



Do job insecurity, anxiety and depression caused by the COVID-19 pandemic influence hotel employees' self-rated task performance? The moderating role of employee resilience

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ABSTRACT

The COVID-19 health disaster has had a dramatic impact on the global hospitality industry, affecting millions of people. The aim of this study is to examine the impact of job insecurity on hotel employees' anxiety and depression, and whether these psychological strains could influence employees' self-rated task performance during the COVID-19 pandemic. We also examine the moderating role of hotel employees' resilience in this context.

The hypotheses were examined by collecting data from 353 hotel employees currently working in the Canary Islands (Spain). The results highlight the significant effects of job insecurity on employees' anxiety and depression levels. However, hotel employees' task performance was not affected by their job insecurity or by their anxiety and depression. In addition, employees' resilience has a moderating effect as it reduces the negative influence of job insecurity on depression. Finally, the discussion section sets out various theoretical and practical implications of the findings.

1. Introduction

Little is yet known about the effects of COVID-19 on the behavior and performance of employees in the tourism sector. Other disasters and crises such as SARS, MERS and the Global Financial Crisis did not have the long-lasting effects on the global community that a unique pandemic like COVID-19 will have on physical and financial environments across the world.

The COVID-19 pandemic has changed the world and has impacted heavily on every industry, including the international travel, tourism and hospitality industry. With more than 8 million confirmed cases and 437,000 deaths worldwide by the second week of June 2020, the economic and social impact of the COVID-19 pandemic across the world is without precedent. In Spain, the number of confirmed cases has been growing exponentially since the end of February, with 27,136 deaths by 7th June 2020 according to the official figures. To combat the pandemic, the Spanish Government implemented a series of measures and declared

a state of emergency, lasting from 13th March to the middle of June 2020. During this period, all school and university classes were cancelled, events and non-essential travel were forbidden, employees were encouraged to work remotely and hotels and restaurants were closed. However, it is unclear how these measures will impact on people's economic, physical and mental well-being, as well as on employees' future task performance.

The tourism, hospitality and travel industry is one of the world's largest employers, together with the energy industry. In the Canary Islands, more than 45% of the GDP comes from tourism. As a result of this health disaster and the uncertain outlook for the tourism industry with the prospect of falling demand, hotel employees are facing job insecurity and are consequently having to cope with high levels of daily stress that affect their psychological well-being and increase their anxiety and depression levels. This situation of the Covid-19 pandemic has made the issue more pertinent and we need to study if there is any change of the average levels of these constructs in the population.

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Traditionally, research on the hotel industry has concentrated on identifying and minimizing negative factors related to work stress in an organization (Hodari et al., 2014; O'Neill and Davis, 2011). More recently, Darvishmotevali et al. (2017) pointed out that in spite of the multiple studies conducted to analyze strategies to cope with stress in the hospitality industry, limited research is available on the moderators of job insecurity.

In response to the lack of research in this area, and to fill this gap, this study tries to extend the knowledge of the link between job insecurity and job performance (task performance) during the COVID-19 pandemic by exploring the potential mediating mechanism of psychological strains (anxiety and depression) and examining the moderating influence of psychological advantages (resilience) in the aforementioned relationship using the conservation of resources (COR) theory and the job demand resources theory (JD-R). Also, our research attempts to answer Karatepe's (2013) call for cross-cultural research in future studies.

Regarding the concept of Resilience, some authors (Brand and Jax, 2007; Linnenluecke, 2017) consider that this concept has different meanings across disciplines and very recently, based on this limitation, DesJardine et al. (2019) pointed out that the application of resilience to management studies is inconsistent. For example, Kyle (1985) studied resilience from the economics perspective as the ability of markets to recover from a liquidity shock; Hollnagel et al. (2006) focused on the perspective of resilience related to the ability of engineering structures to withstand environmental disasters such as floods or earthquakes; Rutter (1987) studied resilience as the psychological ability of people to recuperate from environmental stressors; and, Holling (2001) focused on the socioecological perspective of resilience as the reactions of societies, ecosystems and organizations to changes in the environment. However, from the management discipline, most of the research on resilience draws from positive psychology at the individual level of analysis and it have found that employees' resilience contributed to organizational commitment and job satisfaction (Youssef and Luthans, 2007) and commitment to change (Shin et al., 2012).

Therefore, focusing on the workforce in the hospitality sector within the context of Spain, the aim of this study is to examine the impact that job insecurity related to the COVID-19 pandemic and the resulting economic crisis can have on hotel employees' anxiety and depression. More specifically, this research assesses the influence of these psychological strains (anxiety and depression) on employees' self-rated task performance. We then examine the moderating role of employees' resilience in these relationships. Our study analyzes data from 353 hotel employees collected in the touristic region of the Canary Islands during the state of emergency in Spain caused by the COVID-19 disaster. Finally, we explain our conclusions, limitations and lines of future research. The findings of this study suggest important implications for the Spanish tourism industry as it confronts important unemployment problems.

2. Literature review: Theoretical framework and hypothesis

2.1. Job insecurity and job performance

Many authors have defined job insecurity as the employees' expectations that they will continue in their job (Van Vuuren and Klander-mans, 1990; Heaney et al., 1994; Davy et al., 1997; De Witte, 1999; and Sverke et al., 2002) while other authors define job insecurity as employees' perceptions regarding the probability of losing their job in times of crisis (Mohr, 2000).

According to the theory of job adaptation (Hulin, 1991), employees try to alleviate their job dissatisfaction through several job adaptation responses. In this sense, various studies (Davy et al., 1997; Probst, 2000, 2002), have indicated the different ways that employees tend to withdraw from their work in the face of job-related stressors, such as being less satisfied with their work, being less committed to their organization and having a stronger intention to leave their job. Specifically, when

studying job performance, Han et al. (2007) showed that job performance can be divided into four separate structures: technical core (task performance), citizenship climate (contextual performance), learning process (learning performance) and innovative behavior (innovative performance). More specifically, according to Qin and Jiang (2011), task performance refers to the behaviors or outcomes of employees which contribute to the fulfilment of the organization's objectives at the technical core level based on the instructions and the responsibilities outlined in the job description.

Two different meta-analyses (Sverke et al., 2002; Cheng and Chan, 2008) have concluded that there is a negative association between job insecurity and employees' in-role performance, job satisfaction, job involvement, organizational trust and commitment. Thus, job insecurity has been found to be negatively related to different job outcomes (Wang et al., 2015; Zheng et al., 2014). Similarly, job insecurity is negatively associated with job performance (Cheng and Chan, 2008; Gilboa et al., 2008), and specifically it has a negative effect on in-role performance (Schreurs et al., 2012). Some authors also argued that seasonal employees have higher perceived levels of job insecurity compared to permanent workers (Ünsal-Akbiyik et al., 2012).

However, some studies (Ashford et al., 1989) did not find any significant association and a few of them (Probst et al., 2007; Staufenbiel and König, 2010) even reported a positive relationship between job insecurity and job performance. For instance, for Staufenbiel and König (2010) job insecurity can actually affect employees' in-role performance in the opposite way (i.e. a suppressor effect) because when employees perceive insecurity in their jobs, they might be motivated to work harder in order to make themselves more valuable to the organization.

Therefore, such inconsistent findings suggest the existence of some moderating variables that could mitigate or even reverse the negative influence of job insecurity on job performance. In line with this, Wu (2011) studied the moderating role that individual emotional intelligence can play in reducing the effects of job stress on job performance. Thus, Schreurs et al. (2012) examined the moderating role of social support (e.g. supervisor and colleague support) in the relationship between job insecurity and employee performance.

According to the conservation of resources (COR) theory, individual characteristics and social support can be considered as resources that help to minimize the effects of stressors (i.e. job insecurity) on performance outcomes (i.e. task performance). In addition, support from supervisors and coworkers can reduce the negative effects of job insecurity on performance outcomes (Schreurs et al., 2012). Thus, following Staufenbiel and König's (2010), during an economic crisis provoked by a health disaster, it is expected that hotel employees will be more motivated to perform their job while strictly adhering to the specific procedures in place to minimize the risk of infection for themselves, their coworkers and the customers and, therefore, hotel employees are more likely to deal with stressful conditions (i.e. job insecurity) without it affecting their task performance. Similarly, in the current study, it is assumed that hotel employees' **self-rated performance** is not directly affected by the job insecurity, but rather by other factors which are discussed below.

Based on this, we hypothesized that:

H1. Hotel employees' job insecurity does not influence self-rated task performance during the early stages of the COVID-19 pandemic.

2.2. Job insecurity and psychological strains (PS)

Job insecurity is considered to be one of the most common job stressors (Ashford et al., 1989; Probst, 2002; Sverke et al., 2002) associated with negative psychological and physical health (Crandall and Perrewe, 1995; Quick and Tetrick, 2003).

The job demands-resources (JD-R) model theory is a work stress model, which proposes that strain (i.e. anxiety or depression) is the result of a lack of balance between job demands (i.e. job insecurity) and

job resources (i.e. supervisory support). Other examples of job demands are high work pressure, unsafe physical environment (i.e. risks in the physical hotel environment due to COVID-19 issues) and irregular working hours. Moreover, job demands may turn into job stressors when meeting those demands requires high levels of employees' efforts to the extent that they find it difficult to recover (Meijman and Mulder, 1998). On the subject of job resources, Demerouti and Bakker (2011) pointed out that Job resources may be located at the macro, organizational level, the interpersonal level, the specific job position, and at the level of the task.

During the COVID-19 crisis, job resources at the organizational level (i.e. job security) focus mainly on the physical, social or organizational features of the work that help employees to minimize the negative effect of job demands (i.e. job insecurity) and their consequences (i.e. anxiety and depression). According to the COR theory (Hobfoll, 1989), people experience stress when they don't have resources available. However, when people have personal resources (e.g. self-esteem, resilience or intrinsic motivation) and social resources (e.g. support from family, coworkers or supervisors), they can reduce the negative effects of their work.

Also regarding work stress, Elitharp (2005) argued that stress has both negative and positive consequences, with strain being one of the negative results of stress. Some authors (Cartwright and Cooper, 2009) define strain as serious physiological and psychological harmful reactions to the stressors, which can lead to chronic problems and reduce physical wellbeing. Consistent with the JD-R theory, certain changes to workplace conditions (such as those caused by the COVID-19 health disaster) may create additional stressors, thereby reducing employees' physical and mental resources and increasing their probability of psychological strains (PS). Previous literature has evidenced this positive relationship between job insecurity (JI) and psychological strains (PS) resulting in poor health outcomes (Burgard et al., 2009; Witte, 2010; Burgard et al., 2012). More recently, Gazzaniga et al. (2015) asserted that the psychological reaction of employees to short-term stress resulting from job insecurity could include depression, anxiety and tension, while reactions to long-term stress could lead to serious mental and physical problems, like emotional exhaustion (Li et al., 2010).

In the specific context of the hospitality industry, some authors have documented the undesired effect of job stress (Deery and Jago, 2015; Gill et al., 2006; Kuruziim et al., 2008). Effects such as anxiety and depression are emotional effects which are perceived as being psychological consequences of an individual's exposure to job stress (Gill et al., 2006; Hobfoll and Shirom, 2000). Also in this context, Karatepe (2012) pointed out that when employees are confronted with excessive job demands (i.e. job insecurity) and cannot manage the conflict between work and family roles, they experience emotional exhaustion (EE). More recently, Darvishmotevali et al. (2017) conducted a study in the hospitality industry and found that job insecurity was associated with job exhaustion. They also examined the mediating role of PS (in relation to the variables Anxiety and Emotional Exhaustion) on the job insecurity–job performance relationship. Therefore, we propose that the psychological reaction caused by hotel employees' job insecurity during a stressful period (e.g. the risk of infection of COVID-19 and the closure of hotels over a period of several months due to the pandemic) could include depression and anxiety.

Hence, the following hypotheses are proposed:

H2. Job insecurity creates a higher level of anxiety among hotel employees during the early stages of the COVID-19 pandemic.

H3. Job insecurity creates a higher level of depression among hotel employees during the early stages of the COVID-19 pandemic

2.3. Job insecurity, psychological strains and task performance

As mentioned before, according to the conservation of resources theory (COR), and the job demand resource (JD-R) model, the presence

of job demands (e.g. job insecurity) can cause emotional exhaustion, leading to negative employee outcomes such as lower task performance (Bakker and Demerouti, 2007; Hakonen et al., 2006). Related to that, some authors have demonstrated that prolonged job stress can cause dysfunction at work (Kim, 2008), including poor performance in the service delivery process and lower task performance (Karatepe, 2012).

Different studies support the theory that employee's emotional state and psychological health affect their task performance in different ways. On the one hand, the emotional state affects the workers' cognitive abilities and, on the other hand, their motivation. With regards to the first influence, many authors (Austin et al., 2001; Dalglish et al., 2007; Eysenck et al., 2007) have shown that poor psychological health contributes to cognitive deficits that affect work performance. Accordingly, when people are in situations that cause them depression or anxiety, these negative feelings could also reduce their cognitive resources at work, which, in turn, could negatively influence their task performance (Beal et al., 2005; Ford et al., 2011).

However, when exploring the relationship between emotional exhaustion (EE) and job performance, there are mixed findings within the different economic sectors. For example, in a study of software professionals in India, Advani, Garg, Jagdale & Kumar (2005) showed that EE had a strong positive effect on job performance. By contrast, in a study conducted among Portuguese salespeople, Castanheira and Chambel (2010) concluded that EE didn't have an influence on in-role performance. Nevertheless, different results were found with regards to frontline hotel employees' performance in different countries. For instance, Karatepe and Uludag (2007) demonstrated that EE had a high influence on job performance in Northern Cyprus but the opposite was true in Nigeria (Karatepe and Aleshinloye, 2009). Furthermore, Karatepe (2011) found that exhaustion mitigated in-role performance among frontline hotel employees in Iran. Such mixed findings justified Karatepe's (2013) call for more cross-cultural research regarding the relationship between emotional exhaustion and job performance.

Different studies have shown that PS play a significant mediating role in the relationships between stressful work and turnover (Croon et al., 2004), between job demands and job performance (Lang et al., 2007) and between job discrepancy and job burnout (Khalid and Naem, 2013). However, in spite of the various studies conducted on strategies to cope with stress in the hospitality industry, limited research is available on the mediating effects of the psychological strains (PS) on the direct relationship between job insecurity and task performance. To address this lack of research, Darvishmotevali et al. (2017) extended the study of the impact of job insecurity (JI) on job performance (JP) by exploring the potential mediation mechanism of PS. However, their results confirmed only the mediating role of anxiety in the relationship between the JI and JP but did not support the mediating role of emotional exhaustion (EE). Therefore, it has been suggested in the literature that job insecurity influences job performance indirectly through ANX and EE. While we posit earlier that job insecurity does not directly influence task performance, according to the above discussion, it is hypothesized that the relationship between hotel employees' job insecurity and task performance is indirect and mediated by anxiety and depression. These mediation hypotheses can be classified as indirect only mediations (Zhao, Lynch & Chen, 2010), due to the non-significant direct effect between independent variable and dependent variable. The hypotheses are as follows:

H4. Hotel employees' levels of anxiety negatively influence their self-rated task performance during the early stages of the COVID-19 pandemic.

H5. Hotel employees' depression levels negatively influence their self-rated task performance during the early stages of the COVID-19 pandemic.

H6. Job insecurity exerts an indirect negative effect on hotel employees' self-rated task performance due to anxiety during the early

stages of the COVID-19 pandemic.

H7. Job insecurity exerts an indirect negative effect on hotel employees' self-rated task performance due to depression during the early stages of the COVID-19 pandemic.

2.4. Resilience and task performance

With regards to the negative consequences of JI, we have mentioned several researchers who identified factors that could moderate these effects. Based on the COR theory, employees can cope with job stressors if they have adequate social and personal resources (Hagger, 2015; Siu et al., 2015).

Some authors define resilience as an attribute that can buffer the negative effect of stress. Accordingly, at the individual level, resilience is defined as a personal skill and as the ability to adapt to stressful situations (Chi et al., 2016). Similarly, Masten (2001) explained resilience as a human capacity of positive adaptation even in the context of risk, and other authors (Hu et al., 2015; Niitsu et al., 2017) have defined it as the capacity to recover from negative emotions and the ability to adapt to a constantly changing environment. Previously, Ryff and Singer (1996) pointed out that resilience is the ability to keep a high sense of well-being preventing disease and negative behaviors. Other studies like Connor and Davidson (2003) supported the idea that resilient employees would be able to maintain their physical and psychological health by avoiding the negative effects generated by times of crisis.

In the context of health care, Rushton et al. (2015) have shown that resilience protects employees from emotional exhaustion. Previously, Ngo et al. (2013) examined the effects of perceived job insecurity and psychological capital (i.e. hope, resilience and optimism) on employees' organizational commitment and job satisfaction in Hong Kong. Their results showed that perceived job insecurity had a significant negative effect on both organizational commitment and job satisfaction. Thus, as expected, the three components of psychological capital (i.e. hope, resilience and optimism) predicted better organizational commitment and job satisfaction. This study also showed that only resilience, rather than hope or optimism, moderated the relationships between perceived job insecurity and the attitudinal outcomes.

In the educational sector, Shoss et al. (2018) recently confirmed the moderating role of resilience by examining how it mitigates various negative consequences of job insecurity. They tested the moderating role of resilience during times of job insecurity in a cross-sectional study with a large sample of university employees in the United States and they found that resilience weakened the relationships between job insecurity and emotional exhaustion, cynicism and psychological contract breach.

However, one of the most up-to-date studies on resilience has been published by Anasori et al. (2020), who studied the effects of psychological distress, mindfulness, emotional exhaustion and workplace bullying. They refer to different schools of thought regarding the conceptualization of resilience: The first school considers resilience as a personality trait that represents characteristics that enable individuals to adapt to the situations they face (Connor and Davidson, 2003); while, the second school considers resilience to be the result of a dynamic process which changes are based on interactions between the person and the environment (Egeland et al., 1993).

In the tourism sector, Dai et al. (2019) very recently found that an employee's resilience can reduce their intention to leave and enhance their work engagement in travel agencies. They also found that abusive supervision has a moderating effect on the relationship between resilience and intention to leave. Previously, Hall et al. (2017) explained the important role of resilience in the mitigation and adaptation to the effects of disasters in the complex tourism system at the destination, organizational and individual level. Accordingly, at the individual level, our study proposes that hotel employees' level of resilience may act as a positive mechanism to moderate the harmful effect of stress derived from their job insecurity (e.g. anxiety and depression) and that it has a

positive influence on performance outcome (e.g. task performance) during the COVID-19 pandemic. Based on the above discussion and empirical results, the following hypotheses are established:

H8. Hotel employees' resilience reduces the negative effects of job insecurity on anxiety during the early stages of the COVID-19 pandemic.

H9. Hotel employees' resilience reduces the negative effects of job insecurity on depression during the early stages of the COVID-19 pandemic.

H10. Hotel employees' resilience positively influences self-rated task performance during the early stages of the COVID-19 pandemic.

3. Methodology

3.1. Context of the study

The context of the current study is the Canary islands archipelago in Spain and the data was collected between May and June 2020. In 2019, this Spanish archipelago received almost 15 millions of tourists (a total of 13,262,087 tourists who arrived in the Canary Islands from the rest of Spain and abroad representing the 87.07% and domestic tourism which rose to 1,715,111 tourists, of which 849,036 went to another island according to PROMOTUR Canarias, 2019). By countries in 2019, the United Kingdom with 4,149,104 passengers was top in the ranking of origin of tourists, followed by Germany with 2,651,547 and the Nordic countries with 1,375,914 travelers (Gran Canaria Tourist Board, accumulated in 2019 for the islands of Tenerife, Gran Canaria, Lanzarote and Fuerteventura).

Due to the Covid-19 pandemic, very recently, the Canary Islands Statistics Institute (INE, 2020) estimated that the archipelago's GDP could experience a historical drop of between 20.4% in the best-case scenario (9.5 million overnight stays until December 2020) and 35% in the worst-case scenario (1 million overnight stays until the end of 2020). These two scenarios are defined by three variables: the extension of the confinement period, delays in reestablishing air connections, and the reopening of hotels and other accommodation.

Until March 2020, the Canary Islands had an activity rate of 59.77% and the unemployment rate was 18.79% (INE, 2020). The empirical study was developed between May and the beginning of June of 2020 and the most recent data from the Canary Islands Employment Observatory (2020) show that 28,264 Employment Regulation Orders (ERTES) had been submitted since that date, of which 31.17% affected hospitality companies. This is highly indicative of the effect that the paralysis of the economic activity has had on the archipelago, especially for tourism.

3.2. Measures and data collection

Five constructs were investigated in the current study. All their measurement items were adopted or adapted from previous studies, including nine items of Job Insecurity from Lee et al. (2008); three items each for Anxiety and Depression from Warr (1990); three items for Task Performance from Williams and Anderson (1991) and 10 items of Resilience from Campbell-Sills and Stein (2007). All the items were measured using a 7-point Likert scale.

A total of 28 items measuring five constructs were then included in an online survey for hotel employees in the Canary Islands, Spain. The survey also contains information related to the demographic and work characteristics of the respondents. With a convenience sampling method, the invitation to participate in the online survey was sent to the main trade unions of the Canary Islands and specifically to the main trade unions of the hospitality sector (Comisiones Obreras and UGT). The survey was conducted in May 2020, the questionnaire was available from the 10th to 31st. A total of 353 hotel employees participated in the survey. All of the responses were valid and included for the testing of the

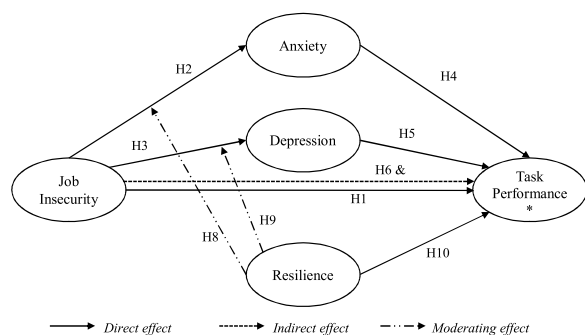


Fig. 1. The proposed structural model.

* Self-rated task performance is referred to as Task Performance.

proposed hypotheses.

The proposed hypotheses were examined using a structural equation modelling approach. The model and the proposed hypotheses are shown in Fig. 1. After the data screening, as discussed below, the CB-SEM approach was followed. The proposed structural model was built and tested in AMOS 26. The guiding principles provided by Hair et al. (2017) were followed to examine the model.

3.3. Respondents' profile

A total number of 353 respondents participated in this survey. Their profile is presented in Table 1 below. The majority of them (68.5%) were aged between 35 and 55, with diverse educational levels. The respondents had a reasonable amount of work experience in the hospitality sector, with an average of 18 years' experience. A high percentage of respondents worked in the housekeeping department (37.7%) or in restaurants and bars (21%). The majority of them were working in higher-rated hotels (i.e. 4 and 5 star hotels) and were employed on permanent contracts. Perhaps due to this, the results indicated a low to medium job insecurity level, with mean scores ranging from 2.39 to 3.53 (out of a 7-point Likert scale). They also indicated a fairly neutral level of anxiety (with mean scores ranging from 4.06 to 4.24) and a somewhat

Table 1
Respondents' profile.

	Frequency	Percentage	
Age	<25	7	2.0
	25 – 35	68	19.3
	35 – 45	124	35.1
	45 – 55	118	33.4
	>55	36	10.2
Children	Yes	155	43.9
	No	198	56.1
Education	No education	9	2.5
	Primary school	125	35.4
	Secondary school	73	20.7
	Comprehensive school/ Professional studies	93	26.3
	University and higher	53	15.0
Job experience	Average (years)	18.08	
	Reception	40	11.3
Working department	Restaurant/BAR	74	21.0
	Housekeeping	133	37.7
	Public Relations	3	0.8
	Others	103	29.2
Type of contract	Permanent contract	298	84.4
	Temporary Full-time contract	48	13.6
	Temporary Part-time contract	7	2.0
Hotel star	1	6	1.7
	2	9	2.5
	3	38	10.8
	4	195	55.2
	5	105	29.7
Total number of respondents	353		

low level of depression (with mean scores ranging from 2.50 to 3.33). The psychological resilience scores ranged from 4.48 to 6.25, out of a 7-point Likert scale, showing a medium to a reasonably high level of resilience among respondents. They also indicated a strong self-rated task performance level, with mean scores ranging from 6.33 to 6.61.

4. Results

4.1. Data screening

The distribution of indicators was examined, considering the assumption of data normality for structural equation modeling (SEM). The results showed the Skewness statistics ranging from -2.913 to 1.254 and the Kurtosis statistics ranging from -1.245 to 8.694. Kim (2013) indicated that for a sample size larger than 300, the absolute values of skewness and kurtosis larger than 2 and 7, respectively, suggest non-normality. With one variable having the absolute kurtosis value larger than 7 and three variables having the absolute skewness value larger than 2, the current data set was evidenced to deviate from normal distribution. Nonetheless, this is not unusual as a recent review of Bono et al. (2017) showed that the data obtained from social sciences, educational, and health research are often not normally distributed. Additionally, various empirical evidences from covariance-based and variance-based SEM proved that both approaches are robust against violations of distributional assumptions (Chou et al., 1991; Hair et al., 2019; Reinartz et al., 2009). In particular, ML-based CBSEM has been considered to be extremely robust with respect to violations of its underlying distributional assumptions, even in extreme cases of skewness and kurtosis (Reinartz et al., 2009). Therefore, the covariance-based SEM was applied, and the software package AMOS 26.0 was used to execute the analyses. In order to minimize the effects of non-normality, ML estimations and bootstrapping methods are applied (Blunch, 2013; Nevitt and Hancock, 2001). Bootstrapping with 2000 samples is performed, then the bootstrap standard errors, confident intervals and p-values, are used to assess the statistical significance of individual parameters. Additionally, in the current study, as a null hypothesis is included, i.e. H1, a Bayesian analysis is applied (Andraszewicz et al., 2015).

4.2. Assessment of the measurement model

The validity and reliability of the measurement model was assessed by performing the confirmation factor analysis (CFA). The reliability and validity of five constructs, including Job Insecurity, Anxiety, Depression, Resilience and Task Performance, were evaluated using factor loadings, Cronbach's alpha (Cronbach's α), composite reliability (CR), average variance extracted (AVE), and discriminant validity following the guiding principles of Hair, Anderson, Tatham, and Black (2010). Accordingly, six measurement items with low factor loadings were eliminated to ensure the constructs' validity and reliability. The measurement model analysis results are presented in Tables 2 and 3.

All unstandardized factor loadings were significant at 0.01 level, and the standardized loadings ranged from 0.539 to 0.938. A few items which had a factor loading of less than 0.7 were retained because: (i) their removals did not significantly increase the Cronbach's alpha, CR and AVE values; and, (ii) in social sciences, it is common to obtain and retain outer loadings of less than 0.7 (Hulland, 1999). The Cronbach's alpha, CR and AVE values of four constructs Job Insecurity, Anxiety, Depression, and Task Performance were above the suggested threshold levels of 0.7, 0.7 and 0.5, respectively (Hair et al., 2010). For Resilience, while the AVE value of 0.435 was lower than the recommended threshold by Hair et al. (2010), it was considered as acceptable because the CR value was well above 0.6 and thus the convergent validity of the construct was still adequate (Fornell and Larcker, 1981). The discriminant validity was firstly assessed by the Fornell-Larcker criterion and no cross loadings issue was found, as shown in Table 3. Additionally, the

Table 2
The measurement model analysis.

	Factor loading	S.E.	Bootstrap S.E.	Bootstrap p-value	Cronbach's α	CR	AVE
Job Insecurity					0.903	0.900	0.501
J11	0.718	–	–	0.001			
J12	0.539	0.087	0.094	0.001			
J13	0.713	0.067	0.085	0.002			
J14	0.744	0.088	0.090	0.002			
J15	0.768	0.096	0.091	0.001			
J16	0.689	0.089	0.101	0.001			
J17	0.696	0.088	0.104	0.002			
J18	0.792	0.085	0.109	0.001			
J19	0.683	0.073	0.090	0.001			
Anxiety					0.930	0.930	0.816
AN1	0.888	–	–	0.001			
AN2	0.920	0.04	0.032	0.002			
AN3	0.901	0.04	0.045	0.001			
Depression					0.921	0.923	0.799
DE1	0.882	–	–	0.001			
DE2	0.938	0.041	0.033	0.001			
DE3	0.860	0.043	0.041	0.002			
Resilience					0.739	0.754	0.436
RE6	0.704	–	–	0.002			
RE7	0.594	0.137	0.159	0.002			
RE9	0.732	0.106	0.120	0.001			
RE10	0.599	0.119	0.154	0.001			
Task Performance					0.847	0.848	0.650
TP1	0.852	–	–	0.001			
TP2	0.781	0.074	0.090	0.002			
TP3	0.784	0.055	0.098	0.002			

Table 3
Discriminant validity.

	Task Performance	Job Insecurity	Resilience	Depression	Anxiety
Task Performance	0.806				
Job Insecurity	–0.094	0.708			
Resilience	0.358	–0.249	0.660		
Depression	–0.130	0.603	–0.252	0.894	
Anxiety	–0.036	0.669	–0.203	0.764	0.903

model showed a good fit to the data ($df = 196, \chi^2 = 342.608, \chi^2/df = 1.745 (p < 0.001), CFI = 0.968, TLI = 0.996, RMSEA = 0.046$).

4.3. Assessment of the structural model and hypothesis testing

After having the measurement model validated, the structural model was assessed to the hypothesized relationships. The model provided a satisfactory fit ($df = 214, \chi^2 = 364.121, \chi^2/df = 1.702 (p < 0.001), CFI = 0.967, TLI = 0.962, RMSEA = 0.045$). The R^2 statistics indicated that the model has a 13.7% explanatory power for Task Performance ($p\text{-value} = 0.003$), 44.9% for Anxiety ($p\text{-value} = 0.002$) and 37.8% for Depression ($p\text{-value} = 0.002$).

The results of hypothesis testing are shown in Table 4, indicating the

support for H1, H2, H3, H9 and H10. In particular, Job Insecurity was not found to significantly influence Task Performance ($\beta = -0.028$; $p\text{-value} = 0.679$), but was positively and significantly associated with Anxiety ($\beta = 0.658$; $p\text{-value} = 0.001$) and Depression ($\beta = 0.578$; $p\text{-value} = 0.001$), supporting H1, H2 and H3. Task Performance was not significantly affected by Anxiety ($\beta = 0.170$; $p\text{-value} = 0.083$) and Depression ($\beta = -0.156$; $p\text{-value} = 0.079$), rejecting H4 and H5. Resilience was indicated to have a significant and positive relation with Task Performance ($\beta = 0.342$; $p\text{-value} = 0.001$), supporting H10. The specific indirect effects were calculated using the indirect effects estimand by Gaskin et al. (2020). This analysis indicated that the indirect effects between Job Insecurity and Task Performance through Anxiety ($\beta = 0.107$; $p\text{-value} = 0.086$) and Depression ($\beta = -0.094$; $p\text{-value} = 0.077$)

Table 4
Results of hypothesis testing.

	Weight	S.E.	Bootstrap S.E.	Confidence interval	p-value	Hypothesis testing
H1 Job Insecurity -> Task Performance	–0.028 (-0.013)*	0.064	0.084	–0.192 – 0.132 (–0.156 – 0.131)*	0.679	Supported
H2 Job Insecurity -> Anxiety	0.658	0.085	0.046	0.567 – 0.742	0.001	Supported
H3 Job Insecurity -> Depression	0.578	0.079	0.048	0.473 – 0.665	0.001	Supported
H4 Anxiety -> Task Performance	0.170	0.059	0.098	–0.024 – 0.359	0.083	Rejected
H5 Depression -> Task Performance	–0.156	0.057	0.092	–0.336 – 0.240	0.079	Rejected
H6 Job Insecurity -> Anxiety -> Task Performance	0.107	–	–	–	0.086	Rejected
H7 Job Insecurity -> Depression -> Task Performance	–0.094	–	–	–	0.077	Rejected
H8 Job Insecurity* Resilience -> Anxiety	0.032	0.073	0.038	–0.043 – 0.107	0.396	Rejected
H9 Job Insecurity* Resilience -> Depression	–0.053	0.072	0.040	–0.126 – 0.027	0.186	Rejected
H10 Resilience -> Task Performance	0.342	0.086	0.080	0.189 – 0.495	0.001	Supported

* Bayesian estimation, confidence interval at 0.05 level.

were not supported, rejecting H6 and H7.

For Hypothesis 1, a conventional approach is often criticized to have limitations in null hypothesis significance testing, while Bayesian methods allow directly a support/accept of the null hypothesis (Zyphur and Oswald, 2015). The Bayesian estimation was thus performed to further confirm the above findings. The results showed the confidence interval at 0.05 level of the regression weight between Job Insecurity and Task Performance was -0.156 to 0.131 and the mean of -0.013 . Since the value zero lies within this confidence interval, the null hypothesis was supported.

For Hypotheses 8 and 9, the interaction (moderation) effects of Resilience on the associations between Job Insecurity and Anxiety, as well as Job Insecurity and Depression were tested. As the joint effects of Job Insecurity and Resilience were examined, the interaction term of Job Insecurity and Resilience was computed, using their standardized values, and added to the model. It indicated non-significant interaction effects of Resilience on the relationships between Job Insecurity and Anxiety ($\beta = 0.032$; p -value = 0.396), as well as Job Insecurity and Depression ($\beta = -0.053$; p -value = 0.186); suggesting a rejection of H8 and H9.

5. Discussions and conclusions

Due to the COVID-19 pandemic, the Spanish government declared a state of emergency in March 2020 that was later extended for an additional three months, with serious economic consequences for the touristic region of the Canary islands after the closure of the airports and hotels and the suspension of all tourist activities. Thousands of temporary employment regulation applications have been submitted, which is highly indicative of the effect of the paralysis of economic activity on the archipelago, especially for tourism.

Under these circumstances, it is important to seek effective strategies to help employees cope with their job insecurity, so that they may stay engaged and productive in their work, particularly in difficult conditions. Researchers and managers, therefore, need to investigate how employees' negative responses to job insecurity can be buffered. This objective is not only important for the theoretical development of the job insecurity literature but also presents practical measures to help manage hotel employees' job insecurity during natural health disasters or shocks such as the COVID-19 pandemic.

Since there is no prior study analyzing the impact of the COVID-19 pandemic on hotel employees' behaviors at work, this study is the first one to conduct such as exploratory analysis by examining some important organizational behavior indicators, like job in-role performance (e.g. self-rated task performance). This study also explores the impact of hotel employees' job insecurity during the COVID-19 crisis on their well-being (measured by their level of anxiety and depression), and simultaneously examines whether employees' resilience moderates the aforementioned relationships. The study of these relationships is absolutely critical for assessing how much we can learn and build on prior literature in times of a pandemic. To the best of our knowledge, it is the first time that a study assessing the impact on hotel employees of a health disaster like the COVID-19 pandemic has been carried out in the tourism and hospitality research field.

Therefore, the current study makes important theoretical contributions to the body of knowledge in several ways. To date, very few empirical studies have been conducted on different Job Insecurity consequences in the hospitality sector (Darvishmotevali, et al., 2017) and, in order to address this gap, our research tested the psychological consequences of job insecurity (as a job stressor) on hotel employees, and studied the effects of the employees' job insecurity on their anxiety and depression. Our results support the findings of Ünsal-Akbıyık et al. (2012) relating to higher perceived levels of job insecurity among seasonal employees compared to permanent workers. In our study, most of the employees were permanent workers and that may be the reason why their job insecurity level was relatively low.

Thus, our results show that job insecurity is significantly and positively associated with anxiety and depression (confirming H2 and H3) but that it didn't influence self-rated task performance (supporting H1). Related to this, prior empirical research findings regarding the relationship between job insecurity and job performance are inconsistent. In spite of some studies that negatively relate job insecurity with job performance (Cheng and Chan, 2008; Gilboa et al., 2008), other authors argue that job insecurity affects job performance in the opposite way in that job insecurity may motivate employees to make themselves more indispensable and valuable to the organization by working harder and being absent less often.

Our results confirm that during the COVID-19 pandemic, hotel employees' job insecurity did not affect their self-rated task performance. The weak exploratory power for self-rated task performance could mean that there are other factors which influence task performance and were not included in our model. Our results are in line with some authors' arguments about the existence of some moderating variables. For example, Wu (2011) considers that there are individual difference variables (e.g., emotional intelligence) that might relate to employees' stress perception. In line with this, our results indicate that resilience, as an individual characteristic of employees, has a positive impact on job performance and moderated the negative relationship between job insecurity and depression (meaning that H9 and H10 are supported). In this respect, highly resilient hotel employees are more likely to be able to reduce or transform the potential negative effects of job stress on job performance than employees with a low level of resilience.

This is one of the important theoretical contributions of our research. It concerns the buffering role of certain psychological advantages such as employees' resilience. Based on the COR theory, we identified resilience as an individual employee characteristic that acts as a moderator. Recently, some authors (Shoss et al., 2018) have confirmed the moderating role of resilience by examining how resilience mitigates various negative consequences of job insecurity in the educational sector. Our current research advances the existing literature by confirming the moderating effect of resilience, on the basis that it reduces the negative influence of job insecurity on hotel employee's depression levels during the COVID-19 health disaster. Therefore, our results support H9 and confirm that within this context, hotel employees' resilience acts as a positive coping mechanism to moderate the harmful effect of job stress (e.g. depression) derived from job insecurity on their performance outcome (e.g. task performance). Our findings also confirm H10 since they indicate that hotel employees' resilience positively influenced self-rated task performance during the COVID-19 pandemic.

Moreover, this study demonstrated that workplace insecurity is positively associated with psychological consequences on hotel employees, leading to anxiety and depression. The outcome of the tested relationship (H2 and H3 supported) is also in line with previous research conducted in different industries (e.g. Burgard et al., 2009; Witte, 2010; Burgard et al., 2012; Rossiter and Sochos, 2018). However, when exploring the relationship between emotional exhaustion (EE) and job performance, there are mixed findings within the different economic sectors in the current literature (Advani et al., 2005; Castanheira and Chambel, 2010), and results relating to frontline hotel employees' performance varied from country to country. Such mixed findings justified Karatepe's (2013) call for more cross-cultural research regarding the relationship between emotional exhaustion (EE) and job performance. In an attempt to answer this call, our study was conducted in the Spanish hospitality industry during the COVID-19 pandemic, and suggests that hotel employees with high levels of anxiety and depression cannot perform effectively in the workplace, thereby reducing their self-rated task performance (H4 and H5).

Surprisingly, our results confirmed that job insecurity did not materially influence self-rated task performance during the COVID-19 period (H1) and confirmed the significant positive relationship between job insecurity and anxiety (H2) and that between job insecurity and depression (H3). However, according to the results of our research

conducted during the COVID-19 disaster, self-rated task performance was not significantly affected by anxiety and depression (H4 and H5 were not confirmed), and, similar to the findings of Karatepe and Ale-shinloye (2009), the results also suggest that anxiety and depression do not act as a mediator between JI and self-rated task performance either, meaning that H6 and H7 were not confirmed. Our results showed a weak exploratory power for self-rated task performance, which might mean that there are other factors which influence task performance that weren't included in this model. Also, the results may be due to the fact that the hotel employees were not working at the time of the interviews as the hotels were closed due to COVID-19. This could explain why their job insecurity increased their anxiety and depression level but didn't affect their self-rated task performance level, as they expect that when the hotels reopen, they will be required to work even harder to protect their jobs, given that the economic crisis could make their jobs less secure.

In addition, our results can help to explain why some authors' argue that natural disasters can change the effect of job insecurity on job performance. Qin and Jiang (2011) explained this phenomenon by pointing to the fact that when a person is dealing with the death of a relative or another individual due to a natural disaster, they experience a strong feeling of survivor's guilt, which may make them show more persistence and courage in their work. This could explain why, during the COVID-19 disaster, employees' job insecurity didn't influence their self-rated task performance. Although many people have died from COVID-19 in Spain, the "survivor employees" are willing to contribute more to the objectives of the organization in accordance with the instructions and responsibilities outlined in their job description. At the same time, the introduction of protocols and regulations governing the reopening of hotels after the COVID-19 disaster to increase the security of employees and tourists could inspire employees to work harder.

This empirical study also has some practical implications. Firstly, during the COVID-19 disaster, hotel managers should take the necessary steps to establish and maintain a supportive work environment as this would help employees to reduce their anxiety and depression levels and thereby improve their well-being. Secondly, building employee resilience is an important element in ensuring organizational resilience in crisis management and in moderating the negative effects of job insecurity on employees' depression.

Another practical implication for hotel managers is the importance of identifying ways to minimize the hotel employees' job insecurity due to the risks of hotel guests being infected by the COVID-19 disease. To cope with this, hotel managers should set up contingency arrangements with a detailed implementation process that follows health advice provided by the Government. Therefore, during the COVID-19 pandemic, employees' job insecurity is not related to lower self-rated task performance as hotel employees know that during the pandemic they should make a greater effort to meet regularly in order to evaluate the situation, assess different preventative measures and follow the contingency plans to reduce the chance of infection.

In addition, hotel managers can reduce their employees' level of anxiety and depression during the COVID-19 period by implementing different measures to prevent employees and customers from becoming infected, such as ensuring compliance with best practices in terms of environmental hygiene and personal health, the cleaning and disinfecting of guest rooms and public areas, the acquisition of personal protective equipment for employees and guests, and the explanation and monitoring of the preventive measures.

However, our research has some limitations. First, the survey was carried out while the hotels were closed due to lockdown and during the peak of the COVID-19 pandemic in Spain. During this time, the policies and strategies of the accommodation sector to deal with this health crisis, especially in terms of human resources management, had not yet been disclosed. Consequently, its impact on the perception of job security and work-related wellbeing are not yet clear, as proven by the low scores of these constructs.

The second limitation of our study is relevant to the scale for task performance, particularly the fact it was self-rated. This paper provides information about how people perceive their own performance, and therefore, we cannot conclude that these performance ratings are necessarily reflective of actual job performance, defined as one's contribution to the organizational mission. Therefore, implications for managers to manage task performance are not available. Nonetheless, as this study focused on relationships between constructs measured from the employee's perspective, the usage of self-rated task performance was reasonable. Additionally, it was our best effort to collect timely data during the lockdown situation. Accordingly, a recommendation for future research would be to study the task performance from the organizational perspective. Also, a similar study in a post-crisis context could be carried out to gain a more comprehensive understanding of the issues discussed here.

Another limitation could be due to the geographical context of this study. Tourism is one of the main industries in the Canary Islands, meaning that its citizens (i.e. the hotel employees) may have few alternative employment options and may therefore try to remain more optimistic about the recovery of the tourism industry. Thus, in a context of high unemployment due to the Spanish economic crisis, we assume employees will maintain their task performance level in order to protect their jobs (Aguiar-Quintana et al., 2020). This limitation reduces the generalizability of this study's findings.

Fourthly, the use of convenience sampling implies a non-random selection of participants, which generates a series of biases that makes it difficult to generalize the results. Once again, the special context of the pandemic and the lockdown of the sector only allowed us to contact the employees through their union representatives. Random samples should be used in future studies to facilitate the generalizability of the findings.

Fifthly, the use of self-rated performance was no ideal. Previous uses of this approach have been the subject on both criticism and stout defence within the literature (e.g., Bernardin et al., 2016; Churchill et al., 1985; Stokes et al., 1999). However, anonymous responses may add credibility to the accuracy of the performance ratings. In acknowledging the limitations of the study, it is noted that obtaining supervision/peer-rating or objective performance outcomes through random sampling was impractical due to restrictions imposed by COVID-19. Future studies could endeavor to obtain other-performance-ratings with a view to extending the generalizability of the findings.

Finally, similar studies in a different context where hotel employees have more alternative employment options should be conducted in order to compare with the current findings. A comparison of hotel employees of different departments or different levels of service encounters (e.g. front line versus management staff) could also be included in future studies to identify the impacts of COVID-19 on different groups of hotel employees.

Declaration of Competing Interest

The authors report no declarations of interest.

Appendix A

JOB INSECURITY SCALE

- To what extent do you feel that due to the COVID-19 situation...
- Can you be pressured to accept an arrangement and cancel your working relationship with your Hotel?
 - Your Hotel can do without you for a long time?
 - Can you be pressured to accept an early retirement?
 - Can you be temporarily laid off?
 - Can you be fired from your Hotel?
 - The future of your department or area is uncertain?
 - Your future salary will be reduced?

You will receive undesirable changes in your working hours and your job title?

Will be pressured to work fewer hours?

ANXIETY AND DEPRESSION

Think about THE CLOSURE OF THE HOTELS DUE TO COVID-19 AND THE POSSIBLE REOPENING BY PHASES:

To what extent has your work made you feel restless?

To what extent has your work made you feel worried?

To what extent has your work made you feel tense?

Think about the situation of weeks ago by the COVID-19:

To what extent has your job made you feel depressed?

To what extent has your work led you to feel demoralized?

To what extent has your work made you feel unhappy?

TASK PERFORMANCE

Despite Covid-19, if I join my job:

I will carry out the tasks that the Hotel expects from my job

I will undertake the tasks that my job formally demands of me

I will fulfil the responsibilities specified in my job position

PSYCHOLOGICAL RESILIENCE

I am able to adapt when changes occur

I can deal with whatever comes my way

I try to see the humorous side of things when I am faced with problems.

Having to cope with stress can make me stronger.

I tend to bounce back after illness, injury or other hardships.

I believe I can achieve my goals, even if there are obstacles.

Under pressure, I stay focused and think clearly.

I am not easily discouraged by failure.

I think of myself as a strong person when dealing with life's challenges and difficulties.

I am able to handle unpleasant or painful feelings like sadness, fear, and anger

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