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The antecedents and outcomes of work stress among casino dealers

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ABSTRACT

The casino workforce faces some unique issues (e.g. emotionally fluctuating gamblers) while sharing common features with other hospitality sectors. This study aims to investigate the antecedents of casino dealers' work stress and the relevant outcomes. We used data collected from 590 casino dealers working for Macao's six gaming operators for structural equation modelling analysis. The results validated that job insecurity and work-to-family conflict are two main antecedents of work stress among casino dealers, which in turn generate burnout and depression. Job mobility has a negative moderating effect on the relationship between work stress and burnout. This study draws attention to the health outcomes of work stress and the moderating effect of job mobility on the negative outcomes of work stress.

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Job insecurity; work-to-family conflict; work stress; burnout and depression; job mobility; conservation of resources theory

Introduction

Work stress is a widely recognized global issue for organizations (Cedstrand et al., 2021). Work stress and its formation mechanism vary across sectors. The literature on work stress has focused on healthcare (McVicar, 2016), tertiary education (Usman et al., 2011), banking (Giorgi et al., 2017), and various hospitality sectors such as food service (Jung & Yoon, 2014), airlines (S. Kim et al., 2022), and gaming (P. Y. K. Wan, 2013). Among hospitality employees, casino dealers' work stress is worthy of scholarly attention because of their frequent encounters with unhappy gamblers (for losing money), regardless of their service quality (Manian et al., 2023). The stress level of casino dealers is so high that some of them resort to substance abuse and casual sexual behaviours (Shi & Liu, 2010). These situations necessitate the investigation of casino dealers' work stress, together with its antecedents and outcomes.

Hospitality businesses such as casinos and hotels share two common workplace characteristics, namely long weekly working hours and the three-shift rotation system. These characteristics might lead to work-to-family conflict, a stressor for casino dealers. Work stress among employees is also closely linked to ongoing changes in the work environment and the job market (Cedstrand et al., 2021). The changing macroeconomic environment can reinforce casino dealers' perceptions of job insecurity. In short, the work stress of casino dealers might be partly attributable to both work – family conflict and job insecurity (Z. Li et al., 2023; Minnotte & Yucel, 2018; Nauman et al., 2020).

Previous studies on the consequences of work stress have focused on work outcomes such as ineffective job performance, counterproductive behaviours, job dissatisfaction, and turnover

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intention (Al-Romeedy & Khairy, 2024; Duffour et al., 2021; Universari & Harsono, 2021). In contrast, the health outcomes of work stress have received less scholarly attention. Investigating the health consequences of work stress is also of practical importance, as many hospitality employees suffer from mental health problems (Yu et al., 2021). Work stress leads to anxiety, tension, burnout, depression, sleep disturbances, and other mental health symptoms (Krishnan & Balaji, 2022). Among such health outcomes, burnout and depression have been investigated as a result of factors such as customer incivility or emotional labour (Karatepe & Ehsani, 2012; H. J. Kim & Kang, 2017); however, the relationships between work stress and burnout and between work stress and depression among hospitality employees await further investigation. Üngüren et al. (2024) investigated the link between work stress and burnout among hotel employees; however, they did not examine depression.

Job mobility refers to workers' ability to change occupations or career paths (Bergin, 2011). Employees will have a greater sense of control when perceiving a high job mobility. It can be considered a resource for employees to cope with any potential challenges in careers. In the gaming context, the perceived job mobility of casino dealers is believed to have a mitigating effect on the negative outcomes of work stress, namely burnout and depression. However, this potential moderating effect has received little attention in the hospitality and gaming literature. Existing studies concentrate on the roles of personal-level factors (e.g. Anasori et al., 2021) and organizational support (e.g. H. Chen & Eyoun, 2021). Job mobility is rather related to career and job as well as personal cognition.

This study draws on conservation of resources (COR) theory (S. E. Hobfoll, 2001; S. Hobfoll et al., 2018) to investigate the interrelationships among the concepts discussed above. COR theory suggests that the loss of a person's psychological resources results in various stressors, which can eventually cause health problems. In the hospitality literature, scholars have used COR theory to explain employees' psychological responses and emotional outcomes (H. Chen & Eyoun, 2021; Zhou et al., 2018). Due to the loss of resources such as job security and work – life balance, employees may experience work stress, which can result in mental and behavioural issues. To the best of our knowledge, no hospitality studies using COR theory have discussed the moderating effect of job mobility on health outcomes. Casino dealers' perceptions of job mobility can be treated as a conditional resource (S. E. Hobfoll, 2001).

Based on the discussion above, our study has three objectives: first, to validate two main antecedents of casino dealers' work stress, namely job insecurity and work-to-family conflict; second, to examine the health consequences of casino dealers' work stress, namely burnout and depression; and third, to investigate the moderating effect of job mobility on the negative outcomes of work stress (i.e. burnout and depression).

Literature review

Conservation of resources theory

COR theory explains the sources of stress and coping mechanisms (S. Hobfoll et al., 2018), arguing that individuals strive to obtain various resources from their environment (Lin et al., 2022). The theory categorizes individual resources into material, energy, and social factors, including housing, cars, time, money, cognitive knowledge, and family and work conditions (Guan et al., 2022). In our study, we use job insecurity and work-to-family conflict to illustrate employees' resource losses and stressors.

COR theory further suggests that negative environments lead to stress, resulting in mental and psychological problems (S. E. Hobfoll, 2001; S. Li et al., 2023). For example, in the workplace, work stress can cause burnout and depression. Workplace burnout, a typical consequence of employees' loss of psychological and conditional resources (leading to job insecurity and work-to-family conflict), manifests itself as emotional exhaustion or a failure to deploy emotional coping skills (J.

Lee & Ok, 2014), or as a “fundamental resource depletion syndrome” (Neveu, 2007, p. 23). Depression can occur as a prolonged mental health problem when burnout and negative emotions cannot be effectively alleviated (S. E. Hobfoll, 2001). In the following sections, we review the concept of work stress, its antecedents (namely job insecurity and work-to-family conflict as stressors), and its outcomes (namely burnout and depression). We also discuss and theorize the interrelationships among these factors.

Work stress in hospitality

In the field of organizational behaviour or human resource management, work stress is pervasive among employees, thereby creating operational and management problems for organizations (Al-Romeedy & Khairy, 2024; Cedstrand et al., 2021). Hospitality is no exception (O'Neill & Davis, 2011); work environments in the hospitality sector are highly stressful, with frontline employees expected to work in states of high tension and emotion (Teoh et al., 2019). These stressful conditions can be further intensified in the event of service failures or guest complaints (Koc, 2019). Today, the adoption of advanced technologies can also lead to work stress among hospitality employees, as many employees are not accustomed to using these technologies effectively (Chadee et al., 2021). These work stressors and psychological challenges also apply to the work environment in casinos (P. Y. K. Wan, 2013). While some studies have identified similar stressors in the gaming sector as compared to other hospitality sectors, other studies have reported unique features of gambling environments such as poor air quality, excessive and unnatural noises, and impolite gamblers (Tiyce et al., 2013). Thus, when discussing work stress, particular attention is needed to specific hospitality sectors.

Antecedents of casino dealers' work stress

Three antecedents are common in the literature on work stress, regardless of the nature of the work (e.g. back office vs. frontline), but reflect different circumstances in the gaming sector: job insecurity, work-to-family conflict, and role ambiguity (Tharmalingam & Bhatti, 2014). Job insecurity refers to employees' perceptions of job uncertainty and discontinuity, particularly in a volatile labour market and in a sector sensitive to economic and social variations (Z. Li et al., 2023). Given concurrent job and career concerns, job insecurity becomes a significant stressor in studies across multiple disciplines, including hospitality (Näswall, 2004; Yoo, 2022). Job insecurity was not a concern for dealers when the gaming industry was growing in the first two decades in Macao. However, the hospitality landscape has changed dramatically due to the COVID-19 pandemic and the resulting uncertainties in the broader economic and social environment (Abbas et al., 2021). Today, job insecurity is a real concern among casino dealers, given the vulnerable nature of the hospitality sector and the different types of crises that the gaming sector may face (e.g. changes in the regulatory environment and automation in casino operations).

Work – family conflict is another natural antecedent of work stress, regardless of the sector of activity (Nauman et al., 2020; Parent-Lamarche & Boulet, 2021). Among employees working in different hospitality sectors, flight attendants and casino dealers typically experience work – family conflict (Chau, 2019; Tang et al., 2020). Shift changes and irregular working hours make their rest time incompatible with that of their family members, friends, and relatives. Unsocial work schedules can add to the stress of casino dealers and other hospitality employees. The bidimensional concept of work – family conflict describes the inter-role conflict that arises when work and family interact: work-to-family conflict, which refers to the conflict when work matters and problems interfere with family time, and family-to-work conflict, which refers to the conflict when family issues affect the work (Huang et al., 2004). Work-to-family or family-to-work conflicts are antecedents of work stress (C. F. Chen & Kao, 2011). Our study focuses on work-to-family conflict and sets aside family-to-work conflict, which is derived from the personal domain. Our discussion of the

antecedents of work stress focuses on the work domain. Work-to-family conflict reflects the interference of casino employees' work duties with their commitment to their family roles, leading to work – life imbalance (Netemeyer et al., 1996).

Role ambiguity is another antecedent of work stress. In the context of tertiary education, role ambiguity leads to work stress (Usman et al., 2011). In the gaming sector, mid-level supervisors in casinos are likely to experience role ambiguity as a stressor (Y. K. P. Wan, 2013, 2010). However, the story for dealers is different. The localization of management positions (especially mid-level management) in recent years (CJT, 2021) has significantly alleviated cross-cultural communication issues. The localization of mid-level management helps to reduce role ambiguity arising from cross-cultural communication between dealers and their immediate supervisors.

Previous studies have investigated some specific stressors for frontline casino employees. Wu and Wong (2008) validated job monotony and job meaningfulness, respectively, as positive and negative antecedents for the work stress of dealers. However, the two job characteristics might not be at the same level of importance as salient factors represented by job insecurity in terms of their influence on work stress. Furthermore, the relatively high income of gaming employees, including dealers, might compromise the influence of job monotony on work stress. Fong et al. (2018) found that casino hosts (customer relationship management professionals) perceived customer relationships as a stressor. A third study, using a qualitative approach, reveals that casino supervisors' work stress is derived from a series of stressors, including role ambiguity, overwhelming workloads, subordinates' poor performance, and so on (P. Y. K. Wan, 2013). However, the stressors of casino hosts and supervisors are not necessarily applicable to dealers due to their different duties.

Considering the above discussion, this study focuses on job insecurity and work-to-family conflict as salient work stressors for today's casino dealers. According to COR theory, these two stressors represent the primary sources of work stress for casino dealers, as dealers experience a loss of treasured psychological and conditional resources. Therefore, we propose the following two hypotheses:

H1: Job insecurity leads to work stress among casino dealers.

H2: Work-to-family conflict leads to work stress among casino dealers.

Consequences of casino dealers' work stress

Work stress leads to various negative consequences. A recent review of the literature on work stress revealed that its primary consequences are job-related, including burnout, job (dis)satisfaction, and turnover intention (Universari & Harsono, 2021). Counterproductive work behaviours are also negative outcomes of work stress (Al-Romeedy & Khairy, 2024). The literature on work stress has also investigated health problems such as anxiety and depression, burnout, and maladaptive behaviours (Giorgi et al., 2017). A study of casino dealers found that they suffered from burnout and depression because of their stressful workplace (H. J. Kim & Kang, 2017).

In line with COR theory, burnout represents a type of emotional exhaustion (Neveu, 2007). The measurement of burnout can be unidimensional or multidimensional if people's dysfunctional behaviours and additional psychological effects are considered (Meng & Choi, 2021). Depression refers to a depressive disorder over an extended period and is typically characterized by a range of psychological and behavioural symptoms such as depressed mood, pessimism, and loss of interest (Cassano & Fava, 2002). COR theory suggests that burnout and depression are health problems triggered by stressful environments (S. E. Hobfoll, 2001). Sustained burnout can lead to depression and sadness, as evidenced by Meng and Choi (2021) in the hotel context. A similar cause-and-effect relationship between burnout and depression may also exist among casino dealers. Accordingly, we propose the following three hypotheses:

H3: Work stress among casino dealers leads to burnout.

H4: Work stress among casino dealers leads to depression.

H5: Burnout among casino dealers leads to depression.

The moderating role of job mobility

The consequences of work stress are also contingent on factors such as job mobility, which refers to a job holder's ability to change their current job or profession (Bergin, 2011). This change can occur within an occupation, within a sector, or across sectors (DiPrete & Nonnemaker, 1997). In our study, perceived job mobility can translate into casino dealers' perception of opportunities in the job market (Awal et al., 2020). Previous studies have revealed the moderating effect of job mobility on the relationship between abusive supervision and job dissatisfaction (Pyc, 2011) and on the relationship between job dissatisfaction and intention to quit (Wheeler et al., 2007). These studies have shown that high perceived job mobility may decrease negative outcomes, whereas low perceived job mobility may increase negative outcomes for employees. The moderating effect of job mobility may apply to the relationship between casino dealers' work stress and health outcomes, namely depression and burnout.

The hospitality literature applying COR theory has identified numerous coping mechanisms and factors related to stress. Personal-level factors include job satisfaction and engagement (Anasori et al., 2021; Yousaf et al., 2020; Zhou et al., 2018), emotional intelligence (J. Lee & Ok, 2014), self-efficacy (Zhou et al., 2018), and attachment to family and colleagues (Meng & Choi, 2021). Organization-level factors include organizational support (H. Chen & Eyoun, 2021) and empowerment (Zhou et al., 2018). According to COR theory (S. E. Hobfoll, 2001), job mobility can also serve as a conditional resource that hospitality employees, and casino dealers in our study, can use to mitigate the effects of work stress on health outcomes, namely burnout and depression. Therefore, we propose the following two hypotheses:

H6: Job mobility negatively moderates the relationship between work stress and burnout.

H7: Job mobility negatively moderates the relationship between work stress and depression.

Conceptual framework

Figure 1 presents our research model. Job insecurity and work-to-family conflict are two stressors generating work stress among casino dealers. Work stress leads to burnout and depression among casino dealers. Meanwhile, job mobility influences the relationship between work stress and burnout and that between work stress and depression.

Methodology

Research instruments

The measures for all of the constructs were based on or adapted from the literature. Specifically, we used five items to measure job insecurity (Benjamin & Samson, 2011; Nauman et al., 2020; Richter et al., 2020), such as "I am worried about the possibility of being fired." Work-to-family conflict was measured using five items (Hwang & Jung, 2021, Nauman et al., 2020); a sample item is "The time

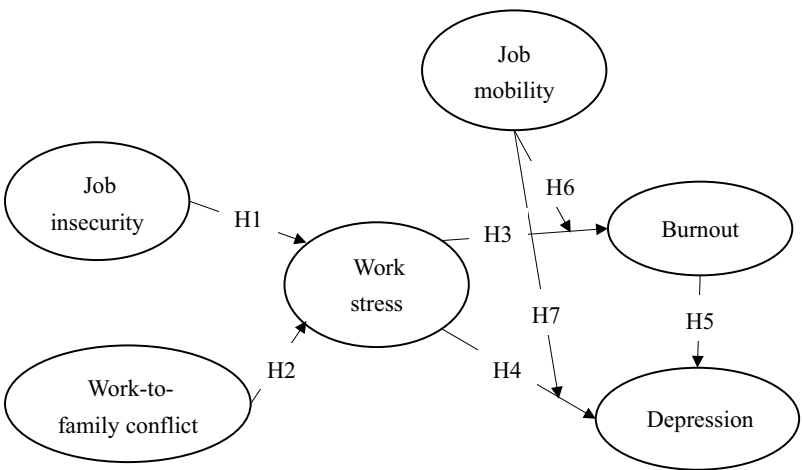


Figure 1. Research model.

I can spend with my family is not sufficient due to work.” Work stress was measured using four items (Clouser et al., 2018; Judge et al., 2012; Taormina & Kuok, 2009), such as “My work environment is fast-paced.” Burnout was measured using five items (Kristensen et al., 2005), such as “I feel worn out at the end of a shift.” Depression was measured using four items (J. M. Lee et al., 2022; Wilson & Liss, 2023); a sample item is “I felt depressed over the past two weeks.” Job mobility was measured using four items (Awal et al., 2020; Tepper, 2000), such as “If I were to quit my job, I could find another job with a similar salary.” We adopted a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) to measure all of the constructs.

Data collection

We recruited five employees from the gaming sector to conduct the survey in December 2023 in Macao. They were also fourth-year undergraduate students enrolled at the university with which the first and third authors are affiliated. Their industry background ensured that they had sufficient contact with the target population. We adopted snowball sampling for the survey (Brunt et al., 2017). Using their networks, the five survey administrators distributed the questionnaire to 707 casino dealers and received 601 responses, for a response rate of 85%. The respondents were employed by all six of Macao’s casino operators, representing a diversity of management styles.

Data analysis

After data screening, we removed 11 invalid questionnaires from the sample (each row with a standard deviation less than 0.25; see ResearchWithFawad, 2024). We found no other quality issues and then used the remaining 590 valid questionnaires for further data analysis. We adopted SmartPLS 4 for partial least squares structural equation modelling (PLS-SEM) analysis, including testing the measurement model and the structural model.

Results

Sample profile

Regarding the profile of the respondents, approximately 73.9% of the respondents were between 40 and 65 years old. Women (51.2%) made up a slightly larger proportion of the sample than men

(48.8%). Majorities of the respondents did not hold a degree (77.9%), were married (60.7%), and had work experience of more than 10 years (81.7%). The demographic characteristics of the sample in terms of age, education level, and marital status were broadly consistent with those of two previous surveys of Macao's casino dealers (Chan, 2018; Chau, 2019). Our sample's gender distribution fell between the results of these surveys, with female respondents accounting for the majority (68%) of the sample in the study by Chau (2019) and the minority (31%) of the sample in the study by Chan (2018).

Measurement model

Before performing confirmatory factor analysis, we tested common method bias adopting Harman's single-factor test (Podsakoff et al., 2003). The factor analysis results showed that the variance explained by the single factor was 32.4%, far less than 50%, showing that common method bias was not a concern in our study. All of the retained questionnaire items had factor loadings greater than .70 (see Table 1). The Cronbach's alpha and composite reliability values of each construct were greater than .70, indicating the reliability of all scales. The AVE values for all constructs were greater than .50, confirming convergent validity. The results of the discriminant validity tests are presented in two subsequent tables. The square root of the AVE was higher than the correlation coefficients in accordance with the Fornell – Larcker criterion (see Table 2), and the HTMT ratios were also less than .90 (see Table 3). These test results showed that discriminant validity was confirmed.

Structural model

Table 4 presents the results of testing the structural model. Both job insecurity ($\beta = .458$, $p = .000$) and work-to-family conflict ($\beta = .356$, $p = .000$) were antecedents of work stress, supporting H1 and H2. The paths from work stress to burnout ($\beta = .713$, $p = .000$) and to

Table 1. Confirmatory factor analysis.

Construct/Item	Loading	Mean	SD	α	CR	AVE
<i>Job insecurity</i>				0.900	0.938	0.834
Worry about the possibility of unemployment	0.934	4.22	1.300			
Worry about the shame of unemployment	0.890	4.11	1.282			
Worry about the future of unemployment	0.915	4.33	1.315			
<i>Work-to-family conflict</i>				0.912	0.944	0.850
Insufficient time for family	0.937	4.99	1.172			
Lack of energy for housework	0.907	4.98	1.128			
Unsocial working hours	0.922	4.71	1.371			
<i>Work stress</i>				0.840	0.903	0.757
Fast-paced environments	0.829	5.45	0.890			
Feeling tense	0.883	5.46	0.902			
Demanding job	0.897	5.55	0.858			
<i>Job mobility</i>				0.879	0.913	0.725
Able to find another job with a similar salary	0.884	3.10	1.238			
Able to find an acceptable job	0.820	3.34	1.192			
Perception of available new jobs	0.838	3.29	1.157			
Perception of external opportunities for development	0.863	3.16	1.122			
<i>Burnout</i>				0.884	0.945	0.896
Worn out at the end of a shift	0.946	5.53	0.873			
Burnt out because of work	0.947	5.44	0.900			
<i>Depression</i>				0.910	0.937	0.787
Feeling depressed	0.894	3.36	1.501			
Feeling of disappointing others	0.929	3.09	1.461			
Feeling worthless to others	0.821	2.79	1.316			
Feeling hopeless	0.902	3.21	1.505			

SD: Standard deviation; α : Cronbach's alpha; CR: Composite reliability; AVE: Average variance extracted

Table 2. Fornell – Larcker criterion.

	1	2	3	4	5	6
1. Burnout	.946					
2. Depression	.574	.887				
3. Job insecurity	.622	.596	.913			
4. Job mobility	–.384	–.283	–.453	.852		
5. Work stress	.781	.576	.614	–.356	.870	
6. Work-to-family conflict	.558	.683	.445	–.156	.558	.922

The square roots of the AVE values are on the diagonal; the HTMT ratios are presented in parentheses.

Table 3. Heterotrait – monotrait (HTMT) criterion.

	1	2	3	4	5	6
1. Burnout						
2. Depression	.633					
3. Job insecurity	.696	.650				
4. Job mobility	.404	.274	.485			
5. Work stress	.895	.646	.700	.379		
6. Work-to-family conflict	.622	.744	.488	.145	.631	

Table 4. Structural model testing.

Path	VIF	β	f^2	t-statistic	Sig.
H1: Job insecurity \rightarrow Work stress	1.247	.458	0.320	9.917	.000
H2: Work-to-family conflict \rightarrow Work stress	1.247	.356	0.194	8.025	.000
H3: Work stress \rightarrow Burnout	1.250	.713	1.098	21.781	.000
H4: Work stress \rightarrow Depression	2.623	.325	0.065	5.512	.000
H5: Burnout \rightarrow Depression	2.688	.307	0.058	5.31	.000
H6: Job mobility \times Work stress \rightarrow Burnout	1.413	–.067	0.014	2.03	.042
H7: Job mobility \times Work stress \rightarrow Depression	1.433	.027	0.002	0.762	.446

VIF: Variance inflation factor.

depression ($\beta = .325$, $p = .000$) were significant, which supported H3 and H4. The path from burnout to depression ($\beta = .307$, $p = .000$) was also significant, supporting H5. Regarding the indirect effects of the two antecedents on the two outcomes, the paths from job insecurity to burnout ($\beta = .326$, $p = .000$) and to depression ($\beta = .250$, $p = .000$) were significant, as were the paths from work-to-family conflict to burnout ($\beta = .254$, $p = .000$) and to depression ($\beta = .195$, $p = .000$).

The negative moderating effect of job mobility ($\beta = -.067$, $p = .000$) on the relationship between work stress and burnout was significant, supporting H6. As [Figure 2](#) shows, when job mobility increase, the slope of burnout predicted by work stress decrease. However, the proposed moderating effect of job mobility on the relationship between work stress and depression was not significant ($\beta = .027$, $p = .446$), rejecting H7.

The R^2 results indicate that the two stressors (i.e. job insecurity and work-to-family conflict) explain 47.7% of the variance in work stress. In addition, 62.6% of the variance in burnout and 37.1% of the variance in depression were explained by their antecedents in the structural model. These statistics suggest the high explanatory power of the model in consumer and hospitality research (Hair et al., 2011).

Conclusion and implications

This study validates two salient antecedents of casino dealers' work stress, namely job insecurity and work-to-family conflict, and two health outcomes of work stress, namely burnout and depression. Our results also show that job mobility moderates the relationship between work stress and

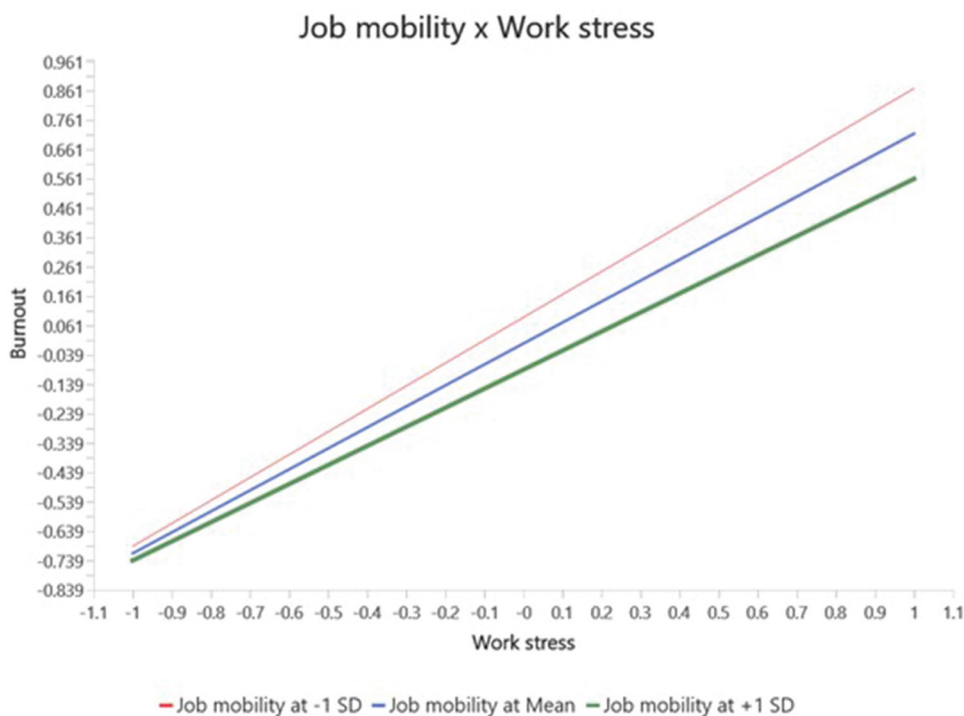


Figure 2. Slope analysis of burnout predicted by work stress.

burnout. Specifically, the greater the job mobility perceived by a casino dealer, the weaker the relationship between work stress and burnout. Overall, our study fulfils its three objectives.

Theoretical implications

This study contributes to the understanding of the work stress of frontline casino employees. This workforce faces some unique challenges, such as emotionally volatile customers and poor air quality. Casinos are particularly vulnerable to economic contractions, and meanwhile their employees may suffer from psychological problems (Lam et al., 2019). Our results show that work stressors are job-specific. In the gaming sector, the two stressors of job insecurity and work-to-family conflict play an important role in causing work stress among casino dealers. Using COR theory, our results show that job security and work-family balance are two major work-related conditional resources lost by employees in the casino environment (Guan et al., 2022). Job insecurity is a common factor contributing to work stress. Tian et al. (2014) found that casino dealers' job insecurity reduces their organizational commitment and increases their counterproductive behaviours. Our confirmation of job insecurity as a stressor contributes to the understanding of the mechanism of formation of work stress among casino dealers. Work-to-family conflict is another critical contributor to casino dealers' work stress, which is consistent with the study of Chau (2019) conducted five years ago. This lasting effect implies that the factors underlying work-to-family conflict, namely long weekly working hours and shift work, have remained constant over time.

Our study also reveals that burnout and depression are consequences of work stress. Building on COR theory, we offer theoretical insights by emphasizing that these two factors demonstrate phenomena of emotional exhaustion (J. Lee & Ok, 2014) and resource depletion (Neveu, 2007) among hospitality and casino employees. Our finding is consistent with the results of previous

studies that frontline employees in the hospitality sector can easily suffer from exhaustion and depression (Karatepe & Ehsani, 2012). For example, casino dealers may suffer from burnout and depression because of their emotional labour (Chan, 2018; H. J. Kim & Kang, 2017). Our validation of burnout and depression as two outcomes of work stress suggests that scholarly attention should be given to the specific context of casino dealers' workplaces. A previous study found that casino dealers were engaged in maladaptive practices of excessive drinking, smoking, playing video games, using addictive substances, and gambling (Hu et al., 2013). Our findings of burnout and depression as consequences of the work stress of dealers can help to understand the why of these deviant behaviours.

Our findings further suggest that job mobility has a negative moderating effect on the relationship between work stress and burnout. Job mobility is a psychological resource and source of capital that casino dealers can use to curb the effects of work stress on burnout. This finding is consistent with the results of Liljegren and Ekberg (2009), who revealed the association between job mobility and health as well as burnout. On the one hand, work stress leads to negative outcomes such as burnout and depression, which can affect casino dealers' performance. On the other hand, our validation of the negative moderating role of job mobility in the relationship between work stress and burnout suggests an approach that can reduce casino dealers' perceptions of burnout by increasing their perceptions of job mobility.

However, we do not find a moderating effect of job mobility on the relationship between work stress and depression. In other words, an increase in job mobility does not reduce casino dealers' perceptions of depression associated with work stress. This finding is different from previous studies that validate a moderating effect of job mobility on negative outcomes, such as job dissatisfaction and turnover intention (Pyc, 2011; Wheeler et al., 2007). Unlike the job-related consequences of work stress, all social, psychological, and biological issues may contribute to depression, and people who have experienced difficult lifetimes are more likely to suffer from it (WHO, 2023). Our finding implies the existence of complex factors between work stress and depression. Depression reflects a prolonged accumulation of negative emotions, sadness, and hopelessness, which do not fade easily (Cassano & Fava, 2002; Wells & Sturm, 1995).

Practical implications

Our results confirm that job insecurity is a stressor for casino dealers. Based on this finding, we suggest that casinos or the government of gaming destinations (e.g. the government of Macao) provide transferable skills training to casino dealers, which will enable these employees to take alternative positions within a casino or even work outside the gaming sector (e.g. hotels). Furthermore, gaming companies can provide incentives (e.g. tuition sponsorship) for participating in continuing education, which will improve dealers' employability or perceived job mobility.

Our results also validate work-to-family conflict as another stressor for casino dealers. This factor is linked to casino dealers' long weekly working hours and the three-shift rotation system, which leads to an imbalance between work and family. We recommend that casinos adopt the five-day work week and reduce the number of weekly working hours to the cross-industry standard (40 hours). Furthermore, the introduction of temporal flexibility into human resource management also helps to decrease work-to-family conflict. Adopting such a family-friendly policy could reduce work-to-family conflict, thereby reducing the stress and burnout levels of casino dealers.

Limitations and future research

This study has two limitations, paving the way for future research. First, this study focuses on job insecurity and work-to-family conflict as two antecedents of casino dealers' work stress, thus leaving aside other latent antecedents. For instance, customers or gamblers can be a source of work stress for casino dealers. Gamblers' emotional fluctuation or incivility associated with

gambling results may add to the stress of dealers. Future research is recommended to investigate the influence of customer-related factors on dealers' work stress. Second, we found that casino dealers' work stress led to depression; however, the proposed moderating effect of job mobility on the relationship between work stress and depression was not significant. Future research could test other moderators, such as job satisfaction, organizational support, and personal resilience, to understand how the causal relationship between work stress and depression (or burnout) is influenced or mitigated.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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