

Article

Antecedents of Organizational Resilience after COVID-19: The Case of UAE

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Abstract: The main purpose of this paper is to investigate the relationship between work stress, employee engagement, employee well-being, and employee and organizational resilience, in order to develop a model that can be used to investigate the effects of these variables on organization performance. A quantitative approach was used and structural equation modeling with AMOS 28 was applied to investigate the relationship between the variables in a convenient sample of 394 employees in the UAE. Based on the results of the study, it can be concluded that work-stress negatively impacts the resilience of organizations, while work engagement and employee resilience are positive indicators of the resilience of organizations. No relationship was found between employee well-being and organizational resilience. Using the findings of this study, one may be able to determine whether a company will be able to achieve better resilience when operating in the midst of intense crisis situations.

Keywords: resilience; UAE; employees; stress; engagement

1. Introduction

Implementing policies that target both mitigating the risks associated with severe crises and reducing the consequences associated with them is one way to enhance economic resilience [1]. For the occasion of risk mitigation, it is necessary to be able to monitor vulnerabilities, dealing with the consequences, and identify policy settings and mechanisms that can be put in place *ex ante* to help absorb the impact of a prolonged downturn [2,3]. The procedures and policies of human resource management (HRM) can affect organizational resilience [4] and subsequently economic resilience. The concept of resilience can be defined as the ability of one to adapt effectively in the face of severe adversity, in order to restore equilibrium in the event of adversity [5].

As the marketplace continues to evolve and become increasingly turbulent, only organizations that are flexible, agile, and relentlessly dynamic will be able to sustain themselves [6]. Indeed, firms must learn to successfully navigate in a complicated, uncertain, and threatening environment so that they can move beyond survival and actually prosper [7–9]. A volatile environment creates frequent challenges and even relatively stable markets can experience periodic jolts or undergo periodic shifts in trends due to unpredictable conditions.

Globally, governments imposed restrictions on the spread of the COVID-19 virus in response to the COVID-19 crisis [10]. Restrictions on public and private organizations included recommendations or injunctions to introduce new working methods. As a result, many employees have been forced to work from home while also caring for their children and homeschooling them. There have been those who have faced more challenging circumstances, including massive pay cuts, unpaid leaves, and job loss.

Many regions have begun to ease lockdowns in response to the flattening of the infection curve. There is however a possibility that COVID-19 will recur in the future, and as a result, individuals and organizations are being forced to adapt to the new normal in



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view of this. In order to fully understand employees' responses to the COVID-19 pandemic, it is necessary to understand how different environmental, personal, and individual factors interact, whereas the social environment at work and individual characteristics may explain their responses to the COVID-19 pandemic. Rafiq and Shahzad [11] results indicate that when workers are satisfied and trust the company, they stay working at the company and will not abandon the company which would lead to a decrease in turnover intention.

Although psychological approaches are called for in human resources management, limited firms view resilience as a combination of skills, attitudes, and feelings that affect strategic HRM if they are developed effectively [5]. The literature has acknowledged the significance of resilience on employees' outcomes, but limited attempts have been made to examine the impact of work stress, work engagement, well-being, and employee resilience to organizational resilience. Furthermore, in most studies, employee resilience is used as a mediator, while in this study, there is an attempt to investigate the direct impact of employee resilience to organizational resilience.

Moreover, up to now, no study has examined those factors for a country such as the UAE where almost 80% of the work force are expatriates and the rest are local Emirati. UAE is a very interesting case because of the asymmetric impact of government policies on businesses [12]. It is interesting to see if the results for a country where expats workforce is higher than locals will have same results or different compared to other countries where locals are more than expats. Rafiq and Jafar [13] found that the opinions of different groups of people regarding the advantages and disadvantages of job embeddedness were affected by geographic, cultural, religious, and economic scope parameters when they examined a sample of employees from Pakistan and China, thus increasing the importance of this study for the specific geographical area. Based on that, the main scope of this paper is to develop a model that will investigate the relationship between stress, engagement, well-being, and employee resilience to organizational resilience in UAE. It is expected that the model will indicate the importance of specific antecedents that can be used to react to the current pandemic and future crises.

2. Literature Review

2.1. Organizational Resilience

During crises, economic resilience plays a major role in improving the performance of an organization and can be defined as the ability to decrease the losses caused by these incidents, which can be applied to firms operating in any industry [14]. Organizations have faced challenges and disruptions as a result of economic recessions [15]. The availability of resources can be a potential enabler as well as an inhibitor of resilience [16]. As Pal and Torstensson [17] delineate, crisis primarily impacts organizations' material resources, financial resources, and secondarily human resource capacities. As an example, in the case of the COVID pandemic, there was a shortage of trained medical personnel, thus causing significant problems on health industry management. Individuals and organizations can enhance their resilience by developing specialized knowledge to respond effectively to unfamiliar or challenging situations [18]. In order to create resilience, researchers emphasize the need to understand these soft processes in organizations and people. In addition, they emphasize that it is important to investigate other aspects, for example how people think, what are their main motives, how they communicate, and what training they have received [19].

As human capital plays a significant role on organizational resilience, it is important to explore some important antecedents related to human capital that can impact positively or negatively organizational resilience.

2.2. Work Stress

Stress at work refers to a variety of negative stimuli that employees are exposed to as well as to the responses of workers employed in environments where the job demands are in excess of their abilities at work [20]. There are a number of factors that contribute to work

stress, including external environmental factors, organizational factors, and individual factors [21]. Stress at work can usually have a variety of effects on an individual. In the workplace, there are various stressors that are thought to be motivating, inspiring, and challenging. As a result, individuals tend to evaluate challenge stressors as being beneficial for the development of their careers as well as for the achievement of their personal goals. There is a tendency for people to invest more time and energy into their work when they are faced with these stressors, since these stressors tend to boost their self-confidence and motivate them to meet their personal goals. A number of these stressors can have a negative effect on the ability of employees to achieve their personal goals as well as negatively affect the performance of the organization. Brunetto and Farr-Wharton [22] investigated the emotional labor of police officers during the COVID-19 pandemic and revealed that officers were stressed and anxious because of the many challenges associated with policing during the outbreak. As in several cases, employees had to work online or work extreme hours under risky conditions; stress increased due to working conditions and an unsecured future [23,24]. Karatepe and Okumus [25] report that when there is stress because of job insecurity, it aggravates the tension in the workplace. As a result of job stresses, employees have less faith in the organization and are more likely to leave early and be late for work, which erodes their trust in the organization. Based on the above the following hypothesis was developed:

Hypothesis 1 (H1). *Positive work stress is affecting positively organizational resilience.*

2.3. Work Engagement

Essentially, work engagement can be defined as a construct consisting of psychological states, behaviors, or attitudes regarding the work environment [26,27]. The degree to which an individual is engaged in their work determines how well they accomplish their tasks and how effective they are at their jobs [28]. A highly engaged employee is more focused and attentive to their responsibilities, more passionately associated with their role's tasks, and more passionate about their work [29]. Employees also engage in hobbies and social activities outside the workplace, leading to positive effects that spill over into their personal lives and vice versa, resulting in improved performance of both individuals and groups [30]. An engaged employee invests effort at work and remains committed even when obstacles arise [31]. In several studies, engaged employees demonstrate extra-role customer service and service performances, and they are effectively committed to the work. Quality customer service behaviors are likely to be sourced from an employee's emotional dedication, vigorous energy, and mental resilience [25].

Hypothesis 2 (H2). *Positive work engagement is affecting positively organizational resilience.*

2.4. Well-Being

Employees are living in two different worlds as they have to deal with their professional responsibilities and at the same time they have to be with their families and live their lives. The degree to which an employee is able to resolve conflicts between their professional and personal lives will indicate their work–life balance level [32]. It has been suggested that individuals are more likely to suffer from stress as a result of losing personal resources (such as time and energy) due to high job demands when they are not able to meet those demands [33]. The COVID pandemic created extreme stress for employees and affected their security for the future in several cases [34]. Furthermore, in the case of the pandemic frontiers, work demands vary significantly from one country to another, affecting employee well-being in both cases [35]. The recovery experiences of individuals have been shown to contribute to the restoration of energy levels, the maintenance of job vitality and the enhancement of well-being as a whole [28]. In the context of subjective well-being, life satisfaction is one of the cognitive components of it, which measures people's happiness and satisfaction with the way their lives are going [36,37].

Hypothesis 3 (H3). *Negative well-being is affecting negatively organizational resilience.*

2.5. Employee Resilience

The concept of personal resilience refers to the ability to build a psychological shield that allows individuals to protect themselves from adverse events and traumatic experiences [38]. There is evidence to suggest that personal resilience permits people to make effective adaptations to major life events and traumatic experiences and to cope successfully and effectively with the consequences of such events. Of course, this was a necessity in the case of the COVID pandemic, where suddenly employees were forced to work from home while dealing with family, etc. When a person has a high level of personal resilience, they are curious and open to new experiences, and they have a high level of positive emotionality and they are able to cope effectively with challenging events and difficult situations by using humor, relaxation techniques, and optimistic thinking [39].

In management and organization studies, resilience is the ability to remain resilient under enormous stress and change. The concept of resilience in management and business studies refers to environmental and sustainability management when faced with extreme conditions. To thrive in today's uncertain, hazardous, turbulent, and vague world, resilience has become increasingly important for individuals, organizations, and society as a whole [40]. Adaptability, flexibility, and responsiveness are essential characteristics of an organization in the current competitive environment characterized by intense global competition and continuous crisis [41]. It is imperative that an organization's employees be innovative and adaptive to succeed.

Employee resilience is a concept that refers to how employees deal with turbulent work environments and produce maximum output for their employers. An employee with high resilience maintains valuable resources, exerts their resources, and motivates themselves at work. A low level of resilience can cause strains, stress, uncertainty, anxiety, and burnout that leads to demotivation and an attempt to conserve their current resources [42]. Employee resilience is usually connected with employee well-being. As Caniels and Hatak [43] delineate, it is important to employees' well-being that they have a good relationship with their supervisor, in order to achieve employee resilience. As studied by Khan and Rao-Nicholson [44], results indicate an organization's job design, the flow and exchange of information within the organization, employee benefits, and employee development opportunities all have an impact on employee resilience. Taking the above into account the following hypotheses were developed:

Hypothesis 4 (H4). *Employee resilience has a positive and significant relationship with organizational resilience.*

As a prelude to being able to use SEM modeling (Figure 1), it is imperative to develop a conceptual model that relates to the hypotheses that have been developed [45]. A questionnaire must be designed, a quantitative survey must be conducted, and a sample must be selected that will serve as a guide to defining the final indicator variables [46].

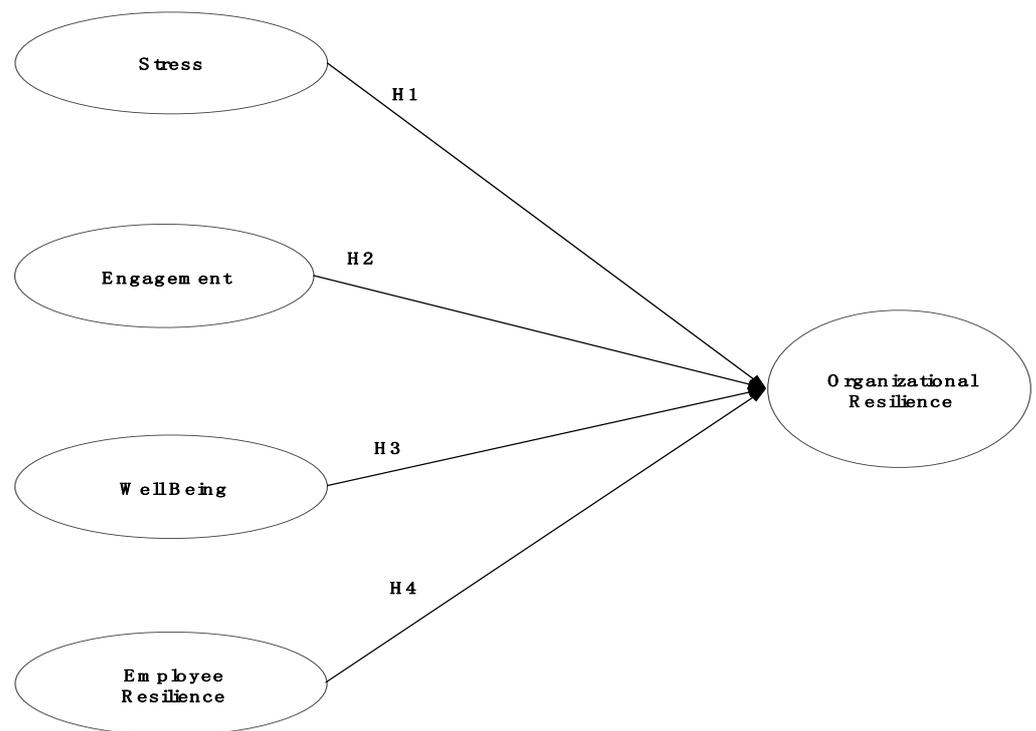


Figure 1. Conceptual Model.

3. Methodology

3.1. Data Collection

Data collection was conducted online as there were social distance restrictions in the UAE during the period January–February 2022 (which was study administration period) because of the pandemic. A convenient sample method was used, and the potential candidate subjects should meet the following three screening criteria: (1) be over 18 years old, (2) be employed in a company in UAE, and (3) being in the same company before and after the pandemic. Using the Qualtrics survey platform, a questionnaire was developed in English, which is the official language of the UAE. In order to administer the questionnaire, ethical clearance was obtained. Then, 416 questionnaires were obtained, but only 394 were considered complete, resulting in a response rate of 94.71%. In the survey, 46% of respondents were male and 54% were female. Age distribution showed that 42% of respondents were younger than 30 years old, 48% were 30 to 49 years old, 9% were 50 to 59 years old, and only 1% were older than 60 years old. Before and after the pandemic, all employees worked for the company and most of them had been working there for at least six years. The majority (87%) had a bachelor’s degree; the remainder (13%) had a postgraduate degree. Expats in the UAE made up 67 percent of respondents, while locals made up 33 percent.

3.2. Measures

Items were carefully adapted from previous studies and reworded to fit the study’s context. The items were rated on a five-point Likert scale, with 1 equaling strongly disagree and 5 equaling strongly agree. The items were also tested on a sample of 30 employees to make sure they were understood clearly. Work stress was measured with four items based on Cheng and Kao [47]. While organizational resilience was examined with three items based on Cheng and Kao [47] and Ozanne, Chowdhury’s [48] work related to the topic. Work engagement items were inspired by the work of Ok and Lim [26] and Khusanova and Kang [31], while there were 4 items regarding employee resilience based on the work

of Rabiul and Promsivapallop [27] and Mubarak and Khan [49]. Finally, well-being items was based on Fotiadis and Abdulrahman's [28] work (Appendix A).

3.3. Data Analysis

With the use of AMOS 28 software, structural equation modeling was used to analyze the data by means of structural equation modeling. SEM development follows specific steps when a quantitative study is developed: first, a model specification is made (hypothesized relationships), then a model identification is needed, then a parameter estimation is needed, followed by a model evaluation (overall goodness of fit), and finally, a model modification (improving the model fit) is required if necessary [50,51].

For screening of data, dealing with missing values, outliers, multicollinearity, and normality of the data, SPSS was used. Detection of suspicious patterns of responses, outliers, and the normality of the data distribution were carried out as part of the preliminary examination of the data [52]. Using Excel, we examined the standard deviation of each of the response to determine if the respondents were answering without paying attention to the questions that were asked. Boxplots were used to examine outliers according to Hoaglin and Iglewicz [53]. Skewness and kurtosis tests were developed as a means to evaluate the degree of normality in the dataset. In addition to developing models and proving the significance of path coefficients, AMOS is also used for testing hypotheses and the development of hypothesis tests [46]. In order to test the dimensionality of organizational resilience, a CFA was conducted based on the theoretical framework that was developed. In the next stage, the path analysis with SEM was performed with the confirmed dimensions of organizational resilience and measurement items of work stress, work engagement, well-being, and employee resilience.

4. Results

4.1. Measurement Model

The convergent validity, reliability, and discriminant validity of the hypotheses were assessed before the hypotheses were tested [54]. There seems to be no problem in maintaining the thresholds of 0.5 for convergent validity, 0.7 for composite reliability (CR), and 0.5 for average variance extracted (AVE) shown in Table 1. As a result, there is no issue with the validity and reliability of the measurement model. Response rates below 70% require a bias test. In this study, despite the high response rate, a common method test was applied through AMOS using Statwiki's plugin tool. Neither $\alpha = 0.05$ nor $\alpha = 0.01$ detected significant differences. In this study, none of the samples explained more than 50% of the total variance by factor one using the recommended cutoff value of 50%, suggesting there was no common method bias involved.

Table 1. Measurement Model.

	CR	AVE	MSV
Stress	0.942	0.736	0.211
Engagement	0.967	0.696	0.483
Well-Being	0.948	0.682	0.414
Employee Resilience	0.945	0.653	0.544
Organizational Resilience	0.921	0.580	0.544

The results of the Confirmatory Factor Analysis demonstrated an appropriate fit to the data of χ^2 (df = 1978). The following Table 2 shows that all necessary measures were on the appropriate level to determine goodness of fit (Hair et al., 2010, p. 654) [55]. It is clear from a non-significant chi-square that the model fits well and is not different from the default one. In addition, the comparative fit index ((CFI) = 0.94) that analyzes the model fit by examining the discrepancy between the data and the hypothesized mode indicated that the model fit was a good fit.

Table 2. Model Fit Metrics.

Measure	Threshold	Current Model
Chi-Square/df	<3	1978
<i>p</i> -value for the model	>0.05	0.15
CFI	>0.90	0.94
GFI	>0.95	0.98
AGFI	>0.80	0.91
SRMR	<0.09	0.04
RMSEA	<0.05	0.03

There should be a good fit between the one-factor model and the data, since the common method variance is largely responsible for inflating the relationships between variables. It has also been argued that one of the most valid criteria for testing the fit of the model is the Standardized Root Mean Square Residual (SRMR), which is based on recent research. A SRMR value of 0 indicates a perfect fit of the path model, and generally, SRMR values between 0.10 and 0.20 are considered acceptable. In this research, the SRMR value of 0.017 is considered an acceptable model fit in support of the indices mentioned above.

4.2. Hypothesis Testing

SEM analysis was used in AMOS version 28 to examine how work stress, engagement, well-being, and employee resilience impact organizational resilience. As opposed to regression analysis (Gefen & Straub, 2005) [56], SEM reduces standard errors by simultaneously estimating all parameters in a single model. The SEM method was selected for our investigation, as it is widely used as a method for examining whether an independent variable, *X*, directly affects a dependent variable, *Y*, or indirectly via a mediator, $X \rightarrow M \rightarrow Y$ (Hair et al., 2010) [55].

According to H1, work-stress and organizational resilience are negatively correlated. Thus, it was anticipated that high stress would lead to lower levels of organizational resilience. The test results show that work-stress negatively affects organizational resilience ($\beta = -0.211, p = 0.016$) (Table 3). The H1 hypothesis is therefore fully supported. Our second hypothesis was examining if work engagement has a positive and significant relationship with organizational resilience. The test results of H2 indicate that there is a significant and positive relationship between work-engagement and organizational resilience ($\beta = 0.172, p = 0.024$). As a result, H2 was supported. In H3, organizational resilience and well-being were predicted to be positively correlated. Based on the results of the test, the two variables are not significantly correlated ($\beta = -0.001, p = 0.989$). Therefore, H3 hypothesis cannot be supported. Last but not least, H4 predicted a positive and significant relationship between employee resilience and organizational resilience. The test results of H4 show that the relationship is significant ($\beta = 0.419, p = 0.03$). Therefore, H4 is supported.

Table 3. Structural Model Results.

Hypotheses	UAE		Result	
	β	<i>p</i>		
H1	Work Stress \rightarrow Organizational Resilience	−0.211	0.016	Supported
H2	Work Engagement \rightarrow Organizational Resilience	0.172	0.024	Supported
H3	Well-being \rightarrow Organizational Resilience	−0.001	0.989	Rejected
H4	Employee Resilience \rightarrow Organizational Resilience	0.419	0.030	Supported

R^2 values, which indicate the amount of variance in the outcome variable explained by the independent variables for each sample. The results of this research revealed that the R^2 values of the models in this study were within a significant range of 0.44. There is no consensus on a standard cut-off value, as this may vary by discipline but R^2 val-

ues above 0.30 indicate that the models in this study have sufficient capacity to explain organizational resilience.

5. Discussion and Conclusions

Essentially, the focus of this paper was to investigate the relationship between stress, engagement, well-being, employee resilience, and organizational resilience, so that we could develop a model that can be used to investigate this relationship. According to the model, specific antecedents were identified, and their importance was indicated so that they could be used in the context of the current pandemics as well as to deal with future crises that may occur in the future. As the results indicate work stress, work engagement and employee resilience are affecting significantly organizational resilience.

In a highly competitive workplace, employees face great work pressure. In spite of the fact that job anxiety can motivate employees to work tougher, unnecessary job stress that is not discharged properly would have opposite effects on their physical and mental health, even affecting their performance at work [47]. As it is natural due to the COVID-19 pandemic threat, employees are faced with greater job stress, and business managers should take steps to resolve those job stress issues as soon as possible. As our results indicate, high levels of work stress are affecting negatively organizational resilience. Low levels of stress can positively affect organizational resilience, which can in turn reduce turnover rates and subsequently affect engagement in a company.

Work engagement is one of the most important antecedents of organizational resilience. Recent studies have attempted to identify the organizational initiatives that increase organizational resilience in light of the demonstrated positive effects of work engagement on performance and productivity [27,31]. Research shows that the environment at work and HR practices in particular are key factors determining employee engagement at work, but empirical evidence for their effect on organizational resilience is lacking [5,38]. At the individual level of analysis, higher engagement levels can be observed when an organization implements HR practices aimed at nurturing employees' abilities, motivation, and opportunities to participate [22]. This type of work engagement, as our results indicate, is affecting organizational resilience. Engaged employees are more informed regarding the internal and external environment of their company and they are following industry updates more tightly [30].

Several studies have examined the importance of well-being for the work environment. As Franco-Santos and Doherty [57] explain a positive work environment plays a vital role in the wellbeing of those who work there, including not only employees, but organizations, the economy, and society at large as well. Based on that, this study examined how well-being and organizational resilience are interrelated. As it is indicated earlier, it was obvious that no significant relationship was visible.

The results of this study agree with Cheng and Kao's work published in 2022 which concludes that positive employee relationships are associated with increased organizational resilience and that an organizational resilience test could be used to evaluate this relationship. As it is natural, if a company has individuals who have a high level of employee resilience, those individuals can recover more quickly from an uncomfortable situation in a high-stress environment like the COVID-19 era. This will also enable the organization and its co-workers to achieve organizational resilience at an exceptionally high level.

5.1. Implications

As a result of the current study, a number of implications can be drawn. It is important to note that, from a theoretical perspective, there is little empirical research investigating the different effects of various organizational capabilities on organizational resilience, and that it is also important that we examine the relationship between resource-based views, and organizational learning to develop a resilient organization in crisis situations. In this paper, we conceptualize a framework for validating such an approach. Additionally, this paper contributes to the growing concern that employees face in different industries as a result of

the dramatic changes that they are experiencing. As McManus and Seville [19] indicate, organization resilience is significant in the current dynamic working environment. As it was visible in several studies, it has been demonstrated that for an organization to achieve success, there are many factors related to employees' well-being, stress, engagement, and resilience that need to be taken into account. In their study, Mubarak and Khan [49] show that employee resilience is a mediator for organizational resilience. In our study, we have found that employee resilience can also have direct relationship with organizational resilience. Through training on resilience and reshaping of the work environment, organizations need to focus on building the personal resources of their employees.

Work stress and well-being were found to affect organizational resilience together with many other organizational factors [40,47,49,58]. Our study results agree that work stress is a significant factor regarding organizational resilience, but disagree that well-being is affecting significantly organizational resilience. By reducing stress and improving the engagement and well-being of employees, organizations can improve employee performance and resilience at work, resulting in a reduction of employee turnover and an increase in employee efficiency [59]. The fact that well-being is not significant for the UAE working environment should be further examined. As the country has more expats than local Emiratis, it is important in the future to investigate if both groups tend to have the same characteristics.

There is no doubt that employee turnover is one of the most costly expenses an organization has to deal with, and this is why businesses should exercise caution when hiring new employees [13]. By employing psychological tests or using new technologies such as simulations, organizations can develop the appropriate tools to enhance their hiring procedure in order to determine if the new hires are suitable for the organization or not. It is important to select employees with high levels of resilience, as this can lead to high levels of organizational resilience, as the results of this study delineate.

5.2. Limitations and Future Research

It is important to note that this study has some limitations. To begin with, the scope of the investigation was limited to the United Arab Emirates, even though a sample of local Emiratis and expats was chosen for the study. Thus, it is not possible to generalize the results of this study to employees in other regions based on the findings of this study alone. The scope of future studies can be expanded to other parts of the world and to a variety of industries. Second, due to the fact that this was a cross-sectional study, causal inferences could not be drawn between the variables. This study, however, was limited by the fact that the research variables were derived and verified from existing literature. Moreover, this study did not take into consideration the demographic characteristics of employees, such as gender, age, religion, etc., even though they can also potentially affect personality traits related to a job.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Questions Used.

Code	Statement
	Work Stress
WS1	I feel fidgety or nervous because of my job
WS2	Problems associated with work have kept me awake at night
WS3	I feel nervous before attending meetings in this organization
WS4	If I had a different job, my health would probably improve
	Work Engagement
WE1	At my work, I feel bursting with energy
WE2	I am enthusiastic about my job
WE3	I am proud of the work that I do
	Work Well-Being
WW1	I feel alive and vital at work
WW2	I am subject to personal harassment at work
WW3	I have energy and spirit at work
WW44	I am subject to bullying at work
	Employee Resilience
ER1	I know what I have to do to achieve my aspirations in life
ER2	I am ambitious to achieve certain things during my lifetime'
ER3	I have got friends to provide me with the emotional support I need'
ER4	I can solve most problems that challenge me'
	Organizational Resilience
OS1	The company I work achieves a new organizational balance by adapting to changes in the environment (offering new products or services, incorporating new technologies)
OR2	The company I work for was able to quickly recognize that there is a threatening situation due to the pandemic
OR3	The company I work for adapts strategically and operationally to new environmental conditions

References

1. Wise, C.; Armijo, L.; Katada, S.N. *Unexpected Outcomes: How Emerging Economies Survived the Global Financial Crisis*; Brookings Institution Press: Washington, DC, USA, 2015.
2. Zhang, X.A.; Cozma, R. Risk sharing on Twitter: Social amplification and attenuation of risk in the early stages of the COVID-19 pandemic. *Comput. Hum. Behav.* **2022**, *126*, 106983. [[CrossRef](#)] [[PubMed](#)]
3. Reichel, A.; Fuchs, G.; Uriely, N. Perceived Risk and the Non-Institutionalized Tourist Role: The Case of Israeli Student Ex-Backpackers. *J. Travel Res.* **2007**, *46*, 217–226. [[CrossRef](#)]
4. Macchi Silva, V.V.; Ribeiro, J.L.D. Human resource management for the resilience of public organizations: A model based on macro-competences. *J. Organ. Eff. People Perform.* **2022**; ahead of print.
5. Cooke, F.L.; Cooper, B.; Bartram, T.; Wang, J.; Mei, H. Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in China. *Int. J. Hum. Resour. Manag.* **2016**, *30*, 1239–1260. [[CrossRef](#)]
6. Korol, T.; Fotiadis, A. Implementing artificial intelligence in forecasting the risk of personal bankruptcies in Poland and Taiwan. *Oeconomia Copernic.* **2022**, *13*, 407. [[CrossRef](#)]
7. Lengnick-Hall, C.A.; Beck, T.E.; Lengnick-Hall, M.L. Developing a capacity for organizational resilience through strategic human resource management. *Hum. Resour. Manag. Rev.* **2011**, *21*, 243–255. [[CrossRef](#)]
8. Siriopoulos, C.; Georgopoulos, A.; Tsagkanos, A. Does the 'Market for Corporate Control' hypothesis explain takeover targets? *Appl. Econ. Lett.* **2006**, *13*, 557–561. [[CrossRef](#)]
9. Konstantaras, K.; Siriopoulos, C. Estimating financial distress with a dynamic model: Evidence from family owned enterprises in a small open economy. *J. Multinat. Financ. Manag.* **2011**, *21*, 239–255. [[CrossRef](#)]
10. Siriopoulos, C. A First Assessment of COVID-19 Pandemic in Financial Markets. *J. Int. Acad. Case Stud.* **2021**, *27*, 1–8.
11. Rafiq, M.; Shahzad, F.; Farrukh, M.; Khan, I. The psychological mechanism linking life satisfaction and turnover intention among healthcare workers during the COVID-19 pandemic. *Work* **2022**, *71*, 505–514. [[CrossRef](#)]
12. Polyzos, E. Examining the asymmetric impact of macroeconomic policy in the UAE: Evidence from quartile impulse responses and machine learning. *J. Econ. Asymmetries* **2022**, *26*, e00267. [[CrossRef](#)]

13. Rafiq, M.; Jafar, R.M.S.; Ahmad, W.; Dastane, O.; Sial, M.A. Job Embeddedness: Cross-cultural Comparison Between China and Pakistan During COVID-19 Pandemic. *Vision* **2022**. [\[CrossRef\]](#)
14. Pashapour, S.; Bozorgi-Amiri, A.; Azadeh, A.; Ghaderi, S.F.; Keramati, A. Performance optimization of organizations considering economic resilience factors under uncertainty: A case study of a petrochemical plant. *J. Clean. Prod.* **2019**, *231*, 1526–1541. [\[CrossRef\]](#)
15. Fotiadis, A.K.; Huan, T.-C. *Decision-Making in Public Hospital During Economic Crisis*, in *Trade Tales: Decoding Customers' Stories*; Emerald Publishing Limited: Bingley, UK, 2017; pp. 39–43.
16. Siriopoulos, C. Is COVID-19 Pandemic a Trumped-Up Test for Democracy? *J. Int. Acad. Case Stud.* **2021**, *27*, 1–3.
17. Pal, R.; Torstensson, H.; Mattila, H. Antecedents of organizational resilience in economic crises—An empirical study of Swedish textile and clothing SMEs. *Int. J. Prod. Econ.* **2014**, *147*, 410–428. [\[CrossRef\]](#)
18. Reddy, M.V.; Boyd, S.W.; Nica, M. Towards a post-conflict tourism recovery framework. *Ann. Tour. Res.* **2020**, *84*, 102940. [\[CrossRef\]](#) [\[PubMed\]](#)
19. McManus, S.; Seville, E.; Vargo, J.; Brunson, D. Facilitated Process for Improving Organizational Resilience. *Nat. Hazards Rev.* **2008**, *9*, 81–90. [\[CrossRef\]](#)
20. Tong, R.; Wang, X.; Wang, L.; Hu, X. A dual perspective on work stress and its effect on unsafe behaviors: The mediating role of fatigue and the moderating role of safety climate. *Process Saf. Environ. Prot.* **2022**, *165*, 929–940. [\[CrossRef\]](#)
21. Mohamed, L.M. An exploratory study on the perceived work stress by individual characteristics: The case of Egyptian hotels. *J. Hosp. Tour. Manag.* **2015**, *25*, 11–18. [\[CrossRef\]](#)
22. Brunetto, Y.; Farr-Wharton, B.; Wankhade, P.; Saccon, C.; Xerri, M. Managing emotional labour: The importance of organisational support for managing police officers in England and Italy. *Int. J. Hum. Resour. Manag.* **2022**, 1–23. [\[CrossRef\]](#)
23. Tengilimoğlu, D.; Zekioglu, A.; Tosun, N.; Işık, O.; Tengilimoğlu, O. Impacts of COVID-19 pandemic period on depression, anxiety and stress levels of the healthcare employees in Turkey. *Leg. Med.* **2021**, *48*, 101811. [\[CrossRef\]](#)
24. Prescott, K.; Baxter, E.; Lynch, C.; Jassal, S.; Bashir, A.; Gray, J. COVID-19: How prepared are front-line healthcare workers in England? *J. Hosp. Infect.* **2020**, *105*, 142–145. [\[CrossRef\]](#) [\[PubMed\]](#)
25. Karatepe, O.M.; Okumus, F.; Saydam, M.B. Outcomes of job insecurity among hotel employees during COVID-19. *Int. Hosp. Rev.* **2022**; ahead of print.
26. Ok, C.M.; Lim, S. Job crafting to innovative and extra-role behaviors: A serial mediation through fit perceptions and work engagement. *Int. J. Hosp. Manag.* **2022**, *106*, 103288. [\[CrossRef\]](#)
27. Rabiul, M.K.; Promsivapallop, P.; Al Karim, R.; Islam, M.A.; Patwary, A.K. Fostering quality customer service during COVID-19: The role of managers' oral language, employee work engagement, and employee resilience. *J. Hosp. Tour. Manag.* **2022**, *53*, 50–60. [\[CrossRef\]](#)
28. Fotiadis, A.; Abdulrahman, K.; Spyridou, A. The mediating role of psychological autonomy, competence and relatedness on work life balance and well-being. *Front. Psychol.* **2019**, *10*, 1267. [\[CrossRef\]](#) [\[PubMed\]](#)
29. Crawford, A.C.; Newmeyer, C.E.; Jung, J.H.; Arnold, T.J. Frontline Employee Passion: A Multistudy Conceptualization and Scale Development. *J. Serv. Res.* **2021**, *25*, 10946705211027659. [\[CrossRef\]](#)
30. Michael, N.; Fotiadis, A. Employee turnover—The hotel industry perspective. *J. Tour. Herit. Serv. Mark.* **2022**, *8*, 38–47.
31. Khusanova, R.; Kang, S.-W.; Choi, S.B. Work Engagement Among Public Employees: Antecedents and Consequences. *Front. Psychol.* **2021**, *12*, 684495. [\[CrossRef\]](#)
32. Yang, X.; Jo, W. Roles of work-life balance and trait mindfulness between recovery experiences and employee subjective well-being: A moderated mediation model. *J. Hosp. Tour. Manag.* **2022**, *52*, 459–468. [\[CrossRef\]](#)
33. Klainin-Yobas, P.; Ramirez, D.; Fernandez, Z.; Sarmiento, J.; Thanoi, W.; Ignacio, J.; Lau, Y. Examining the predicting effect of mindfulness on psychological well-being among undergraduate students: A structural equation modelling approach. *Personal. Individ. Differ.* **2016**, *91*, 63–68. [\[CrossRef\]](#)
34. Sobaih, A.E.E.; Elshaer, I.; Hasanein, A.M.; Abdelaziz, A.S. Responses to COVID-19: The role of performance in the relationship between small hospitality enterprises' resilience and sustainable tourism development. *Int. J. Hosp. Manag.* **2021**, *94*, 102824. [\[CrossRef\]](#)
35. Fisher, E.; Cárdenas, L.; Kieffer, E.; Larson, E. Reflections from the "Forgotten Front Line": A qualitative study of factors affecting wellbeing among long-term care workers in New York City during the COVID-19 pandemic. *Geriatr. Nurs.* **2021**, *42*, 1408–1414. [\[CrossRef\]](#)
36. McCartney, G. The impact of the coronavirus outbreak on Macao. From tourism lockdown to tourism recovery. *Curr. Issues Tour.* **2020**, *24*, 2683–2692. [\[CrossRef\]](#)
37. Lari Dashtbayaz, M.; Salehi, M.; Mozan, S. The impact of COVID-19 on organisational commitment with mediating role of satisfaction among the Iraqi auditors. *TQM J.* **2022**; ahead of print.
38. Dai, Y.-D.; Zhuang, W.-L.; Huan, T.-C. Engage or quit? The moderating role of abusive supervision between resilience, intention to leave and work engagement. *Tour. Manag.* **2019**, *70*, 69–77. [\[CrossRef\]](#)
39. Tugade, M.; Fredrickson, B. Resilient individuals use positive emotions to bounce back from negative emotional experiences. *J. Personal. Soc. Psychol.* **2004**, *86*, 320–333. [\[CrossRef\]](#) [\[PubMed\]](#)
40. Liu, Y.; Cooper, C.L.; Tarba, S.Y. Resilience, wellbeing and HRM: A multidisciplinary perspective. *Int. J. Hum. Resour. Manag.* **2019**, *30*, 1227–1238. [\[CrossRef\]](#)
41. Korol, T.; Spyridou, A. Examining Ownership Equity as a Psychological Factor on Tourism Business Failure Forecasting. *Front. Psychol.* **2020**, *10*, 3048. [\[CrossRef\]](#)

42. Aguiar-Quintana, T.; Nguyen, T.H.H.; Araujo-Cabrera, Y.; Sanabria-Díaz, J.M. 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. *Int. J. Hosp. Manag.* **2021**, *94*, 102868. [[CrossRef](#)]
43. Caniels, M.C.J.; Hatak, I. Employee resilience: Considering both the social side and the economic side of leader-follower exchanges in conjunction with the dark side of followers' personality. *Int. J. Hum. Resour. Manag.* **2022**, *33*, 297–328. [[CrossRef](#)]
44. Khan, Z.; Rao-Nicholson, R.; Akhtar, P.; Tarba, S.Y.; Ahammad, M.F.; Vorley, T. The role of HR practices in developing employee resilience: A case study from the Pakistani telecommunications sector. *Int. J. Hum. Resour. Manag.* **2019**, *30*, 1342–1369. [[CrossRef](#)]
45. Kline, R. *Principles and Practice of Structural Equation Modeling*, 4th ed.; Guilford Press: New York, NY, USA, 2015.
46. Byrne, B.M. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd ed.; Routledge Taylor & Francis Group: New York, NY, USA, 2009.
47. Cheng, S.C.; Kao, Y.H. The impact of the COVID-19 pandemic on job satisfaction: A mediated moderation model using job stress and organizational resilience in the hotel industry of Taiwan. *Heliyon* **2022**, *8*, e09134. [[CrossRef](#)]
48. Ozanne, L.K.; Chowdhury, M.; Prayag, G.; Mollenkopf, D.A. SMEs navigating COVID-19: The influence of social capital and dynamic capabilities on organizational resilience. *Ind. Mark. Manag.* **2022**, *104*, 116–135. [[CrossRef](#)]
49. Mubarak, N.; Khan, J.; Khan, A.K. Psychological distress and project success: The moderating role of employees' resilience and mindfulness. *Int. J. Proj. Manag.* **2022**, *40*, 566–576. [[CrossRef](#)]
50. Kline, R.B. *Principles and Practice of Structural Equation Modeling*, 3rd ed.; The Guilford Press: New York, NY, USA, 2010.
51. Fan, Y.; Chen, J.; Shirkey, G.; John, R.; Wu, S.R.; Park, H.; Shao, C. Applications of structural equation modeling (SEM) in ecological studies: An updated review. *Ecol. Process.* **2016**, *5*, 19. [[CrossRef](#)]
52. Hair, J.F., Jr.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage: Thousand Oaks, CA, USA, 2014.
53. Hoaglin, D.C.; Iglewicz, B. Fine-Tuning Some Resistant Rules for Outlier Labeling. *J. Am. Stat. Assoc.* **1987**, *82*, 1147–1149. [[CrossRef](#)]
54. Kim, J.-H.; Ritchie, J.R.B.; McCormick, B. Development of a Scale to Measure Memorable Tourism Experiences. *J. Travel Res.* **2010**, *51*, 12–25. [[CrossRef](#)]
55. Hair, J.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson Prentice Hall: Hoboken, NJ, USA, 2010.
56. Gefen, D.; Straub, D. A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Commun. Assoc. Inf. Syst.* **2005**, *16*, 91–109. [[CrossRef](#)]
57. Franco-Santos, M.; Doherty, N. Performance management and well-being: A close look at the changing nature of the UK higher education workplace. *Int. J. Hum. Resour. Manag.* **2017**, *28*, 2319–2350. [[CrossRef](#)]
58. Zahedi, J.; Salehi, M.; Moradi, M. Identifying and classifying the financial resilience measurement indices using intuitive fuzzy DEMATEL. *Benchmarking Int. J.* **2022**; ahead of print.
59. Michael, N.; Michael, I.; Fotiadis, A.K. The role of human resources practices and branding in the hotel industry in Dubai. *J. Hum. Resour. Hosp. Tour.* **2022**, 1–25. [[CrossRef](#)]

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