to 'soften' the repercussions of hard HRM practices (e.g. cost-cuttings, firing), which are often unavoidable to overcome the COVID-19 crisis. This argumentation is made under two main premises: 1) employees are one of the most valuable, worth-investing resource for any firm (Jyoti and Rani, 2019), and 2) employees will work best if they are committed. So, this softer approach seeks the long-term continuation of the firm under a win-win situation for both employers and employees (Adikaram et al., 2021).

The current work proposes high performance work systems (HPWSs) as a solution to the aforementioned difficulties. HPWSs are unique interrelated HRM practices that act in concert to improve employee skills, motivation and participation in organisations (Dorta-Afonso and González-de-la-Rosa, 2022; Messersmith et al., 2011; Sun et al., 2007).

https://doi.org/10.1016/j.ijhm.2022.103364

Received 15 September 2021; Received in revised form 13 September 2022; Accepted 3 October 2022 Available online 8 October 2022

<sup>\*</sup> Correspondence to: Faculty of Economy, Business and Tourism, Universidad de Las Palmas de Gran Canaria. E-35017, Las Palmas de Gran Canaria, Spain. *E-mail addresses:* daniel.dorta@ulpgc.es (D. Dorta-Afonso), laura.romero@pdi-atlaticomedio.es (L. Romero-Domínguez), claudia.benitez@ulpgc.es (C. Benítez-

E-mail addresses: daniel.dorta@uipgc.es (D. Dorta-Afonso), laura.romero@pdi-atlaticomedio.es (L. Romero-Dominguez), claudia.benitez@uipgc.es (C. Benitez Núñez).

<sup>0278-4319/© 2022</sup> The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

HPWSs have caught the attention of scholars within the HRM literature in recent decades, resulting in a proliferation of studies documenting their benefits for organisations (e.g. Zhong et al., 2016). In essence, HPWSs play a prominent role in improving the attitudes and behaviours of workers, which will, in turn, improve organisational performance (Zhang and Morris, 2014). Despite the well-documented relationship between HPWSs and business performance (i.e. management-centred approach), fewer studies have focused on explaining how HPWSs affect employee outcomes, such as an employee's health or job satisfaction (i.e. an employee-centred approach) (Kloutsiniotis and Mihail, 2020a), which is of crucial importance in the current COVID-19 situation (Adikaram et al., 2021).

The employee approach is even more important in hospitality and tourism firms because, despite the paramount role of employees in organisational success, companies often fail to satisfy their needs, leading to low levels of job satisfaction and serious problems with talent retention, work stress and employee turnover (Chen and Wang, 2019; Huertas-Valdivia et al., 2021; Karatepe, 2015). The HPWS research in hospitality and tourism has traditionally focused on showing that HPWSs reduce turnover (e.g. Afsar et al., 2018; Karatepe, 2013b; Wong et al., 2019) and increase various forms of performance and productivity, such as service recovery performance, extra-role behaviours or creative performance (Karatepe, 2013a; Karatepe and Olugbade, 2016; Karatepe and Vatankhah, 2014; Safavi and Karatepe, 2018).

Little research has analysed the effects of HPWSs on employee job satisfaction, however, which is key for talent attraction and retention in tourism (Stamolampros et al., 2019), and results are still inconclusive. Two competing perspectives exist regarding the relationship between HPWSs and job satisfaction in the literature: the conflicting outcomes and the mutual gains (Van De Voorde et al., 2012). On the one hand, the conflicting outcomes perspective argues that HPWSs increase organisational performance at the expense of workers' well-being via workload intensification and exploitation (Kloutsiniotis et al., 2021; Ogbonnaya and Messersmith, 2019). By contrast, the mutual gains perspective argues that HPWSs benefit both the organisation and also the employees by integrating them into the business strategy, thus improving employee well-being at work (Kloutsiniotis and Mihail, 2020b). Based on social exchange theory (SET), this study advocates the mutual gains perspective, and it hypothesises that HPWSs are means of increasing employee job satisfaction due to the main rule of reciprocity (Cropanzano and Mitchell, 2005). This means that employees will perceive HPWSs as a signal of investment and caring from their employers and will pay them back with better attitudes (i.e. a high level of job satisfaction). This argumentation aligns with the organisational support theory (Eisenberger et al., 1986), another HRM approach which has been considered as a solution to the pandemic challenges (e.g. Chen and Eyoun, 2021; Cheng et al., 2022).

At the same time, little is known about the underlying mechanisms through which HPWSs may be conducive to higher levels of job satisfaction. This work theorises, based on job demands-resources (JD-R) theory (Bakker and Demerouti, 2017; Demerouti et al., 2001), that HPWSs lead to higher levels of job satisfaction because they contribute to reducing burnout. In this study, the authors use JD-R theory to propose that HPWSs provide workers with resources, such as skills, autonomy, feedback and opportunities for growth (Bakker and Demerouti, 2017). Such resources are beneficial in hospitality firms as they help employees to adapt to job demands, alleviating the stress of intense workloads, which are typical in hotels and have been accentuated due to the uncertain situation resulting from the pandemic. Consequently, HPWSs may very well contribute to a reduction in worker burnout, which may in part improve levels of job satisfaction, therefore supporting the mutual gains perspective.

This work examines the direct effects of HPWSs on employee job satisfaction and its indirect effects through a reduction in burnout during the COVID-19 pandemic. The focus on HPWSs lies in the fact that the pandemic has triggered the urgent need for re-structuring HRM practices (Benítez-Saña, 2021; Zhiqiang et al., 2021), since they are fundamental for employees to cope with uncertain environments and high work demands. As such, they would act as a resource to enhance employee well-being (Agarwal, 2021). This, along with the fact that some HPWS-related practices such as job security (Kloutsiniotis et al., 2022), training (Agarwal, 2021), job redeployment and performance management (Ngoc et al., 2021) have been identified as crucial for business recovery and continuity in the pandemic context, has led this work to focus on HPWSs and examine their potential role in increasing job satisfaction and reducing burnout.

The research hypotheses were tested through partial least squares structural equation modelling (PLS-SEM) and thus make many contributions to both theory development and managerial practice. The current research answers several calls to unlock the black box and show how HPWSs affect outcomes (Murphy et al., 2018; Sun et al., 2007) by performing the first study to incorporate burnout as a mediator in the relationship between HPWSs and job satisfaction in the hospitality sector. Secondly, it contributes to the burgeoning research stream that acknowledges the positive repercussions of HPWSs on employee outcomes (Dhar, 2015; Jaiswal and Tyagi, 2019; Kloutsiniotis and Mihail, 2020c), which supports the mutual gains perspective. Thirdly, it sheds light on the controversial results of previous research linking HPWSs and employee job satisfaction in hospitality and tourism (Dorta-Afonso et al., 2021; Page et al., 2018) by highlighting bundles of practices that directly improve worker satisfaction. Finally, this work provides managerial recommendations for practitioners and human resource (HR) specialists alike, in order to improve worker satisfaction and to reduce their levels of burnout through HPWSs.

This paper is organised as follows. After this introduction, the theoretical foundations that led to the research hypotheses—and subsequent research model—are presented. Next, the method section explains how this research was carried out. Then, the model derived from the data analysis is presented. Finally, the manuscript concludes with a discussion on the theoretical contributions and managerial recommendations before highlighting some limitations that will open interesting future lines of enquiry.

## 2. Literature review

## 2.1. The direct relationship between HPWSs and job satisfaction

Job satisfaction refers to feelings resulting from a worker's perception of the extent to which their job satisfies their needs (Kong et al., 2018). It involves a worker's emotional state regarding the extent to which they like their role inside their workplace (Locke, 1969). According to Herzberg's two-factor theory (1959), job satisfaction differs from job dissatisfaction to a great extent. Whereas satisfaction is achieved based on motivating factors which are present at work (e.g. opportunities for growth), the lack of such factors causes the absence of satisfaction. In turn, dissatisfaction can be prevented by satisfying hygiene factors (e.g. salary), but these factors do not cause satisfaction per se. In this study, the focus is placed on job satisfaction.

Employee job satisfaction is important as it affects turnover, organisational commitment and individual performance (Dorta-Afonso et al., 2021; Kong et al., 2018; Zopiatis et al., 2014) and is therefore a main determinant of organisational performance (Chi and Gursoy, 2009; Wood et al., 2012). Consequently, hoteliers should prioritise efforts to provide employees with working environments that maximise their satisfaction, especially in the current pandemic situation.

Building on social exchange theory (SET), this work proposes that HPWSs increase employee job satisfaction. SET argues that the relationship between organisations and employees takes place according to the main principle of reciprocity (Blau, 1964). This means that, concerning the dyadic exchanges taking place between employers and workers, when one party gives something, the other party will feel obligated to pay them back in an equivalent way (Cropanzano and

Mitchell, 2005). Regarding HPWSs, the exchange is the following: employees who work in companies that develop such practices might perceive that they are cared about, supported and valued for their work because HPWSs provide them with positive outcomes such as abilities, motivation and opportunities (Kloutsiniotis and Mihail, 2020a; Messersmith et al., 2011) that make them realise their value in the firm (Zhong et al., 2016). In this vein, Qi et al. (2021) argue that HPWSs practices such as training can improve employees' skills that might help them in their career development; participation and promotion practices can help employees identify and use resources to improve their performance, which is perceived as that the organisation supports and pays attention to them; and participation-enhancing practices convey that the firm considers employees as partners, so they feel that the firm values them and their contributions. As stated in the Introduction, this rationale is consistent with the organisational support theory, which proposes that employees form a general perception regarding the extent to which their firms value their contributions and care about their well-being (Eisenberger et al., 1986), and has been proposed by some authors as a potential HRM approach in the pandemic context (e.g. Chen and Eyoun, 2021; Cheng et al., 2022) to foster employee performance, engagement and commitment (Eisenberger et al., 2020; Kurtessis et al., 2017). Such consistency can be found in Kurtessis et al. (2017)'s meta-analysis, which shows that HRM practices as those included in HPWSs (e.g. development opportunities, job security, participation in decision-making) are one of the different ways to show organisational support and care because, since most employees perceive that the organisation has substantial control over such practices (i.e. they are discretionary), the favourableness towards such practices is associated to organisational support (Eisenberger et al., 2020). Additionally, specifically in the pandemic context, Bieńkowska et al. (2022) state that, when organisations develop HPWS-related practices such as training, job re-design, etc. employees perceive that their employers care about their health and safety. Therefore, HPWSs could be considered one of many resources of organisational support.

So, in exchange, employees who perceive that they are valued, respected and treated well by their employers (through HPWSs) will reciprocate with positive attitudes and behaviours regarding the organisation (Cropanzano and Mitchell, 2005; Hussien et al., 2021). One of these outcomes is job satisfaction, which is the focus of the present study. SET posits that, when employees feel supported, their satisfaction increases because their socio-emotional needs are met or there is a signal that the organisation is able and willing to aid them (Rhoades and Eisenberger, 2002). Additionally, Teoh et al. (2016) state that giving employees what they want (e.g. support, respect, feelings of worthiness) would be reciprocated through job satisfaction. Thus, several authors have empirically confirmed that job satisfaction is an outcome resulting from the exchange relationships proposed by SET. For example, Huang et al. (2016) found that, in trucking firms, employees' safety climate perceptions were correlated to higher levels of job satisfaction, because such perceptions indicated that the organisation met the basic need for safety at work and committed to their well-being. Another example is Teoh et al. (2016)'s work, who found that supportive manager behaviours (e.g. providing constructive feedback, enhancing work characteristics) had a positive effect on employee job satisfaction because such behaviours made employees feel valued.

Now, focusing on job satisfaction as an outcome of HPWSs, previous research has shown that practices within these systems, such as training (Hussien et al., 2021), rewards (Koo et al., 2020), job design (Wood et al., 2012) and career development (Kong et al., 2015) improve the satisfaction of hospitality workers. As detailed above, this is because said HRM practices provide employees with positive outcomes, such as improved abilities or opportunities for development and enrichment, which will translate into greater satisfaction (Kloutsiniotis and Mihail, 2018; Latorre et al., 2016). Consequently, it would be reasonable to expect that whole HPWSs would have positive effects on employee satisfaction. Indeed, in the tourism and hospitality industry there is some initial research on this relationship. For instance, Alafeshat and Tanova (2019) provided evidence from the airline sector that HPWSs improved worker satisfaction. Similarly, Dorta-Afonso et al. (2021) supported the positive effects of HPWSs on the job satisfaction and general well-being of hotel workers. Outside of tourism, the general literature has also consistently found a positive relationship between HPWSs and job satisfaction, such as in the engineering (García-Chas et al., 2014), public university education (Bashir et al., 2011), manufacturing (Wei et al., 2010) and banking sectors (Haider et al., 2020), as well as in other activities (Fabi et al., 2015).

The authors of this paper argue that hospitality and tourism organisations can improve the job satisfaction of their workforce through HPWSs, thus supporting the mutual gains perspective (Van De Voorde et al., 2012). From this viewpoint, HPWSs are beneficial for companies in the way that they increase organisational performance; however, HPWSs are also beneficial for employees as a means of improving their well-being. For such reason, Bieńkowska et al. (2022) recommend the development of such systems in the current pandemic situation, in order to mitigate its negative effects.

Thus, the following hypothesis is formally submitted:

**Hypothesis 1**. *HPWSs positively and directly affect job satisfaction among hotel employees.* 

In addition to the hypothesised direct effects, another pathway through which HPWSs affect the job satisfaction of hotel employees is also considered. In the next section, an explanation on how HPWSs are conducive to higher levels of satisfaction by reducing worker burnout is provided.

# 2.2. The mediational role of burnout in the relationship between HPWSs and job satisfaction

Burnout is a psychological job-related syndrome that derives from prolonged exposure to chronic job stressors, resulting in a physical, emotional and mental state of feeling drained (Maslach et al., 2001). Burnout consists of three dimensions (Maslach et al., 2001) involving a sense of emotional depletion (i.e. exhaustion), which leads to the development of cynical attitudes towards one's own job (i.e. cynicism) and that, in the end, results in a tendency to evaluate oneself negatively and finding it difficult to achieve anything at work (i.e. reduced personal efficacy) (Maslach and Leiter, 2016). For example, housekeeping workers are often overloaded of work (Sanon, 2013), which may very well contribute to exhaustion as a result of increased levels of stress. Exhaustion would cause them to put a distance between themselves and their jobs, leading to a cynical attitude of indifference towards their tasks. It would then be difficult for workers to experience feelings of accomplishment, which means they would have a sense of being inefficient at work.

The effects of burnout are widely documented for employees and organisations. The costs of burnout for organisations are extremely high due to its direct impact on a worker's health (e.g. Molero Jurado et al., 2018), absenteeism, and turnover (e.g. Maslach and Leiter, 2016). Despite its importance, little research has been carried out in the HRM field regarding how to reduce employee burnout (Fan et al., 2014). Only a small number of studies have examined the mediating role of burnout in the relationship between HPWSs and both employee and organisational outcomes (Jyoti and Rani, 2019). In particular, only one study to date in the hospitality and tourism literature has considered burnout in the relationship between HPWSs and said outcomes. Wong et al. (2019) identified the mediating role of emotional exhaustion between HPWSs and employee turnover intentions, but they did not take into consideration all three components of burnout: they did not consider either cynicism or personal efficacy.

One of the most comprehensive theories that explains worker burnout is the job demands-resources (JD-R) theory (Bakker and Demerouti, 2017; Demerouti et al., 2001), which was used by the authors of this manuscript for the development of their second hypothesis. JD-R theory proposes that job characteristics can be divided into resources or demands (Demerouti et al., 2001). Whereas demands refer to aspects of the job that imply sustained psychological and physical effort (e.g. the amounts of stress derived from the constant changes required by the pandemic), resources refer to those aspects that mitigate job demands, reduce psychological and physical effort and stimulate growth and learning (e.g. training provided by organisations) (Bakker and Demerouti, 2017). Based on JD-R theory, employees with more resources can better deal with demands, which would reduce their exhaustion and lead to better attitudes at work. This premise also aligns with the cybernetic theory of stress, coping and well-being in organisations (Edwards, 1992). In essence, this theory suggest that burnout is the result of the discrepancy between employees' perceived and desired state within their organisations. Such discrepancy would create higher levels of stress that could eventually affect their health and cause burnout.

According to JD-R theory, there are two different perspectives concerning the HPWSs-burnout relationship. On the one hand, the conflicting outcomes perspective (Van De Voorde et al., 2012) state that HPWSs are means of increasing organisational performance at the expense of employee health due to the intensification of work (i.e. HPWSs mean higher job demands). Higher job demands require more physical and psychological effort from employees. This extra effort leads to a depletion of energy, which eventually results in higher burnout. Previous research adopting this stance has empirically found that HPWSs increase job demands and thus are positively related to employee burnout (Kroon et al., 2009; Wood et al., 2012). Under the lenses of the cybernetic theory of stress (Edwards, 1992), HPWSs might be a way in which the gap between employees' desired and perceived state would be enlarged, thus increasing stress and leading to higher burnout.

On the other hand, the mutual gains perspective of HPWSs - which is the one that this article advocates - claims that such systems are a source of job resources that provide workers with the abilities, motivation and opportunities to properly adapt to their job demands, reducing physical and psychological costs and placing workers in a better position to achieve goals in their jobs (Kloutsiniotis and Mihail, 2020b). This assumption, which is more widespread among scholars than the conflicting outcomes perspective, has also been supported in the pandemic context (Kloutsiniotis et al., 2022). Thus, from this point of view, HPWSs provide workers with resources, which translate into lower levels of burnout (Bakker and Demerouti, 2017). In essence, this would mean that HPWSs help workers to better achieve their desired state, thus decreasing their levels of stress (Edwards, 1992). In fact, the reductive effect that HPWSs exert on burnout has been empirically shown in diverse activity sectors, such as healthcare (Bartram et al., 2012; Fan et al., 2014), telecommunications (Jyoti and Rani, 2019) and manufacturing (Kloutsiniotis and Mihail, 2020b), among others. Among the main explanations, Jyoti and Rani (2019) argued that ability-, motivation- and opportunity-improving HR practices contribute to reducing emotional exhaustion, senses of inefficacy and cynicism, respectively. In this line, a recent study by Kloutsiniotis and Mihail (2020b) provided evidence that employees' perception of HPWSs was related to higher amounts of resources and lower levels of demands at work, therefore reducing worker exhaustion.

Research on burnout has traditionally acknowledged its negative effects on employee attitudinal variables such as job satisfaction (e.g. Cordes and Dougherty, 1993; Moore, 2000). This would mean that when organisations fail to manage burnout properly, employees can develop negative attitudes towards their jobs (i.e. low levels of job satisfaction). Research in hospitality and tourism has empirically noted the negative effect of burnout on job satisfaction (e.g. Cheng and O-Yang, 2018; Karatepe and Uludag, 2007; Silva et al., 2021). For example, Cheng and O-Yang (2018) recently proposed job crafting as a way for employees to obtain more resources, thus increasing their job satisfaction due to the

reduction in burnout. Therefore, HPWSs could be reasonably regarded as a means through which hospitality organisations provide employees with more resources that will contribute to reducing their burnout, which results in higher levels of satisfaction. In other words, burnout may thus act as a mediating variable in the relationship between HPWSs and job satisfaction. Considering the previous discussion, it seems reasonable to assume that HPWSs could increase worker job satisfaction, partly due to their contribution to burnout reduction.

## **Hypothesis 2.** Employee burnout mediates the positive relationship between HPWSs and job satisfaction.

Bearing in mind these rationales, a research model was designed to investigate the direct effect of employee perceptions of HPWSs on their job satisfaction, as well as their indirect effect through a reduction in burnout (Fig. 1).

## 3. Method

## 3.1. Data collection and sampling procedure

Three research assistants who were unfamiliar with the research objectives (in order to avoid bias) administered the questionnaire to hotel employees on Gran Canaria (Canary Islands, Spain). The Canary Islands are considered a world-leading destination in Spain. The hospitality and tourism industry also represents 40% of the islands' employment (Exceltur, 2018), which reflects the importance of such economic activity in the territory.

This study was survey-based. A pretest was conducted before distributing the questionnaires to ensure the clarity of the questions and to correct potential wording and grammar mistakes. As regards data collection, twenty establishments from different categories (with the aim of representing the diversity of hotels on the island) were selected, and a total sample of 202 respondents was gathered (convenience sampling process). The fieldwork took place in spring 2021, when tourism was being progressively reactivated on Gran Canaria. Employees were offered the option to fill in the survey using a paper-pen questionnaire, or an electronic version in order to comply with the sanitary measures required for COVID-19.

The gender distribution of the sample was 33.2% men and 66.8% women. Of the total sample, 7 respondents worked in two-star hotels (3.5%), 79 worked at three-star hotels (39.7%), 94 in four-star hotels (47.2%) and 19 in five-star hotels (9.6%). Fifty-eight respondents were between 18 and 34 years old (29.9%), 106 were between 35 and 54 (54.6%), and 30 were over 54 (15.5%). With respect to level of education, 40.8% had completed high school or lower education, 33.8% had completed vocational training, and 25.4% had completed university studies. Finally, respondents worked in different hotel departments: reception (25.1%), management (12.6%), food and beverages (23.1%), housekeeping (36.2%) and others (3.0%).

#### 3.2. Common method variance

The independent and dependent variables were collected from a single source (i.e. hotel employees) simultaneously, and therefore it was necessary to control for common method variance (CMV) by applying both procedural and statistical remedies, as recommended in the literature (Kock, 2015; Kock and Lynn, 2012; Podsakoff et al., 2003). Procedurally, CMV derived from a misunderstanding of questions was avoided by using items from validated scales. In addition, items were written in a clear and precise manner, avoiding complex wording and syntax and double-barrelled questions. Items measuring predictor and criterion constructs were separated in the questionnaire and were assessed using different scales reducing participants' motivation to use prior responses to answer subsequent items. Social desirability bias was avoided by assuring participants that there were no right or wrong answers and that the survey was anonymous.



Fig. 1. Research model.

Statistically, a Harman's single factor test was carried out, and the first factor accounted only for 35.89% of the variance, which is lower than the 50% threshold established in the literature (Podsakoff et al., 2003). A full collinearity test was conducted, and all variance inflation factors (VIF) values were lower than the cut-off point of 3.3 (Kock, 2015). The previous evidence allows to conclude that CMV was not problematic in this research.

#### 3.3. Variables and measures

A questionnaire was developed to be administered to hotel employees to measure the study constructs. Items were adopted from previous research and discussed by professors specialised in organisational behaviour to ensure content validity. The items that measured HPWSs and job satisfaction were originally written in English and were then translated into Spanish using a back-translation procedure (Brislin, 1970). One research assistant first translated the items into Spanish, and a second research assistant translated the items back into English. The authors, with the help of a bilingual professor, discussed these translations to reach consensus.

Appendix A shows the complete scales and their corresponding items.

#### 3.3.1. High-performance work systems (HPWSs)

The same 20 items as Kloutsiniotis and Mihail (2020c) were used to measure HPWSs. These items were adopted from existing scales from previous studies. From the seven subscales, items measuring 'recruitment and selection' were adopted from Zacharatos et al. (2005). Items measuring 'training and development', 'incentives and rewards' and 'performance management' were adopted from Sun et al. (2007). The subscales of 'employment security', 'job design' and 'participation in decision-making' were adopted from Delery and Doty (1996). Participants had to rate each item on a 5-point Likert scale.

## 3.3.2. Burnout

The Spanish version (Moreno-Jiménez et al., 2001) of the Maslach Burnout Inventory-General Survey (MBI-GS) (Schaufeli et al., 1996) was used. The MBI-GS is the most widely used measure for burnout. It consists of 16 items to be answered on a 7-point Likert scale and includes the three dimensions of exhaustion, cynicism and personal efficacy.

#### 3.3.3. Job satisfaction

This construct was measured with a three-item scale adopted from previous research (Suazo, 2009), which has already been used in similar studies in the hospitality and tourism context (García-Rodríguez et al., 2020). Participants had to rate the three items on a 5-point Likert scale, where the higher the score, the higher their job satisfaction.

## 3.3.4. Control variables

The control variables of this study were employee gender, age, education and department in which they work and also the hotel category of the establishment.

Table 1
Comple profile

Variable	Frequency	%
Gender		
Male	67	33.2%
Female	135	66.8%
Hotel category		
Two-star	7	3.5%
Three-star	79	39.7%
Four-star	94	47.2%
Five-star	19	9.6%
Age		
18–34 years old	58	29.9%
35–54 years old	106	54.6%
Over 54 years old	30	15.5%
Education level		
High school or lower	82	40.8%
Vocational training	68	33.8%
University	51	25.4%
Department		
Reception	50	25.1%
Management	25	12.6%
Food & Beverage	46	23.1%
Housekeeping	72	36.2%
Others	6	3%

## 3.4. Statistical analysis

International Journal of Hospitality Management 108 (2023) 103364

#### 4. Results

PLS-SEM, which is widely used in HRM empirical research (Ringle et al., 2020), was performed to test the proposed hypotheses. Following Hair et al. (2019), there are three reasons for this choice. Firstly, this technique performs well with both large and smaller sample sizes. Secondly, PLS-SEM does not assume any particular data distribution, and the data used in this study is non-normal. Lastly, the research model includes both reflective (job satisfaction) and formative constructs (HPWSs and burnout).

Despite performing adequately with smaller samples, PLS-SEM requires a minimum sample size. G\*Power 3.3. software was used to determine this requirement. The following parameters were introduced: 0.8 for the power test (Cohen, 1988), and 0.15 for the effect size (Faul et al., 2007). According to this test, the minimum sample should be 157 cases. The sample size in this research comprised 202 individuals, and therefore it was deemed appropriate for PLS-SEM.

#### Table 2

Reliability and convergent validity of the first-order model

Following Hair et al. (2017), PLS-SEM analyses comprise two stages. The first stage consists of assessing the outer (measurement) model. In the second stage, the inner (structural) model is evaluated. Given that HPWSs and burnout are both reflective-formative, second-order constructs, and they do not have the same number of items, the two-step approach proposed by Wright et al. (2012) was followed. Table. 1.

#### 4.1. Assessment of the outer model

The first-order model, in which all items were reflective, was first validated in order to assess the outer model (see Table 2). According to Hair et al. (2021), this involves evaluating the reliability of measures, both at an individual item (indicator reliability) and construct level (internal consistency reliability). Furthermore, both convergent and discriminant validity were also assessed.

In order to assess indicator reliability (i.e. the proportion of the variance of each indicator that is explained by the construct, which

Constructs	Indicators	Loadings	CR	rho_A	AVE			
HPWSs	Recruitment and selection (REC)							
	REC1	0.922***	0.951	0.931	0.829			
	REC2	0.860***						
	REC3	0.918***						
	REC4	0.940***						
	Training and development (TRA)							
	TRA1	0.932***	0.940	0.922	0.839			
	TRA2	0.902***						
	TRA3	0.914***						
	Employment security (SEC)							
	SEC1	0.863***	0.854	0.835	0.662			
	SEC2	0.832***						
	SEC3	0.740***						
	Performance management (PER)							
	PER1	0.904***	0.940	0.905	0.839			
	PER2	0.927***						
	PER3	0.916***						
	Incentives and rewards (INC)							
	INC1	0.961***	0.878	1.081	0.784			
	INC2	0.803***						
	Part. in decision-making (DEC)							
	DEC1	0.925***	0.916	0.820	0.845			
	DEC2	0.913***						
	Job design (DES)							
	DES1	0.910***	0.946	0.919	0.855			
	DES2	0.932***						
	DES3	0.932***						
BURNOUT	Exhaustion (EXH)							
	EXH1	0.899***	0.947	0.935	0.782			
	EXH2	0.837***						
	EXH3	0.901***						
	EXH4	0.895***						
	EXH5	0.887***						
	Cynicism (CYN)							
	CYN1	0.892***	0.919	0.899	0.741			
	CYN2	0.917***						
	CYN3	0.842***						
	CYN4	0.786***						
	Efficacy (EFF)							
	EFF1	0.726***	0.929	0.917	0.687			
	EFF2	0.782***						
	EFF3	0.896***						
	EFF4	0.888***						
	EFF5	0.861***						
	EFF6	0.806***						
JOB SATISFACTION (SAT)	SAT1	0.918***	0.931	0.891	0.819			
	SAT2	0.902***						
	SAT3	0.895***						

Note: bootstrapping based on n = 10,000 subsamples; \*\*\*p < 0.001

#### Table 3

Discriminant validity of the first-order model.

Discrimin	ant validity										
	SAT	CYN	DEC	EFF	EXH	INC	DES	PER	REC	SEC	TRA
SAT	0.905	0.455	0.335	0.367	0.414	0.156	0.379	0.429	0.425	0.387	0.373
CYN	-0.408	0.861	0.461	0.080	0.721	0.232	0.499	0.509	0.418	0.409	0.421
DEC	0.286	-0.390	0.919	0.120	0.451	0.697	0.657	0.754	0.702	0.819	0.657
EFF	0.336	0.018	0.105	0.829	0.100	0.207	0.276	0.296	0.233	0.299	0.145
EXH	-0.382	0.670	-0.395	0.057	0.884	0.313	0.503	0.532	0.455	0.492	0.366
INC	0.123	-0.207	0.545	-0.120	-0.284	0.886	0.504	0.638	0.452	0.561	0.629
DES	0.348	-0.456	0.567	0.260	-0.467	0.378	0.925	0.813	0.608	0.707	0.588
PER	0.387	-0.462	0.647	0.269	-0.493	0.520	0.740	0.916	0.694	0.808	0.711
REC	0.389	-0.384	0.611	0.220	-0.423	0.363	0.561	0.636	0.911	0.770	0.778
SEC	0.348	-0.372	0.653	0.277	-0.440	0.416	0.635	0.711	0.669	0.813	0.749
TRA	0.341	-0.380	0.564	0.129	-0.339	0.519	0.538	0.647	0.715	0.630	0.916

Note: diagonal elements (in bold) refer to the square root of the AVE. Elements below the diagonal correspond to the correlations between constructs. Elements above the diagonal (in italics) are the HTMT values.

Table 4

Table 5

Validation of the second-order model.

Constructs	Dimensions	Loadings	Weights	VIF
HPWSs	DEC	0.630	0.019 <sup>ns</sup>	2.343
	INC	0.241	-0.328**	1.680
	DES	0.836	0.296**	2.375
	PER	0.885	0.519***	3.361
	REC	0.786	0.272**	2.678
	SEC	0.797	0.175 <sup>ns</sup>	2.686
	TRA	0.654	0.012 <sup>ns</sup>	2.620
BURNOUT	CYN	0.730	0.421***	1.817
	EFF	-0.571	-0.606***	1.004
	EXH	0.725	0.477***	1.823

Note: n = 10,000 subsamples; \*\*\*p < 0.001; \*\*p < 0.05; <sup>ns</sup> non-significant

should be at least 50%), indicator loadings should be observed (Hair et al., 2021). Indicator loadings are recommended to be greater than or equal to 0.708, because this value indicates that the construct explains 50% of the indicator variance (Hair et al., 2019). As shown in Table 2, all indicator loadings were above 0.708, which suggests enough indicator reliability. On the other hand, to examine internal consistency reliability (i.e. the extent to which indicators belonging to a same construct are associated to each other), both the composite reliability (CR) and Dijkstra and Henseler's rho\_A were calculated (Hair et al., 2021). Table 2 shows that the CR was higher than 0.7 in all constructs (Nunnally and Bernstein, 1994). The rho\_A was also higher than 0.7 in all cases (Dijkstra and Henseler, 2015). Therefore, the proposed first-order model had a satisfactory degree of internal consistency reliability.

After analysing reliability, validity was examined. To assess convergent validity (i.e. the extent to which indicators in a same construct correlate to each other, therefore represent said construct), the average variance extracted (AVE) of each construct was observed. According to the literature, the accepted minimum for AVE is 0.5, which means that the construct explains at least 50% of the variance of the indicators that make it up (Hair et al., 2017). The results in Table 2 show that, for all constructs, the AVE exceeded 0.5, thus confirming the convergent validity of the model. Lastly, to assess discriminant validity (i.e. the extent to which a construct is empirically different from other constructs in the model), two criteria were used: Fornell and Larcker's, and the HTMT ratio (Hair et al., 2021). As can be seen in Table 3, both criteria were met. On the one hand, regarding Fornell and Larcker's criterion, the square root of the AVE for each construct (elements on the diagonal in bold) was not lower than the correlations with the other constructs in any case (values below the diagonal) (Fornell and Larcker, 1981). On the other hand, regarding the HTMT criterion, all values (elements above the diagonal in italics) were lower than 0.85, which, according to Henseler et al. (2015), is the recommended threshold when constructs are conceptually different. As such, the discriminant validity of the model was also confirmed.

Once the first-order model was validated, the two-step approach was used to create the second-order model. Following this approach, the items in each and every dimension forming the second-order constructs were grouped. Said dimensions were specified as latent variables, and their scores were used as the items that formed the second-order constructs (Wright et al., 2012).

The new second-order model, in which HPWSs and burnout were the second-order constructs, was validated. As they were both formative, a different evaluation procedure was applied (Hair et al., 2017). First, the variance inflation factor (VIF) values of their individual items (dimensions) were examined. The results in Table 4 show that they were all close to the ideal requirement of VIF < 3 (Hair et al., 2017). Therefore, it could be stated that there were no collinearity problems. Next, the significance level of the weight of each item was examined, in order to detect any insignificant weights that could compromise the quality of the model (Hair et al., 2017). It was observed that the weights of participation in decision-making (DEC), employment security (SEC), and training and development (TRA), all belonging to the HPWSs construct, were not significant. To decide whether these items should be removed from the model, their individual loadings were checked. According to Hair et al. (2017), items with loadings greater than or equal to 0.5 should be kept. Since all three loadings fulfilled such requirement, along with the fact that no collinearity issues were detected previously (Hair et al., 2019), these items were maintained.

Hypothesis testing.			
	β	t	95% CI
Direct effects (paths)			
(H1) HPWSs -> Job sat.	0.167**	1.745	[0.017; 0.324]
HPWSs -> Burnout	-0.669 * **	19.642	[-0.739; -0.627]
Burnout -> Job sat.	-0.521 * **	6.261	[-0.652; -0.379]
Mediation test			
(H1) Direct effect (HPWSs -> Job sat.)	0.167**	1.745	[0.017; 0.324]
(H2) Indirect effect (HPWS -> Burnout -> Job sat.)	0.349***	5.738	[0.258; 0.455]

Note: n = 10,000 subsamples; \*\*\*p < 0.001; \*\*p < 0.05





#### Table 6

Path coefficients and mediation analysis according to the AMO framework.

	β	t	95% CI
Direct effects (paths)			
Abilities -> Job sat.	0.231**	2.801	[0.090; 0.362]
Motivation -> Job sat.	0.027 <sup>ns</sup>	0.217	[-0.181; 0.227]
Opportunities -> Job sat.	-0.045 <sup>ns</sup>	0.501	[- 0.186; 0.106]
Abilities -> Burnout	-0.064 <sup>ns</sup>	0.832	[- 0.204; 0.049]
Motivation -> Burnout	-0.449***	4.603	[-0.593; -0.271]
Opportunities -> Burnout	-0.202**	2.142	[-0.364; -0.056]
Mediation test			
Abilities			
Direct effect (Abilities -> Job sat.)	0.231**	2.801	[0.090; 0.362]
Indirect effect (Abilities -> Burnout -> Job sat.)	0.034 <sup>ns</sup>	0.846	[-0.027; 0.105]
Motivation			
Direct effect (Motivation -> Job sat.)	0.027 <sup>ns</sup>	0.217	[-0.181; 0.227]
Indirect effect (Motivation -> Burnout -> Job sat.)	0.238***	3.250	[0.124; 0.364]
Opportunities			
Direct effect (Opportunities -> Job sat.)	-0.045 <sup>ns</sup>	0.501	[-0.186; 0.106]
Indirect effect (Opportunities -> Burnout -> Job sat.)	0.107**	2.122	[0.029; 0.195]

Note: n = 10,000 subsamples; \*\*\*p < 0.001; \*\*p < 0.05

Therefore, the validity of the second-order model was confirmed.

## 4.2. Assessment of the inner model

The final stage of the PLS-SEM analysis was the assessment of the inner model. The VIF values of the constructs were first calculated. They were all lower than 3, so no collinearity issues were detected. Secondly, path coefficients ( $\beta$ ), confidence intervals (CI) and the significance level of the proposed hypotheses were analysed (see Table 5). On the one hand, it can be observed that HPWSs had a positive and significant effect on job satisfaction ( $\beta = 0.167$ , p < 0.05), thus supporting H1. On the other hand, H2 proposed that burnout would mediate the relationship between HPWSs and job satisfaction. Following Cepeda et al. (2017), the first step to test whether a mediation effect exists is to analyse the significance of the indirect effect (HPWSs -> burnout -> job satisfaction). As Table 5 shows, this effect was statistically significant ( $\beta = 0.349$ , p < 0.001, CI: 0.017; 0.324), thus confirming the mediating effect (Nitzl et al., 2016). The second step addresses the significance of the direct

effect (HPWSs -> job satisfaction) in order to examine the type of mediation (full vs partial). As reported above, the direct effect was significant ( $\beta = 0.167$ , p < 0.05, CI: 0.258; 0.455). This suggests a partial mediation. More precisely, it is a complementary partial mediation, since both the direct and indirect effect pointed in the same (positive) direction. This means that a portion of the effect of HPWSs on job satisfaction was mediated by burnout, whereas HPWSs also explained the portion of job satisfaction which is independent of burnout (Cepeda et al., 2017). To confirm and reinforce this result, the variance accounted for (VAF), which determines the ratio of the indirect-to-total effect, was calculated (Nitzl et al., 2016). The VAF was 0.678. According to Hair et al. (2017), VAF values below 0.2 mean that no mediation occurs; values between 0.2 and 0.8 correspond to partial mediation, and values higher than 0.8 indicate full mediation. In sum, the mediation hypothesis proposed (H2) was also supported.

Of the control variables, the results illustrate that age, gender and education had different effects on job satisfaction: positive in the case of age ( $\beta = 0.127$ , p < 0.05) and negative in the case of both gender

 $(\beta = -0.080, p < 0.1)$  and education  $(\beta = -0.090, p < 0.1)$ . The other two control variables (department and hotel classification) did not have any effect on the dependent variable.

The final step in the assessment of the inner model was the evaluation of the model's explanatory power, which is expressed by the  $R^2$ values of the constructs. As Fig. 2 shows, the model explains 44.8% of the variance of burnout, and 36.7% of the variance of job satisfaction. Following Hair et al. (2019), it can be stated that the model had a moderate explanatory power, since all  $R^2$  values were between 0.25 and 0.50. Lastly, when examining the predictive relevance of the model, represented by  $Q^2$  values, Fig. 2 also shows that in all cases, all  $Q^2$  values were higher than 0, as required by Hair et al. (2017).

## 4.3. Supplementary analysis: the AMO framework

Although the main purpose of this research was to analyse the direct and indirect effects of HPWSs on employee job satisfaction, this study responds to recent calls in the literature by additionally investigating HPWSs from the abilities-motivation-opportunities (AMO) theory (Appelbaum et al., 2000; Jiang et al., 2012; Macky and Boxall, 2007). Under this approach, HPWSs are decomposed into ability, motivation and opportunity bundles of HRM practices. The ability bundle refers to those HRM practices intended for either buying or enhancing/developing employee knowledge, skills and abilities required to perform well at work. Therefore, this bundle is often associated with practices such as selective hiring, as well as extensive training. On its part, the motivation bundle encompasses practices that influence employees' motivation to apply their skills and perform better, such as economic incentives, promotion, high-performance remuneration and job security. Lastly, the opportunity bundle includes HRM practices aimed at providing employees with the opportunity to be involved in their organisations by being autonomous, having a clear job description, and taking part in organisational decisions (Appelbaum et al., 2000; Bello-Pintado and Garcés-Galdeano, 2019; Jiang et al., 2012; Kloutsiniotis and Mihail, 2020b; Prieto and Pérez-Santana, 2014). The deconstruction of HPWSs into such three packages is carried out to examine the heterogeneous effects on outcomes, as opposed to the whole system.

Research using the AMO approach is still rare in a hospitality context (see Kloutsiniotis and Mihail, 2020c for an exception), but highly encouraged, as stated by recent related literature (e.g. Kloutsiniotis and Mihail, 2020a). Consequently, another second-order model, under the AMO framework, was designed and validated. In this new model, HPWSs were decomposed into abilities, motivation and opportunities following Kloutsiniotis and Mihail (2020c)'s work (see Appendix A).

The additional analysis (see Table 6) revealed that the abilities bundle had a positive and significant effect on job satisfaction ( $\beta = 0.231$ , p < 0.05), whereas both the motivation ( $\beta = 0.238$ , p < 0.001) and the opportunity ( $\beta = 0.238$ , p < 0.05) bundles indirectly enhanced job satisfaction through burnout reduction. To corroborate these results, the VAF was calculated. This value was 0.128 for abilities, 0.898 for motivation and 1.723 for opportunities, thus confirming the absence of mediation in the case of abilities and the full mediation in the case of both motivation and opportunities.

In conclusion, considering the AMO framework, it can be stated that different bundles of HRM practices did have differential effects on job satisfaction, both directly and indirectly via burnout reduction.

Of the control variables, age, gender and education had significant effects on job satisfaction. Here again, said effect was positive in the case of age ( $\beta = 0.115$ , p < 0.1) and negative in the case of gender ( $\beta = -0.102$ , p < 0.05) and education ( $\beta = -0.096$ , p < 0.05). No statistically significant effects were observed for department and hotel classification.

## 5. Discussion

The current study has examined how HPWSs positively affect hotel

employee job satisfaction, both directly and indirectly, through a reduction in employee burnout, which should be one critical objective for hoteliers and HRM managers in the current COVID-19 crisis. It was found that HPWSs exerted a positive direct effect on job satisfaction but also had an indirect effect by reducing employee burnout. As a response to recent developments in the HPWSs literature, the AMO framework was also applied, and it was found that the abilities bundle of HRM practices affects job satisfaction, whereas the motivation and opportunities bundles reduce burnout. Both theoretical contributions and managerial recommendations derived from these findings are addressed next.

#### 5.1. Theoretical contributions

This study makes three main theoretical contributions. Firstly, according to the employee-centred approach, the findings of this work align with studies that have claimed a positive relationship between HPWSs and job satisfaction in hospitality firms (Alafeshat and Tanova, 2019; Dorta-Afonso et al., 2021), thus supporting the mutual gains perspective (Van De Voorde et al., 2012) as shown by the positive effects of such practices on employee job satisfaction. These findings complement previous evidence supporting the benefits of HPWSs for hospitality and tourism firms with respect to the enhancement of several outcomes related to increased performance and turnover reduction (Karatepe and Vatankhah, 2014; Rabiul et al., 2021; Wong et al., 2019; Yang et al., 2021) and make those findings generalisable to employee well-being, and concretely applicable to job satisfaction. This is consistent with the reciprocity rule of SET (Cropanzano and Mitchell, 2005) and the tennets of organisational support theory (Eisenberger et al., 1986), as employees who perceive that their hotels invest and take care of them through HPWSs repay them with higher levels of job satisfaction. Consequently, these findings contribute to the literature on job satisfaction in hospitality and tourism, confirming the assumption that hoteliers can enhance the job satisfaction of their workforce through the implementation of management practices (Kong et al., 2018) such as HPWSs. This is particularly important in a sector characterised by harsh working conditions and talent retention problems (Stamolampros et al., 2019), which have been aggravated by the pandemic (Ayachit & Chitta, 2021), and one in which employees are considered to be a determining factor in the customer experience (Huertas-Valdivia et al., 2021).

The second strength of this study is that it also contributes to unlocking the black box of mechanisms through which HPWSs improve job satisfaction. In doing so, this paper offers the first study in a hospitality context to confirm the mediating role of burnout in the relationship between HPWSs and job satisfaction. This manuscript contributes to the burgeoning research stream that claims HPWSs have the potential to reduce burnout (Fan et al., 2014; Jyoti and Rani, 2019) and to make those findings generalisable to the hospitality sector. Under the lens of the JD-R model (Demerouti et al., 2001), these findings suggest that HPWSs provide workers with more job resources than demands. As a consequence, they will show less burnout, and eventually they will be more satisfied. These findings clearly complement the study by Wong et al. (2019), which also found exhaustion (i.e. one of the main components of burnout) to be a mediating mechanism explaining how HPWSs lead to turnover reduction. This manuscript, therefore, contributes to the recent interest among researchers in examining the processes through which HPWSs impact employees' attitudes and behaviours (Kloutsiniotis and Mihail, 2020c; Teo et al., 2020). Although the theory suggests that HPWSs positively impact employees' attitudes such as job satisfaction, the underlying mechanisms explaining this relationship (i.e. the actual process of the black box) have yet to be investigated (Kloutsiniotis and Mihail, 2020a). Indeed, only few studies to date have modelled any mediating mechanisms between HPWSs and job satisfaction in hospitality and tourism (Dorta-Afonso et al., 2021; Page et al., 2018). Thus, this research contributes to fill this evident gap in the literature. It is, furthermore, consistent with JD-R theory (Bakker

and Demerouti, 2017) as it suggests that HPWSs are resources offered by the organisations that help employees overcome daily demands and get the support from the management, thus alleviating the stress originating from their tasks. In other words, consistently with the cybernetic theory tennets (Edwards, 1992), it can be concluded that HPWSs are a means of helping employees to achieve their desired state within their organisations.

Thirdly, this research contributes to the field by being one of the first studies to perform a supplementary analysis of HPWSs under the AMO framework in hospitality and tourism (see an exception in Kloutsiniotis and Mihail, 2020c). This is interesting as several authors have highlighted the delay in this topic in the tourist context and have called for more analyses of the different bundles of HRM practices (Dorta-Afonso et al., 2021; Kloutsiniotis and Mihail, 2020a). This work provides evidence of the differential effects of said bundles on both the job satisfaction of hotel employees (i.e. the ability bundle has a positive and direct impact on job satisfaction) and on burnout (i.e. the motivation and opportunity bundles have both negative direct effects on burnout and exert an indirect effect on job satisfaction).

The aforementioned indirect effects are explained by the following rationales. Overall, the pandemic has brought higher workloads. Now, the motivation bundle of practices is intended to reward employees for the extra effort associated to such situation. Some authors claim that, when there is an imbalance between the effort devoted by employees and the rewards received in exchange, stress may arise (e.g. de Reuver et al., 2021). Consequently, as the results of this research show, the motivation bundle may foster the reduction of stress that contributes to the development of burnout and, at the same time, may increase job satisfaction. The same reasoning would apply to employees fearing losing their jobs (Ayachit and Chitta, 2022). However, those organisations providing job security are expected to reduce the gap between employees' perceived and desired states, thus resulting in reduced stress (Edwards, 1992).

In a similar vein, in the present work the opportunity-enhancing HRM practices exerted a reduction effect on burnout, which in turn enhanced job satisfaction. In essence, these practices empower employees by giving them autonomy over their tasks and providing them with clear task descriptions (Jiang et al., 2012). Such opportunity to decide over their tasks provides employees with a sense of control over the events taking place in their work environment. This facilitates the reduction of anxiety and stress (i.e. burnout) in stressful situations (Conway et al., 2016) - such as the ones resulting from the pandemic -, which in turn would increase job satisfaction.

Lastly, the aforementioned indirect effect of burnout in the abilitiesjob satisfaction relationship was not empirically supported. Such finding aligns with existing evidence suggesting that certain HRM practices such as training may, indeed, increase employee stress (Topcic et al., 2016).

The third contribution embraces the three dimensions of HPWSs as the focus was placed on HPWSs not only as a system of HRM but as a decomposition of abilities-, motivation- and opportunity-enhancing bundles of practices (Appelbaum et al., 2000). Based on this approach, there has been a wide proliferation of research adopting the lenses of the AMO framework (e.g. Kloutsiniotis and Mihail, 2020b) in the general literature, but only one study has analysed hospitality organisations (Kloutsiniotis and Mihail, 2020c). In order to fill this gap, this manuscript demonstrated that the three bundles under study were positive in terms of employee outcomes but that their effect took place differently. For example, in the pandemic context in which this research took place, if hoteliers detect or want to prevent burnout stemming from the intense stress faced by their employees, they should invest in motivation and opportunity HRM practices to alleviate said burnout.

#### 5.2. Practical implications

This study is expected to be useful for HR specialists and hoteliers

alike in several ways, as its results reveal that HPWSs are beneficial given their effect on burnout and job satisfaction among the hospitality workforce. It is recommended that hotel managers invest in the development and implementation of HPWSs in order to reduce employee burnout and, in turn, to create a more satisfied workforce, which is fundamental in the current context of uncertainty caused by the coronavirus. This is crucial as previous research has linked the job satisfaction of hospitality employees to their individual performance (Dorta-Afonso et al., 2021). In essence, these results empirically support the relationship between HPWSs and employee job satisfaction, which is necessary for tourist satisfaction and organisational performance (Chi and Gursoy, 2009) but most importantly for employee well-being (Dorta-Afonso et al., 2021). Complementary, it is also recommended not only to develop such practices, but also to effectively communicate them to employees, so their perceptions towards the implementation of HPWSs are enhanced. Consequently, employees would be more aware of the benefits associated with working in their hotels (Shapoval, 2019).

In addition, it was found that the motivation and opportunity bundles of the AMO framework reduce burnout. Thus, at a time when employees are affected by high levels of stress due to COVID-19, managers should focus their efforts on developing practices like compensation, performance appraisals, participation and job enrichment to reduce burnout.

However, the results provided here should be interpreted with caution as they do not suggest that the implementation of HPWSs is always beneficial for both employees and organisations. Although HPWSs are proposed as a solution to alleviate the intense workloads faced by workers in hospitality organisations, and therefore improve their job satisfaction, employers should ensure that HPWSs are not implemented at the expense of employee well-being but in a win-win manner. Some studies have suggested that HPWSs can increase job demands, which negatively affect employee well-being (i.e. they support the conflicting outcomes perspective) (Ogbonnaya and Messersmith, 2019). The decomposition of HPWSs into bundles of HRM practices sheds some light on this issue. If hoteliers focus on recruiting and selecting the best talent and on providing their workers with continuous ongoing training (i.e. ability bundle) but ignore their motivation and opportunities to perform, it might result in higher levels of burnout and have negative effects on satisfaction and performance later. Therefore, it is recommended that managers bear in mind the possible negative effects associated with HPWSs and specific bundles of HRM practices.

Additionally, the highlighted distinction between job satisfaction and job dissatisfaction (Herzberg et al., 1959) is also an important issue that HR and hotel managers should bear in mind. In this sense, the managerial recommendations of this work are pointed at providing employees with higher levels of job satisfaction. For example, providing employees with training and growing opportunities is aimed at improving their satisfaction. Nevertheless, job dissatisfaction should not be ignored. It is also recommended that managers monitor their employees' contentment with other factors such as salary or job security that may not directly impact job satisfaction, but lead to dissatisfaction if lacking, thus causing employees to decrease their motivation, performance and resulting in withdrawal behaviours (Lee et al., 2015).

## 5.3. Limitations and future research

Although this is the first study to analyse the effects of HPWSs on job satisfaction through the reduction in burnout in a hospitality and tourism context, there are some limitations that deserve attention and should be considered for future research. Firstly, this study draws on the perceptions of workers regarding the existence and implementation of HPWSs in their organisations rather than the intended HRM practices reported by HR managers. Future studies on this topic could gather data from both HR managers and employees, which would broaden the knowledge of the effects of HPWSs on employee outcomes.

Secondly, this study is cross-sectional in nature, and therefore the

relationships found here could also be explained by reversed causality. More specifically, higher levels of job satisfaction may affect the extent to which employees perceive that their organisations implement HPWSs. In order to overcome this limitation, it is suggested that longitudinal studies be performed in order to examine whether the relationships found here hold true.

This study is pioneering with regard to the disaggregation of HPWSs into three bundles of HRM practices, which were shown to affect employee outcomes in varied ways. A third limitation, however, is related to recent studies which suggest that work design should be analysed as a fourth subdimension instead of being grouped in the opportunities bundle (Oppenauer and Van De Voorde, 2018). Consequently, it is recommended that future research not only consider the effects of HPWSs on employee and organisational outcomes, but also the four subdimensions into which HPWSs can be decomposed. In this line, it would be interesting to place the focus on the distinction between job satisfaction and job dissatisfaction. Future studies could consider the differential effects of bundles of HPWSs on employees' job satisfaction and dissatisfaction and characterise each bundle as a motivating or hygiene factor (Herzberg et al., 1959).

Fourth, there may be other mediating mechanisms through which HPWSs may be conducive for higher levels of job satisfaction as well as other outcomes affected by burnout reduction due to HPWSs. For example, recent research highlighted the role of leadership between HPWSs and employees' attitudes and behaviours (Huertas-Valdivia et al., 2018, 2021). Future studies could consider the two most important leadership styles, directive and empowering (Dorta-Afonso, 2019; Rico et al., 2021), as potential mediators between HPWSs and employee outcomes. Also, since the indirect effect of the ability bundle of HRM practices on job satisfaction throughout the reduction of burnout was not supported, it would be interesting to further investigate whether this bundle may indeed increase employees' job satisfaction throughout any other mediating mechanism. Additionally, not only satisfaction at work but overall satisfaction with one's own life (Uysal et al., 2016) may be another plausible result of HPWSs through burnout reduction that deserves attention in future studies.

Lastly, and bearing in mind the JD-R theory, future studies could consider different kinds of job resources and demands through which HPWSs may affect burnout (Bakker & Demerouti, 2001). In this sense, whereas job resources may reduce the discrepancy between the perceived and desire state of employees within their hotels, demands would enlarge such discrepancy, thus leading to higher levels of stress and increasing employee burnout (Edwards, 1992). Concretely, recent developments on the JD-R theory (Bakker and Demerouti, 2017) have proposed a differentiation between challenge and hindrance job demands. Whereas hindrance job demands are expected to increase employee burnout, challenge job demands are thought to play a motivational role and may very well have a positive effect on employee engagement, thus reducing burnout (Gordon and Adler, 2022).

## 6. Conclusion

This study highlights the importance of HPWSs for hospitality firms given their effects on crucial attitudinal employee outcomes. HPWSs directly affect employee job satisfaction and indirectly improve job satisfaction by reducing burnout. As the satisfaction of employees is of paramount importance for the performance of the hospitality business, the authors hope that academics and practitioners will find this study useful. We expect that our findings will stimulate the development of new studies on HPWSs from an employee-centred point of view in order to better understand how to increasingly obtain a more satisfied workforce in hospitality and tourism firms.

## Data Availability

Data will be made available on request.

## Acknowledgements

We would like to thank the Editor-in-Chief, Manuel Rivera; Associate Editor, Valeriya Shapoval, and three anonymous reviewers for their honest and constructive feedback on our research.

#### References

- Adikaram, A.S., Naotunna, N.P.G.S.I., Priyankara, H.P.R., 2021. Battling COVID-19 with human resource management bundling. Empl. Relat. 43 (6), 1269–1289.
- Afsar, B., Shahjehan, A., Shah, S.I., 2018. Frontline employees' high-performance work practices, trust in supervisor, job-embeddedness and turnover intentions in hospitality industry. Int. J. Contemp. Hosp. Manag. 30 (3), 1436–1452.

Agarwal, P., 2021. Shattered but smiling: Human resource management and the wellbeing of hotel employees during COVID-19. Int. J. Hosp. Manag. 93, 102765.

- Alafeshat, R., Tanova, C., 2019. Servant leadership style and high-performance work system practices: pathway to a sustainable Jordanian airline industry. Sustainability 11 (22), 6191.
- Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A.L., Bailey, T.A., 2000. Manufacturing Advantage: Why High-performance Work Systems Pay Off. Cornell University Press
- Ayachit, M., Chitta, S., 2022. A systematic review of burnout studies from the Hospitality literature. J. Hosp. Mark. Manag. 31 (2), 125–144.
- Bakker, A.B., Demerouti, E., 2017. Job demands-resources theory: taking stock and looking forward. J. Occup. Health Psychol. 22 (3), 273.
- Bartram, T., Casimir, G., Djurkovic, N., Leggat, S.G., Stanton, P., 2012. Do perceived high performance work systems influence the relationship between emotional labour, burnout and intention to leave? A study of Australian nurses. J. Adv. Nurs. 68 (7), 1567–1578.
- Bashir, M., Jianqiao, L., Zhao, J., Ghazanfar, F., Khan, M.M., 2011. The role of demographic factors in the relationship between high performance work system and job satisfaction: a multidimensional approach. Int. J. Bus. Soc. Sci. 2 (18), 207–218.
- Bello-Pintado, A., Garcés-Galdeano, L., 2019. Bundles of HRM practices in family and non-family firms: the impact on enhancing performance. Int. J. Hum. Resour. Manag. 30 (21), 2971–2992.
- Benítez-Saña, R.M., 2021. Sistemas de trabajo de alto rendimiento y modelo de organización saludable frente al impacto psicológico de la COVID-19 en profesionales sanitarios. Estud. Gerenc. 37 (159), 167–177.
- Bieńkowska, A., Koszela, A., Sałamacha, A., Tworek, K., 2022. COVID-19 oriented HRM strategies influence on job and organizational performance through job-related attitudes. PLoS One 17 (4), e0266364.
- Blau, P., 1964. Exchange and Power in Social Life. Routledge, New York.
- Brislin, R.W., 1970. Back-translation for cross-cultural research. J. Cross Cult. Psychol. 1 (3), 185–216.
- Bufquin, D., Park, J.-Y., Back, R.M., de Souza Meira, J.V., Hight, S.K., 2021. Employee work status, mental health, substance use, and career turnover intentions: An examination of restaurant employees during COVID-19. Int. J. Hosp. Manag. 93, 102764.

Cepeda, G., Nitzl, C., Roldán, J.L., 2017. Mediation analyses in partial least squares structural equation modeling: guidelines and empirical examples. In: Latan, H., Noonan, R. (Eds.), Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications (173–195). Springer, Heidelberg.

- Chen, H., Eyoun, K., 2021. Do mindfulness and perceived organizational support work? Fear of COVID-19 on restaurant frontline employees' job insecurity and emotional exhaustion. Int. J. Hosp. Manag. 94, 102850.
- Chen, H.T., Wang, C.H., 2019. Incivility, satisfaction and turnover intention of tourist hotel chefs. Int. J. Contemp. Hosp. Manag. 31 (5), 2034–2053.
- Cheng, J.-C., O-Yang, Y., 2018. Hotel employee job crafting, burnout, and satisfaction: the moderating role of perceived organizational support. Int. J. Hosp. Manag. 72, 78–85.
- Cheng, T.M., Hong, C.Y., Zhong, Z.F., 2022. Tourism employees' fear of COVID-19 and its effect on work outcomes: The role of organizational support. Curr. Issues Tour. 25 (2), 319–337.
- Chi, C.G., Gursoy, D., 2009. Employee satisfaction, customer satisfaction, and financial performance: an empirical examination. Int. J. Hosp. Manag. 28 (2), 245–253.
- Choi, H.-M., Mohammad, A.A., Kim, W.G., 2019. Understanding hotel frontline employees' emotional intelligence, emotional labor, job stress, coping strategies and burnout. Int. J. Hosp. Manag. 82, 199–208.
- Cohen, J., 1988. Statistical power analysis for the behavioural sciences. Laurence Erlbaum Assoc.
- Collings, D.G., Nyberg, A.J., Wright, P.M., McMackin, J., 2021. Leading through paradox in a COVID-19 world: Human resources comes of age. Hum. Resour. Manag. J. 31 (4), 819–833.
- Conway, E., Fu, N., Monks, K., Alfes, K., Bailey, C., 2016. Demands or resources? The relationship between HR practices, employee engagement, and emotional exhaustion within a hybrid model of employment relations. Hum. Resour. Manag. 55 (5), 901–917.
- Cordes, C.L., Dougherty, T.W., 1993. A review and an integration of research on job burnout. Acad. Manag. Rev. 18 (4), 621–656.
- Cropanzano, R., Mitchell, M.S., 2005. Social exchange theory: an interdisciplinary review. J. Manag. 31 (6), 874–900.
- Delery, J.E., Doty, D.H., 1996. Modes of theorizing in strategic human resource management: tests of universalistic, contingency, and configurational performance predictions. Acad. Manag. J. 39, 802–835.

#### D. Dorta-Afonso et al.

#### International Journal of Hospitality Management 108 (2023) 103364

Demerouti, E., Bakker, A.B., Nachreiner, F., Schaufeli, W.B., 2001. The job demandsresources model of burnout. J. Appl. Psychol. 86 (3), 499–512.

Dhar, R.L., 2015. The effects of high performance human resource practices on service innovative behaviour. Int. J. Hosp. Manag, 51, 67–75.

- Dijkstra, T.K., Henseler, J., 2015. Consistent partial least squares path modeling. MIS Q. 39 (2), 297–316.
- Dorta-Afonso, D. (2019). A longitudinal approach to team adaptation through the twophase framework: The role of team leadership, coordination, behavioral interaction patterns and team cognition on team adaptation when facing changes of different magnitude [Doctoral Dissertation]. Universidad Autónoma de Madrid.
- Dorta-Afonso, D., González-de-la-Rosa, M., 2022. High-performance work systems. In: Buhalis, D. (Ed.), Encyclopedia of Tourism Management and Marketing. Edward Elgar Publishing.

Dorta-Afonso, D., González-de-la-Rosa, M., García-Rodríguez, F.J., Romero-Domínguez, L., 2021. Effects of high-performance work systems (HPWS) on hospitality employees' outcomes through their organizational commitment, motivation, and job satisfaction. Sustainability 13 (6), 3226.

- Edwards, J.R., 1992. A cybernetic theory of stress, coping, and well-being in organizations. Acad. Manag. Rev. 17 (2), 238–274.
- Eisenberger, R., Huntington, R., Hutchison, S., Sowa, D., 1986. Perceived organizational support. J. Appl. Psychol. 71 (3), 500–507.
- Eisenberger, R., Rhoades Shanock, L., Wen, X., 2020. Perceived organizational support: why caring about employees counts. Annu. Rev. Organ. Psychol. Organ. Behav. 7, 101–124.

Exceltur. (2018). Estudio de Impacto Económico del Turismo: IMPACTUR Canarias 2018.

Fabi, B., Lacoursière, R., Raymond, L., 2015. Impact of high-performance work systems on job satisfaction, organizational commitment, and intention to quit in Canadian organizations. Int. J. Manpow. 36 (5), 772–790.

- Fan, D., Cui, L., Zhang, M.M., Zhu, C.J., Härtel, C.E., Nyland, C., 2014. Influence of high performance work systems on employee subjective well-being and job burnout: empirical evidence from the Chinese healthcare sector. Int. J. Hum. Resour. Manag. 25 (7), 931–950.
- Faul, F., Erdfelder, E., Lang, A.-G., Buchner, A., 2007. G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav. Res. Methods 39 (2), 175–191.

Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Mark. Res. 18 (1), 39–50.

García-Chas, R., Neira-Fontela, E., Varela-Neira, C., 2014. High-performance work systems and job satisfaction: a multilevel model. J. Manag. Psychol. 31 (2), 451–466.

García-Rodríguez, F.J., Dorta-Afonso, D., González-de-la-Rosa, M., 2020. Hospitality diversity management and job satisfaction: the mediating role of organizational commitment across individual differences. Int. J. Hosp. Manag. 21, 102698 https:// doi.org/10.1016/j.ijhm.2020.102698.

Gordon, S., Adler, H., 2022. Challenging or hindering? Understanding the daily effects of work stressors on hotel employees' work engagement and job satisfaction. Int. J. Hosp. Manag. 103, 103211.

Guerci, M., Hauff, S., Gilardi, S., 2022. -.High performance work practices and their associations with health, happiness and relational well-being: are there any tradeoffs? Int. J. Hum. Resour. Manag. 33 (2), 329–359.
Haider, S., De-Pablos-Heredero, C., De-Pablos-Heredero, M., 2020. A three-wave

Haider, S., De-Pablos-Heredero, C., De-Pablos-Heredero, M., 2020. A three-wave longitudinal study of moderated mediation between high-performance work systems and employee job satisfaction: the role of relational coordination and peer justice climate. Front. Psychol. 11, 792.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., 2017. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 2nd ed..., SAGE Publications,

Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M., 2019. When to use and how to report the results of PLS-SEM. Eur. Bus. Rev. 31 (1), 2–24.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S., 2021. Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook, first ed. Springer.

Henseler, J., Ringle, C.M., Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Mark. Sci. 43 (1), 115–135.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). The motivation to work (2nd ed.). John Wiley & Sons.

Huang, Y.H., Lee, J., McFadden, A.C., Murphy, L.A., Robertson, M.M., Cheung, J.H., Zohar, D., 2016. Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. Appl. Ergon. 55, 248–257.

Huertas-Valdivia, I., Llorens-Montes, F.J., Ruiz-Moreno, A., 2018. Achieving engagement among hospitality employeeS: A serial mediation model. Int. J. Contemp. Hosp. Manag. 30 (1), 217–241.

Huertas-Valdivia, I., Gallego-Burín, A.R., Castillo, A., Ruiz, L., 2021. Why don't highperformance work systems always achieve superior service in hospitality? The key is servant leadership. J. Hosp. Tour. Manag. 49, 152–163.

Hussien, F.M., Ibrahim, Y., Naser, H.A., 2021. The impact of human resource management practices on job satisfaction and affective commitment in Hurghada resort hotels. J. Hosp. Tour. Insights, Ahead–Print.

Jaiswal, D., Tyagi, A., 2019. Effect of high performance work practices on service innovative behavior. Tour. Rev. 75 (2), 382–401.

Jiang, K., Lepak, D.P., Hu, J., Baer, J.C., 2012. How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. Acad. Manag. J. 55 (6), 1264–1294.

Jyoti, J., Rani, A., 2019. Role of burnout and mentoring between high performance work system and intention to leave: Moderated mediation model. J. Bus. Res. 98, 166–176. Kang, S.-E., Park, C., Lee, C.-K., Lee, S., 2021. The stress-induced impact of COVID-19 on tourism and hospitality workers. Sustainability 13 (3), 1327.

Karatepe, O.M., 2013a. High-performance work practices and hotel employee performance: the mediation of work engagement. Int. J. Hosp. Manag. 32, 132–140.

Karatepe, O.M., 2013b. High-performance work practices, work social support and their effects on job embeddedness and turnover intentions. Int. J. Contemp. Hosp. Manag. 25, 903–921.

Karatepe, O.M., 2015. High-performance work practices, perceived organizational support, and their effects on job outcomes: test of a mediational model. Int. J. Hosp. Tour. Adm. 16 (3), 203–223.

Karatepe, O.M., Olugbade, O.A., 2016. The mediating role of work engagement in the relationship between high-performance work practices and job outcomes of employees in Nigeria. Int. J. Contemp. Hosp. Manag. 28 (10), 2350–2371.

Karatepe, O.M., Uludag, O., 2007. Conflict, exhaustion, and motivation: a study of frontline employees in Northern Cyprus hotels. Int. J. Hosp. Manag. 26 (3), 645–665. Karatepe, O.M., Vatankhah, S., 2014. The effects of high-performance work practices and

job embeddedness on flight attendants' performance outcomes. J. Air Transp. Manag. 37, 27–35.

Kloutsniotis, P.V., Mihail, D.M., 2018. The link between perceived high-performance work practices, employee attitudes and service quality: the mediating and moderating role of trust. Empl. Relat. 40 (5), 801–821.

Kloutsiniotis, P.V., Mihail, D.M., 2020a. High performance work systems in the tourism and hospitality industry: a critical review. Int. J. Contemp. Hosp. Manag. 32 (7), 2365–2395.

Kloutsiniotis, P.V., Mihail, D.M., 2020b. Is it worth it? Linking perceived highperformance work systems and emotional exhaustion: the mediating role of job demands and job resources. Eur. Manag. J. 38 (4), 565–579.

Kloutsiniotis, P.V., Mihail, D.M., 2020c. The effects of high performance work systems in employees' service-oriented OCB. Int. J. Hosp. Manag. 90, 102610.

Kloutsiniotis, P.V., Katou, A.A., Mihail, D.M., 2021. Examining the "dark-side" of high performance work systems in the Greek manufacturing sector. Empl. Relat.: Int. J. Kloutsiniotis, P.V., Mihail, D.M., Mylonas, N., Pateli, A., 2022. Transformational

Routsmons, P.V., Minar, D.M., Mytonas, N., Paten, A., 2022. Transformational leadership, HRM practices and burnout during the COVID-19 pandemic: the role of personal stress, anxiety, and workplace loneliness. Int. J. Hosp. Manag. 102, 103177.

Kock, N., 2015. Common method bias in PLS-SEM: A full collinearity assessment approach. Int. J. e-Collab. IJEC 11 (4), 1–10.

Kock, N., Lynn, G., 2012. Lateral collinearity and misleading results in variance-based SEM: an illustration and recommendations. J. Assoc. Inf. Syst. 13 (7), 546–580.

Kong, H., Wang, S., & Fu, X. (2015). Meeting career expectation: Can it enhance job satisfaction of Generation Y? International Journal of Contemporary Hospitality Management, 27(1), 147–168.

Kong, H., Jiang, X., Chan, W., Zhou, X., 2018. Job satisfaction research in the field of hospitality and tourism. Int. J. Contemp. Hosp. Manag. 30 (5), 2178–2194.

Koo, B., Yu, J., Chua, B.-L., Lee, S., Han, H., 2020. Relationships among emotional and material rewards, job satisfaction, burnout, affective commitment, job performance, and turnover intention in the hotel industry. J. Qual. Assur. Hosp. Tour. 21 (4), 371–401.

Kroon, B., Van de Voorde, K., Van Veldhoven, M., 2009. Cross-level effects of highperformance work practices on burnout: two counteracting mediating mechanisms compared. Pers. Rev. 38 (5), 509–525.

Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A., Adis, C.S., 2017. Perceived organizational support: a meta-analytic evaluation of organizational support theory. J. Manag. 43 (6), 1854–1884.

Latorre, F., Guest, D., Ramos, J., Gracia, F.J., 2016. High commitment HR practices, the employment relationship and job performance: a test of a mediation model. Eur. Manag. J. 34 (4), 328–337.

Lee, J.S., Back, K.J., Chan, E.S., 2015. Quality of work life and job satisfaction among frontline hotel employees: a self-determination and need satisfaction theory approach. Int. J. Contemp. Hosp. Manag. 27 (5), 768–789.

Locke, E.A., 1969. What is job satisfaction? Organ. Behav. Hum. Perform. 4 (4), 309-336.

Macky, K., Boxall, P., 2007. The relationship between 'high-performance work practices' and employee attitudes: An investigation of additive and interaction effects. Int. J. Hum. Resour. Manag. 18 (4), 537–567.

Maslach, C., Leiter, M.P., 2016. Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry 15 (2), 103–111.

Maslach, C., Schaufeli, W.B., Leiter, M.P., 2001. Job burnout. Annu. Rev. Psychol. 52 (1), 397–422.

Messersmith, J.G., Patel, P.C., Lepak, D.P., Gould-Williams, J.S., 2011. Unlocking the black box: exploring the link between high-performance work systems and performance. J. Appl. Psychol. 96 (6), 1105–1118.

Molero Jurado, M.D.M., Pérez-Fuentes, M.D.C., Gázquez Linares, J.J.G., Simón Márquez, M.D.M., Martos Martínez, Á., 2018. Burnout risk and protection factors in certified nursing aides. *Int. J. Environ. Res. Public* Health 15 (6), 1116.

Moore, J.E., 2000. Why is this happening? A causal attribution approach to work exhaustion consequences. Acad. Manag. Rev. 25 (2), 335–349.

Moreno-Jiménez, B., Rodríguez-Carvajal, R., Escobar Redonda, E., 2001. La evaluación del burnout profesional. Factorialización del MBI-GS. Un análisis preliminar. Ansiedad Y. Estrés 7 (1), 69–78.

Murphy, K., Torres, E., Ingram, W., Hutchinson, J., 2018. A review of high performance work practices (HPWPs) literature and recommendations for future research in the hospitality industry. Int. J. Contemp. Hosp. Manag. 30 (1), 365–388.

Nemteanu, M.-S., Dabija, D.-C., 2021. The influence of internal marketing and job satisfaction on task performance and counterproductive work behavior in an emerging marketing during the COVID-19 Pandemic. Int. J. Environ. Res. Public Health 18 (7), 3670.

#### D. Dorta-Afonso et al.

- Ngoc, Su, D., Luc Tra, D., Thi, Huynh, H.M., Nguyen, H.H.T., O'Mahony, B., 2021. Enhancing resilience in the COVID-19 crisis: lessons from human resource management practices in Vietnam. Curr. Issues Tour. 24 (22), 3189–3205.
- Nitzl, C., Roldan, J.L., Cepeda, G., 2016. Mediation analysis in partial least squares path modeling: helping researchers discuss more sophisticated models. Ind. Manag. Data Syst. 119 (9), 1849–1864.
- Nunnally, J.C., Bernstein, I.H., 1994. Psychometric Theory. McGraw-Hill, New York.
- Ogbonnaya, C., Messersmith, J., 2019. Employee performance, well-being, and differential effects of human resource management subdimensions: mutual gains or conflicting outcomes? Hum. Resour. Manag. J. 29 (3), 509–526.
- Oppenauer, V., Van De Voorde, K., 2018. Exploring the relationships between high involvement work system practices, work demands and emotional exhaustion: a multi-level study. Int. J. Hum. Resour. Manag. 29 (2), 311–337.
- Page, S.J., Bentley, T., Teo, S., Ladkin, A., 2018. The dark side of high performance human resource practices in the visitor economy. Int. J. Hosp. Manag. 74, 122–129.
  Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., Podsakoff, N.P., 2003. Common method
- biases in behavioral research: a critical review of the literature and recommended remedies. J. Appl. Psychol. 88 (5), 879.
- Prieto, I.M., Pérez-Santana, M.P., 2014. Managing innovative work behavior: the role of human resource practices. Pers. Rev. 43 (2), 184–208.
- Qi, W., Enhua, H., Jiandong, S., Hongmei, S., 2021. Double-edged sword effect of highperformance work system on employee well-being — moderating effect of union practice. Front. Psychol. 12, 619345.
- Rabiul, M.K., Patwary, A.K., Panha, I., 2021. The role of servant leadership, self-efficacy, high performance work systems, and work engagement in increasing serviceoriented behavior. J. Hosp. Mark. Manag. 31 (4), 504–526.
- de Reuver, R., Van de Voorde, K., Kilroy, S., 2021. When do bundles of high performance work systems reduce employee absenteeism? The moderating role of workload. Int. J. Hum. Resour. Manag. 32 (13), 2889–2909.
- Rhoades, L., Eisenberger, R., 2002. Perceived organizational support: a review of the literature. J. Appl. Psychol. 87 (4), 698–714.
- Rico, R., Uitdewilligen, S., Dorta-Afonso, D., 2021. Patterns of team adaptation: the effects of behavioural interaction patterns on team adaptation and the antecedent effect of empowering versus directive leadership. J. Contingencies Crisis Manag. 1–14.
- Ringle, C.M., Sarstedt, M., Mitchell, R., Gudergan, S.P., 2020. Partial least squares structural equation modeling in HRM research. *The*. Int. J. Hum. Resour. Manag. 31 (12), 1617–1643.
- Safavi, H.P., Karatepe, O.M., 2018. High-performance work practices and hotel employee outcomes: the mediating role of career adaptability. Int. J. Contemp. Hosp. Manag. 30, 1112–1133.
- Sanon, M., 2013. Hotel housekeeping work influences on hypertension management. Am. J. Ind. Med. 56 (12), 1402–1413.
- Schaufeli, W.B., Leiter, M.P., Maslach, C., Jackson, S.E., 1996. The MBI-General survery (MBI-GS). In: Maslach, C., Jackson, S.E., Leiter, M.P. (Eds.), Maslach Burnout Inventory Manual. Consulting Psychologists Press.
- Shapoval, V., 2019. Organizational injustice and emotional labor of hotel front-line employees. Int. J. Hosp. Manag. 78, 112–121.
- Silva, C.T., Hakim, M.P., Zanetta, L.D., Pinheiro, G.S.D.D., Gemma, S.F.B., da Cunha, D. T., 2021. Burnout and food safety: understanding the role of job satisfaction and menu complexity in foodservice. Int. J. Hosp. Manag. 92, 102705.
- Stamolampros, P., Korfiatis, N., Chalvatzis, K., Buhalis, D., 2019. Job satisfaction and employee turnover determinants in high contact services: insights from employees' online reviews. Tour. Manag. 75, 130–147.

- Suazo, M.M., 2009. The mediating role of psychological contract violation on the relations between psychological contract breach and work-related attitudes and behaviors. J. Manag. Psychol. 24 (2), 136–160.
- Sun, L.-Y., Aryee, S., Law, K.S., 2007. High-performance human resource practices, citizenship behavior, and organizational performance: a relational perspective. Acad. Manag. J. 50, 558–577.
- Teo, S.T., Bentley, T., Nguyen, D., 2020. Psychosocial work environment, work engagement, and employee commitment: a moderated, mediation model. Int. J. Hosp. Manag. 88, 102415.
- Teoh, K.R.H., Coyne, I., Devonish, D., Leather, P., Zarola, A., 2016. The interaction between supportive and unsupportive manager behaviors on employee work attitudes. Pers. Rev. 45 (6), 1386–1402.
- Topcic, M., Baum, M., Kabst, R., 2016. Are high-performance work practices related to individually perceived stress? A job demands-resources perspective. Int. J. Hum. Resour. Manag. 27 (1), 45–66.
- Tsui, P.-L., 2021. Would organizational climate and job stress affect wellness? An empirical study on the hospitality industry in Taiwan during COVID-19. Int. J. Environ. Res. Public Health 18 (19), 10491.
- Uysal, M., Sirgy, M.J., Woo, E., Kim, H.L., 2016. Quality of life (QOL) and well-being research in tourism. Tour. Manag. 53, 244–261.
- Van De Voorde, K., Paauwe, J., Van Veldhoven, M., 2012. Employee well-being and the HRM–organizational performance relationship: a review of quantitative studies. Int. J. Manag. Rev. 14 (4), 391–407.
- Wei, Y.C., Han, T.S., Hsu, I.C., 2010. High-performance HR practices and OCB: a crosslevel investigation of a causal path. Int. J. Hum. Resour. Manag. 21 (10), 1631–1648.
- Wong, I.A., Xu, S., Chan, S.H.G., He, M., 2019. A cross-level investigation of the role of human resources practices: Does brand equity matter? Tour. Manag. 75, 418–426.
- Wood, S., Van, Veldhoven, M., Croon, M., de Menezes, L.M., 2012. Enriched job design, high involvement management and organizational performance: the mediating roles of job satisfaction and well-being. Hum. Relat. 65 (4), 419–445.
- Wright, R.T., Campbell, D.E., Thatcher, J.B., Roberts, N., 2012. Operationalizing multidimensional constructs in structural equation modeling: recommendations for IS research. Commun. Assoc. Inf. Syst. 30 (1), 23.
- Yang, J., Kim, Y., Kim, P.B., 2021. Pushing forward high-performance work systems in the hotel industry: a procedural-justice climate to promote higher unit-level outcomes. Tour. Manag. 87, 104385.
- Zacharatos, A., Barling, J., Iverson, R.D., 2005. High-performance work systems and occupational safety. J. Appl. Psychol. 90 (1), 77–93.
- Zhang, B., Morris, J.L., 2014. High-performance work systems and organizational performance: Testing the mediation role of employee outcomes using evidence from PR China. Int. J. Hum. Resour. Manag. 25 (1), 68–90.
- Zhiqiang, M., Khan, H.S., Chughtai, M.S., Mingxing, L., 2021. Re-engineering the human resource strategies amid and post-pandemic crisis: Probing into the moderated mediation model of the high-performance work practices and employee's outcomes. Front. Psychol. 12, 710266.
- Zhong, L., Wayne, S.J., Liden, R.C., 2016. Job engagement, perceived organizational support, high-performance human resource practices, and cultural value orientations: a cross-level investigation. J. Organ. Behav. 37, 823–844.
- Zopiatis, A., Constanti, P., Theocharous, A.L., 2014. Job involvement, commitment, satisfaction and turnover: evidence from hotel employees in Cyprus. Tour. Manag. 41, 129–140.