sustainability

MDPI

Article

The Impact of the COVID-19 Pandemic on the Hospitality and Tourism Industry: The Mediating Effect of Coping and the Moderating Role of Management Support

Demetris Vrontis [1,2], Ranjan Chaudhuri [3,*], Sheshadri Chatterjee [4] and Antonino Galati [5]

1 School of Business, University of Nicosia, Nicosia 2417, Cyprus; vrontis.d@unic.ac.cy
2 Department of Management Studies, Adnan Kassar School of Business, Lebanese American University, Beirut 11022801, Lebanon
3 Research Center, Léonard de Vinci Pôle Universitaire, 92400 Courbevoie, France
4 Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur, Kharagpur 721302, India; sheshadri.academic@gmail.com
5 Department of Agricultural, Food and Forest Sciences, University of Palermo, 90133 Palermo, Italy; antonino.galati@unipa.it
* Correspondence: ranjan.chaudhuri@devinci.fr

Abstract: The COVID-19 pandemic has impacted most industries, including the hospitality and tourism industry. This is one of the first studies to investigate the impact of COVID-19 on the psychological well-being of individuals in the hospitality and tourism industry. With the help of the literature and theories, a theoretical model is developed, which is later validated through structural equation modeling, using a survey of 314 usable respondents from the hospitality and tourism industry. This study finds that coping has a significant mediating effect on individuals' psychological well-being and that management support plays a considerably significant role in hospitality and tourism employees' psychological well-being.

Keywords: tourism and hospitality; COVID-19; coping; psychological well-being; risk; management support

check for updates

Citation: Vrontis, D.; Chaudhuri, R.; Chatterjee, S.; Galati, A. The Impact of the COVID-19 Pandemic on the Hospitality and Tourism Industry: The Mediating Effect of Coping and the Moderating Role of Management Support. *Sustainability* **2023**, *15*, 15057. https://doi.org/10.3390/su152015057

Academic Editors: Kyle Maurice Woosnam and Hong-Youl Ha

Received: 22 August 2023
Revised: 8 October 2023
Accepted: 18 October 2023
Published: 19 October 2023

Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

COVID-19 has brought unprecedented and unforeseen consequences to almost all sectors in the world economy [1]. In such a precarious situation, stock markets have dramatically collapsed, supply chains have been disrupted, and even a global recession looms [2,3]. COVID-19 symptoms may be considered similar to those that were associated with the outbreak of SARS in 2003 [4]. In fact, COVID-19 has ruthlessly transformed everyday life with the bitter experiences of lockdowns, closures of businesses and other establishments, and even the closures of national borders [5,6].

Researchers in several fields are exploring COVID-19, striving to find a way to address its catastrophic effects [7]. Early endeavors to blunt the impact of the COVID-19 virus stressed using masks and maintaining physical distancing, as well as quickly treating those who became ill [8]. In this scenario, the hospitality and tourism industry, along with various sectors, was severely impacted [9]. The hospitality and tourism industry is always bidirectionally linked with pandemics in a cause–effect manner [10]. Although lockdowns were able to control the spread of COVID-19 infections, this measure has a considerable impact on people's mental health, causing extreme stress [11]. The COVID-19 pandemic possesses a psychological dimension since it is closely concerned with sharp declines in persons' psychological well-being [12–15]. Businesses in different sectors, especially the hospitality and tourism industry, are worried about their workers' mental health and well-being due to the COVID-19 pandemic [13]. Earlier studies investigated several causes of mental stress among employees in the hospitality and tourism industry [16–19]. There is no

denying the fact that unless employees in the hospitality and tourism industry are confident about their immunity during the COVID-19 pandemic, they cannot work properly and perform their tasks to their best ability. In such a context, it is necessary to investigate how the pandemic impacts on the mental health and physical well-being of employees in the hospitality and tourism industry. It is also necessary to examine how employees' emotional attitude in such stressful situations is influenced and how they could control their experience by acquiring proper skills to address such turbulent situations. Also, it is essential to study how the leadership of hospitality and tourism organizations could support their employees to work without worrying about job uncertainty or being infected by COVID-19. However, detailed studies about these issues are scant in the extant literature. Hence, there is a research gap. With this background, the purpose of this study is to examine the impact of the COVID-19 pandemic on employees in the hospitality and tourism industry and to investigate the mediating effects of coping along with the moderating impacts of management support on their psychological well-being. In this context, the aim of this study is to address the following objectives:

1. To examine the impact of the COVID-19 pandemic on employees in the hospitality and tourism industry.
2. To determine if there is any mediating effect of coping on the psychological well-being of employees in the hospitality and tourism industry.
3. To investigate the moderating effect of management support on the psychological well-being of employees in the hospitality and tourism industry.

To address the above-mentioned questions, a survey was conducted to analyze the responses of 314 employees, managers, and executives of the top 100 companies (Top 100 companies worldwide: Travel, tourism, and hospitality: www.statista.com) (accessed on 21 August 2023). A conceptual model was also developed. The conceptual model was validated with the factor-based PLS-SEM technique. To substantiate the empirical findings, appraisal-based theory and resource-based stress theory were integrated since neither of them alone could explain the impacts of the COVID-19 pandemic on employees in the hospitality and tourism industry mediated by the effects of coping and under the moderating influence of managerial support.

2. Review of Literature

The COVID-19 pandemic impacted the world's hospitality and tourism industry, and because of that, people in this industry have been impacted socially, economically, and even psychologically [20–22]. COVID-19 has had a considerable adverse impact on customers, employees, and businesses in the hospitality and tourism industry that had huge investments in tour operations, hotels, and the airline sector [20,23,24]. Several issues, including constraints on one's working life, adverse effects on one's well-being, demoralization because of uncertainty, pessimism, anxiety about job security, and the fear of being infected by COVID-19, are considered to have negatively impacted employees [25–27]. Studies have analyzed how the sudden outbreak of the COVID-19 pandemic affected people's attitudes and behavior towards tourism [23,24]. Other studies have also investigated how, during and after the COVID-19 pandemic, applications of smart tourism technologies could help to develop the tourism industry even in rural areas [9,27].

During the COVID-19 pandemic, hotels changed their human resource plans. Putting employees on non-paid leave [28], reducing the number of employees [20], and banning new recruitment [29] are some of the salient steps taken by hotel management teams during the COVID-19 pandemic situation. Some studies conducted in China highlighted that, after the COVID-19 pandemic shock, healthcare employees experienced depression, emotional stress, anxiety, and even insomnia [30–33]. Thus, the impacts of the COVID-19 pandemic on business organizations are unprecedented.

Business organizations, especially in the hospitality and tourism sector, are concerned about their employees' psychological well-being and mental health since the nature of their jobs burdens them psychologically [11]. Krok et al. [33] showed that, during the

COVID-19 pandemic, employees' perception of risk must be an important consideration in the healthcare industry. The same study also showed that the risk factor does not directly impact on the healthcare personnel's psychological well-being, but it indirectly impacts the coping process. The concept of coping is interpreted as information seeking and planning, which is known as problem-focused coping, and seeking emotional support from others during crisis, which is known as emotion-focused coping [34–38]. The concept of coping emerges from the stress theory known as the Conservation of Resources (COR) theory [39]. The perception of risk and fear that affects employees in the hospitality and tourism industry can be explained by protection motivation theory (PMT) [40].

3. Theoretical Underpinning and Development of Hypotheses

3.1. Theoretical Underpinning

Several studies successfully predicted the outcomes of stress in different sectors through appraisal-based theory and resource-based stress theory [41,42]. Appraisal-based theories include protection motivation theory (PMT) [40], which has successfully explained how people assess the probability of a threat [43]. Resource-based stress theories include Conservation of Resources (COR) theory [39], which helps one interpret how personal resources could enable people to efficiently address any threat [44]. Thus, protection motivation theory (PMT) could interpret how and to what extent an individual's emotions and attitude are impacted during a crisis. PMT also highlights how an individual could behave and respond in any turbulent environment. Also, Conservation of Resources theory (COR) elucidates how people could use their personal ability in the quest for a fruitful way out of any crisis that could affect their well-being. These theories are considered related to appraisal-based theory and resource-based stress theory.

PMT emphasizes the importance of the perception of risk and comprises three components: a person's apprehension of a threat happening, like being attacked or being infected by a disease such as COVID-19; a person's fear about the severity of the danger; and the individual's perception about the extent of harm that the threat would cause. In the context of the present study, this perception of a threat includes how a COVID-19 infection could harm a person's health and the health of other people. This forces people to take precautionary measures [45,46]. A study of SARS survivors highlighted that the severity of their infection was related to their psychological adjustment, which could be assessed in terms of emotional distress as well as turbulence in mental health, and another study on COVID-19 survivors found the same results [47,48].

Conservation of Resources (COR) theory [39] posits that people are motivated to maintain their current resources and pursue new resources. Resources are defined as "those entities that either are centrally valued in their own right or acts as means to obtain centrally valued ends" [44] (p. 307). The extent of resources that an individual possesses will help the person to manage stress. Research has demonstrated that resources considerably influence people's ability to combat environmental hazards successfully [49,50]. Hence, resources are considered to positively affect coping, which improves psychological well-being and helps to improve one's capacity to resist stress [51].

COR theory supposes that, in the face of a threat, people first attempt to take detailed information about the reasons for that threat, then they articulate a plan to address it, and, finally, they act. This process is called problem-focused coping [52]. The COR theory posits that after attempting to act, individuals try to regulate emotional stress, which is related to the situation. This type of coping is known as emotion-focused coping [36]. Studies also highlighted that coping acts as a successful mediator of perceived risk and psychological well-being [53].

It is argued in the context of this study that one's perceived risk of COVID-19 is predicted by that person's fear of contracting it and the perceived threat from COVID-19, which is interpreted through PMT [40], and the perceived risk of COVID-19 impacts individual's psychological well-being and is mediated through two types of coping, in terms of COR theory [39].

With the inputs from the literature review and from the two theories, a conceptual model for prompting individuals' psychological well-being in the context of the abrupt outbreak of the COVID-19 pandemic is proposed and is shown in Figure 1.

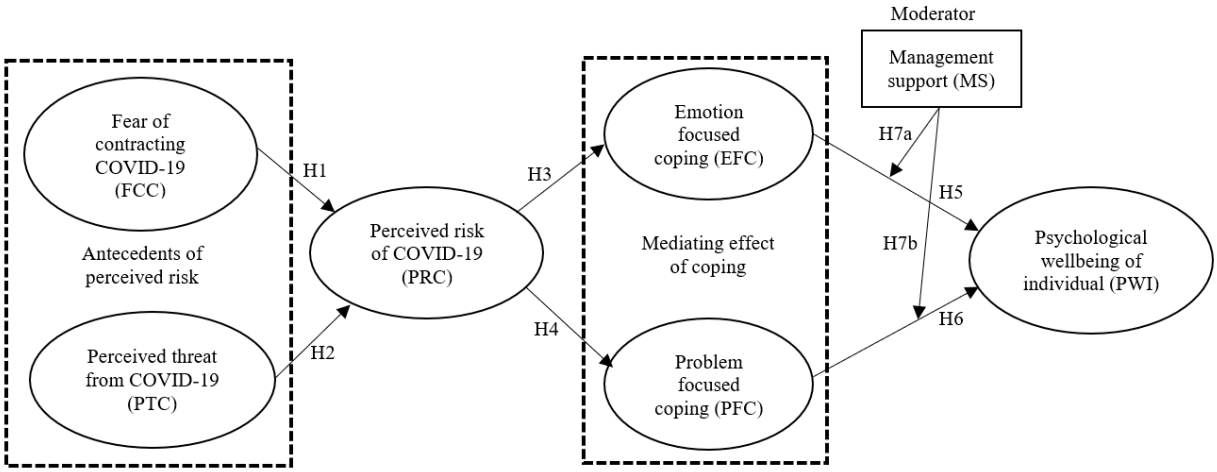


Figure 1. The conceptual model.

3.2. Development of Hypotheses

This study identified the determinants that could impact the psychological well-being of employees in the hospitality and tourism industry during the COVID-19 pandemic. This study proposed the moderating role of management support, which could help hospitality and tourism employees to address the stressful situation of the COVID-19 pandemic. In this section, how these determinants are related and how the moderator, management support, acts will be explained to formulate the hypotheses.

3.2.1. Fear of Contracting COVID-19 (FCC)

The antecedent fear of contracting COVID-19 (FCC) is the perception of employees in the hospitality and tourism industry of the risk of their being infected by COVID-19. The COVID-19 pandemic affected the lives of people across the globe. Many countries enacted lockdown measures, enforced social distancing, and mandated businesses to close to prevent the spread of COVID-19 [3,9]. In such a situation, the authority of the hospitality and tourism industry is concerned with how it impacts employees' mental health, causing stress, which is extreme in comparison with the stress experienced in everyday life [54]. Hospitality and tourism workers withstand stress because they are uncertain about their job security and because they fear contracting COVID-19 while at work [11]. In terms of the discussion above, the following hypothesis is proposed.

H1. *The fear of contracting COVID-19 (FCC) has a positive impact on the perceived risk of COVID-19 (PRC).*

3.2.2. Perceived Threat from COVID-19 (PTC)

The hospitality and tourism industry is considered robust to withstand shocks, at least in the long run, but it is less able to in the short run [55]. This industry has had to tolerate setbacks, which were occasioned by several crises, including wars, epidemics, natural disasters, terror attacks, and so on, which threatened the safety and security of a destination [10]. But COVID-19 affected different industries in every nook and cranny of the world, especially the hospitality and tourism industry [9]. The pandemic has had a huge negative impact on employees in different industries, particularly in the hospitality and tourism industry, as well as the healthcare industry [56]. The economic consequences from the abrupt cessation of activities in these industries, due to COVID-19, have had a colossal impact on the employees who have suffered from uncertainty and unpredictability,

thus impacting them psychologically [57]. They perceived themselves to have experienced threats to their job security from COVID-19, as well as to their health. In such a scenario, the following hypothesis is formulated.

H2. *The perceived threat from COVID-19 (PTC) positively impacts the perceived risk of COVID-19 (PRC).*

3.2.3. Perceived Risk of COVID-19 (PRC)

Protection motivation theory (PMT) has been effectively applied to explain people's attitudes and reactions towards perceived risk [43]. The risk perception comprises three components [40]: the affected people's perception of being exposed to the threat of being infected with COVID-19; their perception of the severity of the danger; their perception of how harmful the consequences of the risk will be [45]. Considering the above discussion on protection motivation theory, it transpires that during COVID-19, hospitality and tourism employees perceived the risk of being affected by COVID-19 like other people had. The employees also felt that the uncertain situation may adversely affect their job conditions, and they were afraid to think about the consequences of all these prognoses [3]. The employees attempted to collect accurate information regarding the magnitude of COVID-19's impact. They tried to plan and to act accordingly [36], and they sought emotional support from others for their survival. Thus, before they became psychologically affected, they undertook beneficial coping strategies. Risk perception is believed to impact coping strategies, as the individuals involved have to withstand industrial or natural catastrophes [58]. Accordingly, it is hypothesized as follows.

H3. *The perceived risk of COVID-19 (PRC) has a positive impact on emotion-focused coping (EFC).*

H4. *The perceived risk of COVID-19 (PRC) has a positive impact on problem-focused coping (PFC).*

3.2.4. Emotion-Focused Coping (EFC)

Emotion-focused coping (EFC) is considered a psychological factor that is involved with emotional expression as well as emotional processing for reacting and responding to a stressful situation [59]. By applying emotional expression and emotional processing, it is possible for a person to address a stressful situation [60]. With emotional processing, a person attempts to understand, consider, and examine the emotion for responding to a stressful event like the COVID-19 pandemic [56,59]. Emotional expression is conceptualized as an attempt for verbally or non-verbally sharing and communicating the emotion [59,60]. Emotion-focused coping (EFC) "is oriented towards managing the emotions that accompany the perception of stress" [61] (p. 122). This type of coping can be achieved by seeking support from society, using avoidance techniques, exerting self-control, and so on [62]. This emotion-focused coping process is perceived to impact the psychological well-being of employees in any industry, during any crisis. Accordingly, it is hypothesized as follows.

H5. *Emotion-focused coping (EFC) positively impacts the psychological well-being of individuals (PWI).*

3.2.5. Problem-Focused Coping (PFC) and Psychological Well-Being of Individuals (PWI)

Coping is conceptualized as an individual's conscious effort to solve interpersonal and personal problems and to mitigate conflict as well as stress [60,63]. Problem-focused coping is also called adaptive behavioral coping. Some researchers opined that this type of coping allows individuals to ensure greater control over problems compared to that achieved by emotion-focused coping [64]. This process involves seeking information about the problem, then developing self-expertise to combat it, and, finally, acquiring skills to manage those problems. Different coping strategies are found to be beneficial in different contextualities. However, in a highly controllable situation, PFC is deemed to be more

beneficial [65]. Studies have confirmed that coping plays an important mediating role between perceived risk and well-being [58,66]. Accordingly, it is hypothesized as follows.

H6. *Problem-focused coping (PFC) positively impacts the psychological well-being of individual (PWI).*

3.2.6. Moderating Effects of Management Support (MS)

In the context of the COVID-19 pandemic, employees in the hospitality and tourism industry suffered from job uncertainty, and, at the same time, they feared being infected by COVID-19. Thus, the pandemic severely impacted the psychological well-being of these employees [67]. To embolden the mental health of hospitality and tourism employees during the COVID-19 pandemic, the role of the management team is critical in taking appropriate decisions for the employees' well-being [68]. The management team and decision making are perceived to be interwoven, as the management team is engaged in decision-making processes [69]. The management team, during the COVID-19 pandemic and in the context of their employees' well-being, needs to take appropriate action so that employees do not become depressed but are supported to cope with the situation [70]. In the COVID-19 pandemic environment, hospitality and tourism employees are perceived to be most affected. Therefore, management must strengthen the employees' mental health and make them feel more secure [71]. Accordingly, it is hypothesized as follows.

H7a. *Management support (MS) moderates the relationships between emotion-focused coping (EFC) and the psychological well-being of individuals (PWI).*

H7b. *Management support (MS) moderates the relationships between problem-focused coping (PFC) and the psychological well-being of individuals (PWI).*

4. Methodology

4.1. The Instrument

Through a survey, responses are taken against a structured questionnaire (a set of instruments), and the responses are quantified on a standard scale. The present study adopted a five-point Likert scale. Thus, for this process, a set of questions (questionnaire) in the form of statements was initially prepared using inputs from the existing validated scale and literature review to measure the content validity of the instruments of the constructs. There were 32 items prepared first, which were pretested with a small sample to rectify the wording and the format of the questionnaire. Thus, 10 experts in the domain of this study were also requested for their opinions about the questionnaire. The inputs of the experts helped to rectify the recitals of the instruments to increase their readability and comprehensiveness. As the scale adopted was a five-point Likert scale, five options were given, from strongly disagree (SD) to strongly agree (SA), with respective markings from 1 to 5 for each instrument. A pilot test was also conducted to finally rectify any flimsy errors in the wording and readability of the questionnaire. In this way, 32 instruments were fine-tuned. The list of questions along with their sources is provided in the Appendix A.

4.2. Participants

For targeting potential respondents, both convenience sampling and purposive sampling techniques were used. A list of hospitality and tourism organizations was available from the website www.statisto.com (Top 100 Companies Worldwide: Travel, Tourism, and Hospitality). The hospitality and tourism organizations were selected according to their overall revenue. Initially, the executives of 100 organizations were contacted and requested to allow their employees to take part in the survey. The executives were assured that the aim of this study was purely academic and the confidentiality and anonymity of the organizations and participants would be strictly preserved. After waiting a fortnight, one reminder email was sent. After waiting another fortnight and receiving very few

responses, another reminder was sent to all the potential respondents, as before. After that, the top executives of 22 organizations wanted to know details of this project, which were duly intimated to them. Fortunately, within another week, the executives of those 22 organizations agreed and sent us the details of the respective contact persons (coordinators) of their organizations who can be contacted. They were contacted and requested to send the list of their employees of different ranks who consented to take part in the survey. Within one week, a reminder was also sent to them. Ultimately, a list of 709 employees was received from different ranks of 14 organizations. These 709 employees were provided with a response sheet containing 32 items with a guideline on how to fill in the response sheet and with further information that their identity would not be disclosed. The entire survey was conducted during November 2020 to March 2021.

The respondents were to put one tick mark against five options for each item. They were requested to respond within two months (January and February 2021), and by the end of the scheduled time, responses from 326 respondents were obtained. The response rate was 46%. The responses were scrutinized, and we found that, out of 326 responses, 12 responses were incomplete and were not considered. Analysis was, therefore, performed with 314 usable responses against 32 items. This is within the permissible range [72]. The demographic information of 314 respondents is provided in Table 1.

Table 1. Demographic information (N = 314).

Particular	Category	Number of Respondents	Percentage (%)
Gender	Male	182	58.0
	Female	132	42.0
Age	18–30 years	140	44.6
	31–45 years	102	32.5
	45–55 years	42	13.4
	55–65 years	18	5.8
	Above 65 years	12	3.7
Organization hierarchy	Employees	195	62.1
	Managers	72	22.9
	Executives	47	15.0

5. Data Analysis and Results

To analyze the data, the partial least squares (PLS)–structural equation modelling (SEM) technique was preferred [73], and SmartPLS 3.2.3 software was used [74]. The bootstrapping procedure was followed with 5000 replications to estimate path coefficients and test the hypotheses. The PLS-SEM technique has some additional advantages over other techniques. This technique can analyze an exploratory study like this, it can analyze data which may not be normally distributed, and this approach does not require any sample restriction.

5.1. Measurement Properties and Discriminant Validity Test

The convergent validity of each item was analyzed by measuring the loading factor (LF) of each item. To assess the validity, reliability, and internal consistency of each construct, the average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha (α) of each construct were estimated. All these parameters were found to be within the allowable range. The results are shown in Table 2.

It was observed that the square roots of all the AVEs were greater than the corresponding bifactor correlation coefficients, thus satisfying the Fornell and Larcker criterion [75]. This confirms discriminant validity. The results are shown in Table 3.

Table 2. Measurement properties.

Constructs/Items	LF	AVE	CR	A	t-Values
FCC		0.85	0.89	0.93	
FCC1	0.96				17.38
FCC2	0.94				28.16
FCC3	0.95				24.22
FCC4	0.89				24.17
FCC5	0.88				26.29
PTC		0.82	0.87	0.91	
PTC1	0.95				30.32
PTC2	0.85				27.04
PTC3	0.90				26.22
PTC4	0.87				32.11
PTC5	0.96				28.07
PRC		0.83	0.88	0.92	
PRC1	0.92				28.20
PRC2	0.95				24.17
PRC3	0.94				36.11
PRC4	0.89				37.04
PRC5	0.88				25.62
EFC		0.88	0.91	0.96	
EFC1	0.90				29.17
EFC2	0.92				26.74
EFC3	0.95				29.03
EFC4	0.97				31.22
EFC5	0.94				22.17
PFC		0.87	0.90	0.95	
PFC1	0.94				26.37
PFC2	0.90				37.18
PFC3	0.89				33.22
PFC4	0.96				39.01
PFC5	0.95				26.20
PWI		0.84	0.87	0.90	
PWI1	0.90				32.44
PWI2	0.94				26.17
PWI3	0.96				25.67
PWI4	0.89				29.11
PWI5	0.92				27.06
PWI6	0.95				38.51
PWI7	0.85				26.91

Table 3. Discriminant validity test (Fornell and Larcker criterion).

Constructs	FCC	PTC	PRC	EFC	PFC	PWI	AVE
FCC	0.92						0.85
PTC	0.27	0.91					0.82
PRC	0.29	0.26	0.91				0.83
EFC	0.35	0.19	0.26	0.94			0.88
PFC	0.36	0.28	0.19	0.25	0.93		0.87
PWI	0.34	0.17	0.27	0.32	0.29	0.92	0.84

5.2. Effect Size f^2

Effect size f^2 values were estimated to assess if any exogenous latent variables (FCC and PTC) contributed to the endogenous variables (PRC, EFC, PFC, and PWI). It is known that if the f^2 value lies between 0.020 and 0.150, it is weak; if it lies between 0.150 and 0.350, it is medium; and if it is greater than 0.350, it is large [76]. In the present study, the results show that the effect size of FCC on PRC is 0.312, the effect size of PTC on PRC is 0.413, the effect size of PRC on EFC is 0.111, the effect size of PRC on PFC is 0.429, the effect size of

EFC on PWI is 0.405, and the effect size of PFC on PWI is 0.390. The results are presented in Table 4.

Table 4. Effect size f^2.

Constructs	PRC	EFC	PFC	PWI
FCC	0.312 (M)			
PTC	0.413 (L)			
PRC		0.111 (W)	0.429 (L)	
EFC				0.405 (L)
PFC				0.390 (L)

5.3. Moderator Analysis (Multigroup Analysis)

In the present study, management support (MS) was considered as a moderator acting on two linkages, H5 and H6. The effects of strong MS and weak MS on linkages H5 and H6 were considered separately. To estimate the effects, multigroup analysis (MGA) with the bootstrapping procedure considering 5000 replications was conducted. It is known that if the *p*-value difference is less than 0.05 or greater than 0.95, then the effects of the moderator on the linkage are significant [77]. The results of the present study show that the effects of the moderator MS on the two linkages H5 and H6 are significant. The results are shown in Table 5.

Table 5. Moderation analysis (MGA).

Linkages	Hypotheses	Moderator	*p*-Value Difference	Remarks
(EFC→PWI) × MS	H7a	Management Support (MS)	0.02	Significant
(PFC→PWI) × MS	H7b	Management Support (MS)	0.04	Significant

5.4. Hypotheses Testing (SEM)

Using the blindfolding procedure with a bootstrapping approach considering 5000 replications, the cross-validated redundancy concerning independent variables with an omission separation of 5 was estimated. The Q^2 value emerged as 0.077 (>0). This result highlights that the model has predictive relevance. Therefore, path coefficients of different linkages, *p*-values, and coefficients of determinant (R^2) could be measured. The results are shown in Table 6.

Table 6. Path coefficients, R^2 values, *p*-values, and remarks.

Linkages	Hypotheses	Path Coefficients/R^2 Values	*p*-Values	Remarks
Effects on PRC		R^2 = 0.34		
By FCC	H1	0.21	$p < 0.01$ (**)	Supported
By PTC	H2	0.31	$p < 0.001$ (***)	Supported
Effects on EFC		R^2 = 0.47		
By PRC	H3	0.27	$p < 0.05$ (*)	Supported
Effects on PFC		R^2 = 0.51		
By PRC	H4	0.33	$p < 0.001$ (***)	Supported
Effects on PWI		R^2 = 0.71		
By EFC	H5	0.41	$p < 0.001$ (***)	Supported
By PFC	H6	0.43	$p < 0.001$ (***)	Supported
(EFC→PWI) × MS	H7a	0.19	$p < 0.05$ (*)	Supported
(PFC→PWI) × MS	H7b	0.17	$p < 0.01$ (**)	Supported

Note: $p < 0.05$ (*); $p < 0.01$ (**); and $p < 0.001$ (***).

With all these inputs, the validated model is shown in Figure 2.

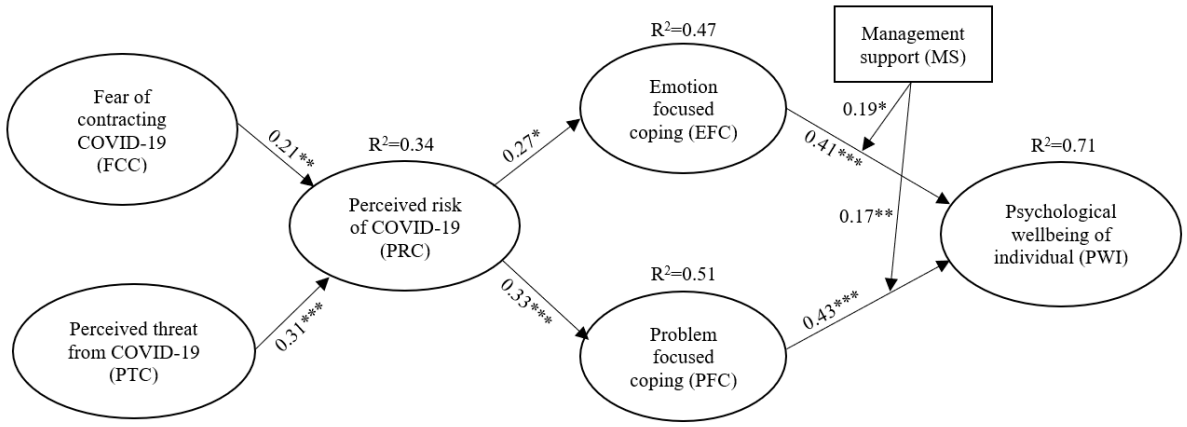


Figure 2. Validated model (SEM). Note: $p < 0.05$ (*); $p < 0.01$ (**); and $p < 0.001$ (***).

5.5. Results

In the present study, we established eight hypotheses, out of which two hypotheses (H7a and H7b) are related to the effects of the moderator, management support (MS), on the two linkages H5 and H6. The present study shows that FCC and PTC could impact PRC significantly and positively, as the path coefficients concerned are 0.21 and 0.31, respectively (H1 and H2), with corresponding levels of significance of $p < 0.01$ (**) and $p < 0.001$ (***). The results also highlight that PRC could impact EFC and PFC (H3 and H4) significantly and positively, since the path coefficients concerned are 0.27 and 0.33, respectively, each with levels of significance of $p < 0.01$ (*) and $p < 0.001$ (***). In this study, it was observed that the impacts of EFC and PFC on PWI (H5 and H6) were positive and significant since the concerned path coefficients are 0.41 and 0.43, with respective levels of significance of $p < 0.001$ (***) and $p < 0.001$ (***). The effects of the moderator MS on (EFC→PWI) H5 are significant and positive, as the concerned path coefficient is 0.19, with a level of significance of $p < 0.05$ (*), and the effects of the moderator MS on (PFC→PWI) H6 are also positive and significant, since the concerned path coefficient is 0.17, with a level of significance of $p < 0.01$ (**). Regarding the coefficients of determinant (R^2) values, FCC and PTC could explain PRC 34% ($R^2 = 0.34$) of the time. PRC could explain EFC and PFC separately to the tune of 47% ($R^2 = 0.37$) and 51% ($R^2 = 0.51$), respectively. These results highlight that EFC and PFC could explain PWI to the extent of 71% ($R^2 = 0.71$), which is the explanative power of the model. A summary of hypothesis statements, results, key findings, and interpretations is shown in Table 7.

Table 7. Hypotheses, results, and key findings.

Hypothesis Statement	Result Obtained	Findings/Interpretation
H1: The fear of contracting COVID-19 (FCC) has a positive impact on the perceived risk of COVID-19 (PRC).	Hypothesis is supported. β = 0.21 ** ($p < 0.01$)	The employees in the hospitality and tourism industry are fearful of contracting COVID-19. They perceive it as a risk.
H2: Perceived threat from COVID-19 (PTC) positively impacts the perceived risk of COVID-19 (PRC).	Hypothesis is supported. β = 0.31 *** ($p < 0.001$)	The employees are threatened by the consequences of impact of COVID-19 which increase their risk perception.
H3: Perceived risk of COVID-19 (PRC) has a positive impact on emotion-focused coping (EFC).	The hypothesis is supported. β = 0.27 * ($p < 0.05$)	For the employees of the hospitality and tourism industry, there is a positive and significant impact of perceived risk of COVID-19. The employees will be able to overcome this risk by developing their self-control and by lending support from the society which relates to emotion-focused coping.

Table 7. *Cont.*

Hypothesis Statement	Result Obtained	Findings/Interpretation
H4: Perceived risk of COVID-19 (PRC) has a positive impact on problem-focused coping (PFC).	The hypothesis is supported. β = 0.33 *** ($p < 0.001$)	For employees of the hospitality and tourism industry, there is a positive and significant impact of perceived risk of COVID-19. The employees will be able to overcome the risks by developing their problem-solving expertise and skills to combat any untoward situation which is related with problem-focused coping.
H5: Emotion-focused coping (EFC) positively impacts psychological well-being of individuals (PWI).	The hypothesis is supported. β = 0.41 *** ($p < 0.001$)	The psychological well-being of the individual employee of hospitality and tourism industry is positively and significantly impacted by emotion-focused coping.
H6: Problem-focused coping (PFC) positively impacts psychological well-being of individual (PWI).	The hypothesis is supported. β = 0.43 *** ($p < 0.001$)	The psychological well-being of the individual employee of hospitality and tourism industry is positively and significantly impacted by problem-focused coping
H7a: Management support (MS) moderates the relationships between emotion-focused coping (EFC) and psychological well-being of individuals (PWI).	The hypothesis is supported. β = 0.19 * ($p < 0.05$)	The management support (HR managers, immediate managers, and other leadership support) is essential for improving the self-control ability supported by the management to overcome the COVID-19 pandemic situation which relates to emotion focused coping, and it will help to improve psychological well-being of the individual employee of tourism and hospitality industry.
H7b: Management support (MS) moderates the relationships between problem-focused coping (PFC) and psychological well-being of individuals (PWI).	The hypothesis is supported. B = 0.17 ** ($p < 0.01$)	The management support (HR managers, immediate managers, and other leadership support) is essential for improving the self-control ability and individual skills of the employees to overcome untoward risks that relates to the problem-focused coping, and it will help to improve the psychological well-being of the individual employee.

Note: $p < 0.05$ (*); $p < 0.01$ (**); and $p < 0.001$ (***).

6. Discussion

The present study attempted to examine the issue of risk perception and resources concerning coping strategies, along with the psychological well-being of employees in the hospitality and tourism industry during the abrupt outbreak of the COVID-19 pandemic. The present study showed that one's perception of the risk of COVID-19 is predicted through the person's fear of contracting COVID-19 and the perceived threat from COVID-19 (H1 and H2). The risk perception eventually impacts hospitality and tourism employees' psychological well-being, mediated through emotion-focused coping and problem-focused coping (H3 and H4). The present study hypothesized that risk perception could assess employees in the hospitality and tourism industry whose psychological well-being was affected by mediation through two categories of coping (H5 and H6). These findings are supported by a previous study of survivors of the 2003 SARS epidemic, which highlighted that their risk perception was predicted by fear and perceived threat, causing emotional stress [47]. Also, the hypotheses of the present study received support from other studies that observed that, during the COVID-19 outbreak, people's perception of its severity depended on their ability to control the situation impacted on their psychological well-being [48]. The present study highlighted that emotion-focused coping as well as problem-focused coping significantly and positively impact the psychological well-being of employees in the hospitality and tourism industry. This finding corroborates other studies [12,78], which demonstrated that adopting a strategy to address any unforeseen situation and seeking support from others to help combat a crisis are directly related with

the affected persons' psychological well-being. By using problem-focused coping and emotion-focused coping as two mediating variables correlating perceived risk and well-being, this study highlighted that both types of coping are two dynamic processes that vary in terms of cognitive appraisal as well as personal necessary resources, and they eventually regulate the psychological well-being of the employees affected by the COVID-19 pandemic. This study hypothesized that emotional coping and problem-solving coping impacted on the psychological well-being of employees in the tourism and hospitality industry during the COVID-19 pandemic. It is pertinent to mention here that during any unprecedented situation, employees in hospitality and tourism organizations are expected to consider and conceptualize how and to what extent they are emotionally impacted by it. In such situations, they spontaneously seek support from society to be resilient. Also, they exert conscious effort to figure out how to address the situation so that their organizations function without being unnecessarily interrupted. In this context, it is argued that the present study successfully used the concepts of the two types of coping as the mediating factors impacting employees' psychological well-being. The mediating role of these two types of coping to improve the psychological well-being of employees in the tourism and hospitality industry during the COVID-19 pandemic was corroborated in another study [8]. The study of Prem et al. [8] highlighted how the people of Wuhan in China could manage the COVID-19 pandemic situation by adopting an effective control strategy. This could reveal that self-control can manage and address any awkward situation. The idea of the study of Prem et al. [8] provided effective inputs in the present study to hypothesize that coping associated with the power of self-control could impact on the psychological well-being of employees in the tourism and hospitality industry. Another study, by Li et al. [47], also supported the hypotheses of the present study, which established the relationships between emotional coping and problem-solving coping with the psychological well-being of employees in the tourism and hospitality industry. The study of Torabi et al. [9] discussed, in general, how the abrupt outbreak of a pandemic can cause a global change in business policy for the tourism industry. This idea helped us to analyze in the present study how hospitality and tourism employees' risk perception of the COVID-19 pandemic could considerably affect their psychological well-being under the mediating influence of their emotional- and problem-focused coping strategies, duly impacted by the moderating effect of management support. The present study also showed the effectiveness and veracity of the proposed model by comparing it with an alternative model (rival model). Details are provided in the Appendix A.

Now, the effects of the moderator MS on H5 and H6 are discussed through separate graphical presentations. Figure 3 shows the effects of strong MS and weak MS on linkage H5 (EFC→PWI).

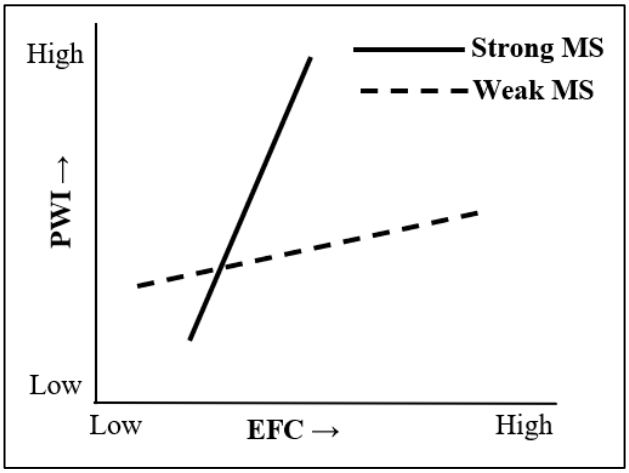


Figure 3. Effects of MS on H5.

The two lines in the graph show that as EFC increases, the rate of increase in PWI is more from the effects of strong MS compared to the effects of weak MS, since the gradient of the continuous line, representing effects of strong MS, is more than the gradient of the dotted line, representing the effects of weak MS.

Figure 4 shows the effects of strong MS and weak MS on linkage H6 (PEC→PWI).

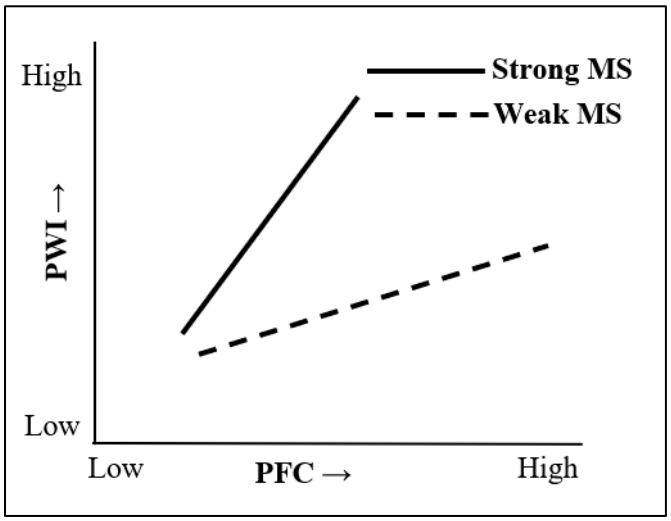


Figure 4. Effects of MS on H6.

Continuous and dotted lines represent the effects of strong MS and weak MS, respectively, on H6. From gradient analysis, it is seen that as PFC increases, the rate of increase in PWI is more from the effects of strong MS than from the effects of weak MS on H6, since the continuous line has a steeper gradient than the dotted line has.

7. Implications

7.1. Theoretical Implications

It is claimed that the present study provides several important theoretical contributions to the body of literature on the impact of perceived risk on employees' psychological well-being when they work in an industry that faces a crisis. No other studies have exhaustively investigated the impacts of risk factors predicted by the fear of COVID-19 and the threat of being affected by COVID-19 on the psychological well-being of hospitality and tourism employees, mediated through two vital strategic components of coping in the COVID-19 pandemic environment. By investigating these issues, it is claimed that this study has added value to the body of knowledge in this area.

Also, no extant literature was found to have investigated the contributions of the moderator, management support, on the psychological well-being of employees in this context. The present study considered the moderating effects of management support in this context to enrich the proposed theoretical model. The present study is built upon findings that cognitive (problem-focused coping) and motivational (emotion-focused coping) strategies mediate the interrelation between perceived risk and psychological well-being. Gerhold [79] observed that people in Germany tended to utilize only problem-focused coping strategies to combat the COVID-19 pandemic. The present study has extended Gerhold's observation by considering that both problem-focused coping and emotion-focused coping simultaneously operate as two mediators to establish a nexus between risk perception and well-being. This adds substantive value to the body of literature. The present study projected that there is a dominating interplay of cognitive and motivational strategies underlying the mechanisms of coping to address the dangers propounded because of the abrupt COVID-19 outbreak. The present work successfully enhanced our understanding by effectively conceptualizing that people's very perceptions and realizations of threats and uncertainty from the COVID-19 pandemic could cause them to rely on both motivational

(emotion-focused coping) and cognitive (problem-focused coping) strategies to seek help to improve their psychological well-being. This has added value to the extant literature concerning the hospitality and tourism industry. The proposed theoretical model with high predictive power is deemed to have provided a useful architecture for individuals to improve their psychological well-being to combat any crisis. This is also claimed as a unique theoretical contribution of the present study.

7.2. Practical Implications

This study provides several practical implications to help employees in the hospitality and tourism industry to sustain and maintain their psychological well-being to combat the COVID-19 pandemic or any other crisis when their jobs become uncertain. Employees are afraid of being infected by COVID-19 or experiencing any other untoward situation due to the nature of their job pattern. From the present study, it appears that fear of contracting COVID-19 positively and significantly impacts the perceived risk of COVID-19 (H1). This implies that management teams in the hospitality and tourism industry should provide adequate arrangements so that employees can take appropriate preventive measures to protect themselves from COVID-19. Management should make employees aware of the importance of wearing a mask when needed, social distancing, washing hands frequently, and cultivating the habit of using sanitizer.

The present study also highlights that the perceived threat of COVID-19 positively and significantly impacts the perceived risk of COVID-19 (H2). This implies that the management of the organizations concerned should arrange to supply oxygen promptly as and when the employees need it. The employees should also be assured that neither they nor their family would face problems being admitted to a healthcare center, and that they would be supported by the concerned organizational authority. When the organizational authority apprises employees of these arrangements, it will help the employees to not be unnecessarily threatened by the menace of COVID-19. Management support for the employees' health and well-being will help employees be calmer about COVID-19.

The present study hypothesized that the perceived risk of COVID-19 impacts positively and significantly on hospitality and tourism employees' psychological well-being, as mediated through emotion-focused coping and problem-focused coping (H3, H4, H5, and H6). This implies that the managers of the organizations concerned must encourage employees to adopt cognitive and motivational strategies to combat the situation. The employees are to be encouraged by their management teams to be aware of how infection is spread so that they can plan and act accordingly to address it (problem-focused coping). The authority should provide emotional support to the employees for all aspects during such a crisis so that they do not suffer from emotional hazards (emotion-focused coping). From the results of this study, it is seen that the perceived risk of the COVID-19 pandemic impacts the psychological well-being of employees in the hospitality and tourism industry, duly influenced by the two mediating factors of employees' emotion-focused coping and problem-focused coping. This implies that managers in the hospitality and tourism industry need to motivate employees in such an apocalyptic situation to be able to cope with stressful situations, seek information about the problems, and develop their own skills to manage and address them. Such arrangements, extended by the active support of management (H7a and H7b), can help employees in the hospitality and tourism industry to sustain their psychological well-being, even in such a crisis. The proposed framework is not only helpful to maintain the psychological well-being of employees in hospitality and tourism organizations but it also provides a pragmatic mechanism for the leaders of different types of organizations to improve the well-being of their employees during any crisis. In turn, such measures could help any type of organization to conduct their business seamlessly, even during a turbulent situation. A summary of the practical implications is highlighted in Table 8.

Table 8. Practical implications of the validated model.

Path	β-Value (Significance Level)	Practical Implications
FCC→PRC	β = 0.21 ** ($p < 0.01$)	• The HR management team in the hospitality and tourism industry should provide adequate arrangements so that the employees can take appropriate preventive measures to protect themselves from COVID-19. • The HR leadership team should make employees aware of the importance of wearing a mask when needed, social distancing, washing hands frequently, and cultivating the habit of using sanitizer.
PTC→PRC	β = 0.31 *** ($p < 0.001$)	• The crisis management team along with HR leadership of the concerned organizations should arrange to supply oxygen along with other essentialities promptly as and when the employees need those. • The HR team should also assure the employees that neither they nor their family members would face problems getting admission to a healthcare center in an emergency.
PRC→EFC	β = 0.27 * ($p < 0.05$)	• The immediate manager of the employees should provide emotional support to the employees. • The immediate manager should touch base with the employee more frequently and provide mental support. • The line managers should be respectful and sympathetic of the employees' feeling in dealing with COVID-19 crisis.
PRC→PFC	β = 0.33 *** ($p < 0.001$)	• Immediate managers should help the employees to overcome any hostile situation by improving the employees' problem-solving skills. • Leadership team should encourage the employees to practice systematic problem-solving skills and relaxation procedures.
EFC→PWI	β = 0.41 *** ($p < 0.001$)	• The immediate manager should complement the employees for any tasks the employees do in the crisis which will strengthen their psychological well-being. • The immediate managers should pay proper attention to the psychological well-being of the individual employees.
PFC→PWI	β = 0.43 *** ($p < 0.001$)	• Immediate managers should provide adequate support to the employees so that the employees are able to solve any issues with the support of their managers or themselves. • The leadership team can arrange or sponsor mindfulness practices or motivational training which would keep the employees psychologically well and strong in such a crisis.
(EFC→PWI) × MS	β = 0.19 * ($p < 0.05$)	• The HR leadership team should always support the employees' health and well-being as one of the topmost priorities. • The management authorities should provide emotional support to the employees for all aspects during such a crisis so that they do not suffer from emotional hazards. • The HR leadership team should help the employees to solve any problems they experience in such a crisis. • Immediate managers of the employees should extend their hands to solve any problem of the employee which could be faced by the employees during crisis. • Management support is needed for cross-functional problem-solving activities in such crisis to keep employees of hospitality and tourism industry stable and sustain their psychological well-being, even in such a crisis.

Note: $p < 0.05$ (*); $p < 0.01$ (**); and $p < 0.001$ (***).

8. Conclusions

This research work was able to address its objectives. The present study highlighted that the sudden outbreak of the COVID-19 pandemic created panic regarding becoming

victims of COVID-19. Due to lockdown measures, COVID-19 impacted employees regarding the uncertainty of their job security. These two factors are found to be dominant for employees in the tourism and hospitality industry by the very nature of their jobs. They must stay close to individuals to perform their duties. Lockdown and the ban on travelling also affected the tourism industry adversely, endangering the job security of the employees. The present study highlighted how the COVID-19 pandemic could impact employees in the tourism and hospitality industry.

The present study showed that, in a crisis, employees in the tourism and hospitality industry become panic stricken. In such precarious situations, it is seen in this study that employees in the tourism and hospitality industry tried to withstand the situation by lending support from society to develop their self-control ability, which is the process of beating the crisis, and this relates to emotional coping. In addition, this study demonstrated that employees attempted to solve the problems faced by them in such turbulent situations with their personal problem-solving ability through the acquisition of necessary skills and expertise to combat such pandemic situations. Thus, this study showed that employees could address the risks of the COVID-19 pandemic with the help of emotional as well as problem-solving coping procedures to ensure they maintained their mental health in a better way through development of their psychological well-being.

The present research study also showed that the deterioration of mental health of employees in the tourism and hospitality industry in the COVID-19 pandemic situation could be kept in check had the management team of the concerned organization extended effective support to their employees. The management support should be of practical help to the employees, like facilitating appropriate treatment, quick supply of oxygen as and when needed, ease in gaining admission into healthcare units, and so on, with coverage to the employees and their family members. This study enumerated in the practical implication section how management support can act as a critical positive catalyst towards the psychological well-being of the employees in the tourism and hospitality industry facing a crisis like the COVID-19 pandemic.

9. Limitations and Future Research Scope

It is a fact that no study can be completed without any limitation, and this study is no different. The present study relied on cross-sectional survey data, which were obtained at a particular time through self-reported measures. Therefore, causality in the relationships between the constructs cannot be inferred. In addition, a cross-sectional study is often prone to endogeneity bias. Hence, it is suggested that future researchers should conduct longitudinal field research to eliminate these issues. The explanative power of the proposed model is 71%. To enhance the strength of the model, future researchers might consider if more boundary conditions could serve this purpose. The results of this study depend on the inputs of 314 usable respondents from 14 organizations in the hospitality and tourism industry. In a global context, this seems to be considerably inadequate for generalizability. Therefore, future researchers could conduct a survey with more respondents from more organizations from the hospitality and tourism industry to eliminate this defect.

Author Contributions: Methodology, R.C.; Investigation, D.V.; Writing—original draft, S.C.; Project administration, A.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data is confidential.

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

Appendix A. The Rival Model

The rival model was developed by dropping the mediators EFC and PFC from the proposed validated theoretical model, as shown in Figure 2. The effects of the moderator MS on the linkage PRC→PWI were considered in the rival model, which is shown in Figure A1.

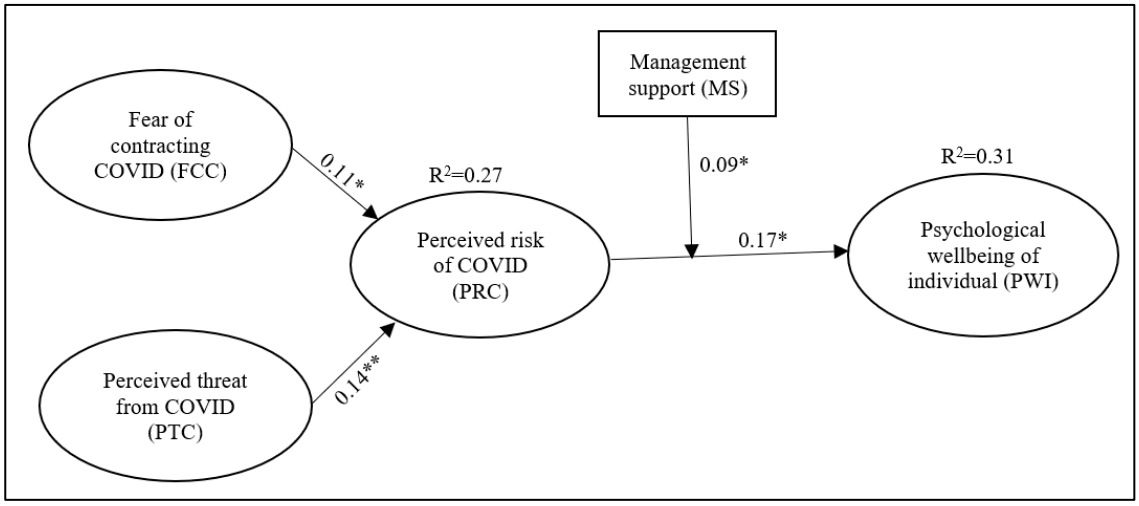


Figure A1. The rival model. Note: $p < 0.05$ (*); $p < 0.01$ (**).

The rival model did not consider the mediating effects of coping. Through empirical analysis, it appears that the path coefficients of the impacts of FCC on PRC and PTC on PRC are 0.11 and 0.14, respectively, with levels of significance $p < 0.05$ (*) and $p < 0.01$ (**). The proposed model values were each 0.21 and 0.31 with respective levels of significance as $p < 0.01$ (**) and $p < 0.001$ (***).

The FCC and PTC can explain PRC to the tune of 27% in this rival model, compared to 34% in the proposed theoretical model. The overall explanative power of the rival model was found to be 31%, whereas the explanative power of the proposed model was 71%. The explanative power of the proposed model was found to be 129% more than the explanative power of the rival model. This signifies that the effectiveness of the mediating variables is maximum. This also signifies that in perceiving the risk of COVID-19, employees in the hospitality and tourism industry could not improve their psychological well-being, even with management support. Therefore, they must have recourse to coping strategies.

Table A1. Summary of Questions.

Items	Source	Statements	Response [SD][D][N][A][SA]
FCC1	[3,9]	I was impacted by the COVID-19 virus.	[1][2][3][4][5]
FCC2	[11]	I think that the COVID-19 pandemic has affected the lives of people across the globe.	[1][2][3][4][5]
FCC3	[9,54]	I was fearful of getting impacted by COVID-19 virus.	[1][2][3][4][5]
FCC4	[9]	Many of my colleagues were affected by the COVID-19 virus.	[1][2][3][4][5]
FCC5	[3,54]	Some of my colleagues took leave due to fear of getting impacted by the COVID-19 virus.	[1][2][3][4][5]
PTC1	[55,56]	I believe that the hospitality and tourism industry can withstand COVID-19 shocks	[1][2][3][4][5]
PTC2	[10]	I believe most of the organizations were threatened by the abrupt outbreak of the COVID-19 pandemic.	[1][2][3][4][5]
PTC3	[9,10]	I think in the long-term hospitality and tourism industry could flourish again in the post-COVID-19 era.	[1][2][3][4][5]

Table A1. *Cont.*

Items	Source	Statements	Response [SD][D][N][A][SA]
PTC4	[56]	I believe that because of the COVID-19 pandemic, the employees have suffered from uncertainty and unpredictability.	[1][2][3][4][5]
PTC5	[10,57]	I think that during the COVID-19 pandemic, the employees have suffered psychologically due to uncertainty about their jobs.	[1][2][3][4][5]
PRC1	[43,45]	I believe that most of the employees in the hospitality and tourism industry were at risk of losing their jobs due to the COVID-19 pandemic.	[1][2][3][4][5]
PRC2	[40]	During the COVID-19 pandemic, the employees felt many uncertainties which adversely affected their job conditions.	[1][2][3][4][5]
PRC3	[45,58]	I believe that a few of the employees were under extreme pressure as some of their family members were affected due to COVID-19 virus.	[1][2][3][4][5]
PRC4	[3,43]	I think that some of the employees attempted to collect accurate information regarding the magnitude of COVID-19 impacts.	[1][2][3][4][5]
PRC5	[40,45]	I believe that the hospitality and tourism industry suffered a huge loss due to the COVID-19 pandemic.	[1][2][3][4][5]
EFC1	[59]	I believe that emotion-focused coping is a psychological related factor.	[1][2][3][4][5]
EFC2	[60]	Emotion-focused coping is involved with emotional expression of employees.	[1][2][3][4][5]
EFC3	[56,62]	I believe that emotion-focused coping relates to reacting and responding to a stressful situation.	[1][2][3][4][5]
EFC4	[59]	I think that emotional expressions could help individuals to be able to address a stressful situation.	[1][2][3][4][5]
EFC5	[59,61]	I think with emotional expression, a person attempts to appropriately respond to a stressful event like the COVID-19 pandemic.	[1][2][3][4][5]
PFC1	[60]	I think coping relates to an individual's conscious effort to solve interpersonal and personal problems.	[1][2][3][4][5]
PFC2	[63,64]	I believe that coping helps to mitigate conflict as well as reduces stress.	[1][2][3][4][5]
PFC3	[64]	I believe that problem-focused coping is related to behavioral aspects of individuals.	[1][2][3][4][5]
PFC4	[58,65]	Problem-focused coping ensures greater control over an individual's emotions.	[1][2][3][4][5]
PFC5	[60]	I believe that some of the employees acquired various new skills to manage various issues during the COVID-19 pandemic.	[1][2][3][4][5]
PWI1	[64,65]	I think that the psychological well-being of employees of hospitality and tourism industry should have been the topmost priority by the leaders of this industry.	[1][2][3][4][5]
PWI2	[58]	I believe that a psychologically stable person can perform well in their jobs.	[1][2][3][4][5]
PWI3	[65]	There were many incentives provided to the employees of hospitality and tourism industry during and after the COVID-19 pandemic.	[1][2][3][4][5]
PWI4	[60,66]	I believe that family members of employees can also play a critical role in providing support during stressful situations.	[1][2][3][4][5]
PWI5	[58,60]	I think that most of the organizations in the hospitality and tourism industry have a comprehensive policy to keep their employees psychologically fit.	[1][2][3][4][5]
PWI6	[65,66]	Employees should be trained to overcome any psychological challenges in stressful situations.	[1][2][3][4][5]
PWI7	[58,66]	I think that organizations should take care of their employees especially the psychological aspects of employees during any turbulent situations.	[1][2][3][4][5]

Note: SD = Strongly Disagree; D = Disagree; N = Neither disagree nor agree; A = Agree; SA = Strongly Agree.

References

1. Daly, M.; Sutin, A.; Robinson, E. Longitudinal changes in mental health and the COVID-19 pandemic: Evidence from the UK Household Longitudinal Study. *Psychol. Med.* **2022**, *52*, 2549–2558. [CrossRef]
2. Fernandes, N. Economic Effects of Coronavirus Outbreak (COVID-19) on the World Economy. 2020. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id53557504 (accessed on 14 March 2021).
3. Naumann, E.; Möhring, K.; Reifenscheid, M.; Wenz, A.; Rettig, T.; Lehrer, R.; Krieger, U.; Juhl, S.; Friedel, S.; Fikel, M.; et al. COVID-19 policies in Germany and their social, political, and psychological consequences. *Eur. Policy Anal.* **2020**, *6*, 191–202. [CrossRef]
4. Wilder-Smith, A.; Chiew, C.J.; Lee, V.J. Can we contain the COVID-19 outbreak with the same measures as for SARS? *Lancet Infect. Dis.* **2020**, *20*, 102–107. [CrossRef]
5. Roy, D.; Tripathy, S.; Kar, S.K.; Kaushal, V. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian J. Psychiatry* **2020**, *51*, 83–102.

6. Branicki, L.; Sullivan-Taylor, B.; Brammer, S. Towards crisis protection(ism)? COVID-19 and selective de-globalization. *Crit. Perspect. Int. Bus.* **2021**, *17*, 230–251. [CrossRef]
7. Mohring, K.; Naumann, E.; Reifenscheid, M.; Wenz, A.; Rettig, T.; Krieger, U.; Friedel, S.; Finkel, M.; Cornesse, C.; Blom, A.G. The COVID-19 pandemic and subjective well-being: Longitudinal evidence on satisfaction with work and family. *Eur. Soc.* **2021**, *23*, 601–617. [CrossRef]
8. Prem, K.; Liu, Y.; Russell, T.W.; Kucharski, A.J.; Eggo, R.M.; Davies, N. The effect of control strategies to reduce social mixing on outcomes of the COVID-19 epidemic in Wuhan, China: A modelling study. *Lancet Public Health* **2020**, *5*, 261–270. [CrossRef]
9. Torabi, Z.A.; Rezvani, M.R.; Hall, C.M.; Allam, Z. On the post-pandemic travel boom: How capacity building and smart tourism technologies in rural areas can help-evidence from Iran. *Technol. Forecast. Soc. Chang.* **2023**, *193*, 122633. [CrossRef]
10. Adongo, A.C.; Amenumey, E.K.; Kumi-Kyereme, A.; Dube, E. Beyond fragmentary: A proposed measure for travel vaccination concerns. *Tour. Manag.* **2021**, *83*, 104180. [CrossRef]
11. Yu, Q.; McManus, R.; Yen, D.A.; Li, X. Tourism boycotts and animosity: A study of seven events. *Ann. Tour. Res.* **2020**, *80*, 102792. [CrossRef]
12. Zika, S.; Chamberlain, K. On the relation between meaning in life and psychological well-being. *Br. J. Psychol.* **1992**, *83*, 133–145. [CrossRef] [PubMed]
13. Grotz, J.; Dyson, S.; Birt, L. Pandemic policy making: The health and well-being effects of the cessation of volunteering on older adults during the COVID-19 pandemic. *Qual. Ageing Older Adults* **2020**, *21*, 261–269. [CrossRef]
14. Zacher, H.; Rudolph, C.W. Individual differences and changes in subjective well-being during the early stages of the COVID-19 pandemic. *Am. Psychol.* **2021**, *76*, 50–62. [CrossRef] [PubMed]
15. Demetris, V. Big data analytics in strategic sales performance: Mediating role of CRM capability and moderating role of leadership support. *EuroMed. J. Bus.* **2022**, *17*, 295–311.
16. Hon, A.H.Y.; Chan, W.W. The effects of group conflict and work stress on employee performance. *Cornell Hosp. Q.* **2013**, *54*, 174–184. [CrossRef]
17. Kim, H.; Lee, S.; Uysal, M.; Anh, K. Nature-based tourism: Motivation and subjective well-being. *J. Travel Tour. Mark.* **2015**, *32*, 1–21. [CrossRef]
18. Karatepe, O.M.; Yavas, U.; Babakus, E.; Deitz, G. The effects of organizational and personal resources on stress, engagement, and job outcomes. *Int. J. Hosp. Manag.* **2018**, *74*, 147–161. [CrossRef]
19. Thrassou, A. Adoption of robust business analytics for product innovation and organizational performance: The mediating role of organizational data-driven culture. *Ann. Oper. Res.* 2021; *in press*. [CrossRef]
20. Altınay Özdemir, M. Tourism with measures taken after the COVID-19 outbreak: Possible scenarios. *J. Recreat. Tour. Res.* **2020**, *7*, 222–238. [CrossRef]
21. Ghebreyesus, T.A. WHO Director-General's Opening Remarks at the Media Briefing on COVID-19. 2020. Available online: https://www.who.int/dg/speeches/detail/who-director-generals-opening-remarks-at-the-media-briefing-on-covid-19 (accessed on 10 June 2021).
22. Bahar, O.; Çelikllal, N. Economic effects of the Coronavirus (COVID-19) on the tourism industry. *Int. J. Soc. Sci. Educ. Res.* **2020**, *6*, 125–139. [CrossRef]
23. Škare, M.; Soriano, D.R.; Porada-Rochoń, M. Impact of COVID-19 on the travel and tourism industry. *Technol. Forecast. Soc. Change* **2021**, *163*, 120469. [CrossRef] [PubMed]
24. Shareef, M.A.; Akram, M.S.; Malik, F.T.; Kumar, V.; Dwivedi, Y.K.; Giannakis, M. An attitude-behavioral model to understand people's behavior towards tourism during COVID-19 pandemic. *J. Bus. Res.* **2023**, *161*, 113839. [CrossRef] [PubMed]
25. Kaushal, V.; Srivastava, S. Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India. *Int. J. Hosp. Manag.* **2021**, *92*, 1–9. [CrossRef] [PubMed]
26. Thrassou, A. SME entrepreneurship and digitalization–the potentialities and moderating role of demographic factors. *Technol. Forecast. Soc. Chang.* **2022**, *179*, 121648.
27. Sigala, M. Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *J. Bus. Res.* **2020**, *117*, 312–321. [CrossRef]
28. Bayat, G. The Effects of COVID-19 on the Tourism Sector and Hotel Businesses: The Case of Marmaris. *J. Soc. Sci.* **2020**, *23*, 617–634. Available online: https://www.academia.edu/44425622/The_Effects_of_COVID_19_on_the_Tourism_Sector_and_Hotel_Businesses_The_Case_of_Marmaris (accessed on 22 June 2021).
29. Cai, H.; Tu, B.; Ma, J.; Chen, L.; Fu, L.; Jiang, Y.; Zhuang, Q. Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID-19) in Hubei, China. *Med. Sci. Monit.* **2020**, *15*, e924171. [CrossRef]
30. Lai, J.; Ma, S.; Wang, Y.; Cai, Z.; Hu, J.; Wei, N.; Wu, J.; Du, H.; Chen, T.; Li, R. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw. Open* **2019**, *3*, e203976. [CrossRef]
31. Xiao, H.; Zhang, Y.; Kong, D.; Li, S.; Yang, N. The effects of social support on sleep quality of medical treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. *J. Exp. Clin. Med.* **2020**, *26*, 23–54. [CrossRef]
32. Sakka, G. Impact of firm's intellectual capital on firm performance: A study of Indian firms and the moderating effects of age and gender. *J. Intellect. Cap.* **2021**, *23*, 103–126.

33. Krok, D.; Zarcycka, B.; Telka, E. Risk of Contracting COVID-19, Personal Resources and Subjective Well-Being among Healthcare Workers: The Mediating Role of Stress and Meaning-Making. *J. Clin. Med.* **2020**, *10*, 132. [CrossRef] [PubMed]
34. Lazarus, R.S.; Folkman, S. *Stress, Appraisal, and Coping*; Springer: Berlin/Heidelberg, Germany, 1984.
35. Lehavot, K. Coping strategies and health in a national sample of sexual minority women. *Am. J. Orthopsychiatry* **2012**, *82*, 494–504. [CrossRef] [PubMed]
36. Sheshadri, C. Influence of IoT policy on quality of life: From government and citizens' perspectives. *Int. J. Electron. Gov. Res.* **2019**, *15*, 19–38.
37. Siachou, E. Examining the dark side of human resource analytics: An empirical investigation using the privacy calculus approach. *Int. J. Manpow.* **2022**, *43*, 52–74.
38. Hobfoll, S. Conservation of Resources. A new attempt at conceptualizing stress. *Am. Psychol.* **1989**, *44*, 513–524. [CrossRef]
39. Rogers, R.W. A protection motivation theory of fear appeals and attitude change. *J. Psychol.* **1975**, *91*, 93–114. [CrossRef]
40. Hobfoll, S.E. The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Appl. Psychol. Int. Rev.* **2001**, *50*, 337–370. [CrossRef]
41. Szkody, E.; McKinney, C. Appraisal and social support as moderators between stress and physical and psychological quality of life. *Stress Health* **2020**, *36*, 586–595. [CrossRef]
42. Floyd, D.L.; Prentice-Dunn, S.; Rogers, R.W. A meta-analysis of research on protection motivation theory. *J. Appl. Soc. Psychol.* **2000**, *30*, 407–429. [CrossRef]
43. Hobfoll, S.E. Social and psychological resources and adaptation. *Rev. Gen. Psychol.* **2002**, *6*, 307–324. [CrossRef]
44. Grothmann, T.; Reusswig, F. People at risk of flooding: Why some residents take precautionary action while others do not. *Nat. Hazards* **2006**, *38*, 101–120. [CrossRef]
45. Ranjan, C. Examining the global retail apocalypse during the COVID-19 pandemic using strategic omnichannel management: A consumers' data privacy and data security perspective. *J. Strateg. Mark.* **2021**, *29*, 617–632.
46. Cheng, S.K.W.; Chong, G.H.C.; Chang, S.S.Y.; Wong, C.W.; Wong, C.S.Y.; Wong, M.T.P.; Wong, K.C. Adjustment to severe acute respiratory syndrome (SARS): Roles of appraisal and post-traumatic growth. *Psychol. Health* **2006**, *21*, 301–317. [CrossRef]
47. Li, J.B.; Yang, A.; Dou, K.; Cheung, R.Y.M. Self-control moderates the association between perceived severity of coronavirus disease 2019 (COVID-19) and mental health problems among the Chinese public. *Int. J. Environ. Res. Public Health* **2019**, *17*, 4820. [CrossRef]
48. Sheshadri, C. Dark side of online social games (OSG) using Facebook platform: Effect of age, gender, and identity as moderators. *Inf. Technol. People* **2021**, *34*, 1800–1818.
49. Thrassou, A. The influence of online customer reviews on customers' purchase intentions: A cross-cultural study from India and the UK. *Int. J. Organ. Anal.* **2022**, *30*, 1595–1623.
50. Hobfoll, S.E.; Johnson, R.J.; Ennis, N.; Jackson, A.P. Resource loss, resource gain, and emotional outcomes among inner city women. *J. Personal. Soc. Psychol.* **2003**, *84*, 632–643. [CrossRef]
51. Folkman, S.; Moskowitz, J.T. Positive act meaning-focused coping during significant psychological stress. In *The Scope of Social Psychology: Theory and Applications*; Hewstone, M., Schut, H., Eds.; Psychology Press: London, UK, 2007; pp. 193–208.
52. Rabenu, E.; Yaniv, E.; Elizur, D. The relationship between psychological capital, coping with stress, well-being, and performance. *Curr. Psychol.* **2017**, *36*, 875–887. [CrossRef]
53. Main, M.; Hesse, E.; Hesse, S. Attachment theory and research: Overview with suggested applications to child custody. *Fam. Court Rev.* **2011**, *49*, 426–463. [CrossRef]
54. Avraham, E. Destination marketing and image repair during tourism crises: The case of Egypt. *J. Hosp. Tour. Manag.* **2016**, *28*, 41–48. [CrossRef]
55. Leite, H.; Lindsay, C.; Kumar, M. COVID-19 outbreak: Implications on healthcare operations. *TQM J.* **2021**, *33*, 247–256. [CrossRef]
56. Manderson, L.; Levine, S. COVID-19, risk, fear, and fall-out. *Med. Anthropol.* **2020**, *39*, 367–370. [CrossRef] [PubMed]
57. López-Vázquez, E.; Marván, M.L. Risk perception, stress and coping strategies in two catastrophe risk situations. *Soc. Behav. Personal. Int. J.* **2003**, *31*, 61–70. [CrossRef]
58. Stanton, A.L.; Kirk, S.B.; Cameron, C.L.; Danoff-Burg, S. Coping through emotional approach: Scale construction and validation. *J. Personal. Soc. Psychol.* **2000**, *78*, 1150–1169. [CrossRef]
59. Sakka, G.; Galati, A.; Siachou, E. Adoption of social media marketing for sustainable business growth of SMEs in emerging economies: The moderating role of leadership support. *Sustainability* **2021**, *13*, 12134.
60. Brannon, L.; Feist, J. Personal coping strategies. In *Health Psychology: An Introduction to Behavior and Health*, 7th ed.; Wadsworth Cengage Learning: Boston, MA, USA, 2009; pp. 121–123.
61. Carver, C.S. Coping. In *The Handbook of Stress Science: Biology, Psychology, and Health*; Contrada, R., Baum, A., Eds.; Springer: Berlin/Heidelberg, Germany, 2011; pp. 220–229.
62. Snyder, C.R. *Coping: The Psychology of What Works*; Oxford University Press: Oxford, UK, 1999.
63. Weiten, W.; Lloyd, M.A. *Psychology Applied to Modern Life*, 9th ed.; Wadsworth Cengage Learning: Boston, MA, USA, 2008.
64. Taylor, S.E. *Health Psychology, International ed.*; McGraw-Hill Education: New York, NY, USA, 2006.
65. Baker, J.P.; Berenbaum, H. Dyadic moderators of the effectiveness of problem-focused and emotional-approach coping interventions. *Cogn. Ther. Res.* **2011**, *35*, 550–559. [CrossRef]

66. Dunkley, D.M.; Blankstein, K.R.; Halsall, J.; Williams, M.; Winkworth, G. The relation between perfectionism and distress: Hassles, coping, and perceived social support as mediators and moderators. *J. Couns. Psychol.* **2000**, *47*, 437–453. [CrossRef]
67. Cowan-Sahadath, K. Business transformation: Leadership, integration, and innovation-a case study. *Int. J. Proj. Manag.* **2010**, *28*, 395–404. [CrossRef]
68. van Knippenberg, D. Leadership and decision making: Defining a field. In *Judgment and Decision Making at Work*; Highhouse, S., Dalal, R.S., Salas, E., Eds.; Routledge: Abingdon, UK, 2014; pp. 140–158.
69. Heller, F.A. *Decision-Making and Leadership*; CUP Archive: Cambridge, UK, 1992.
70. Mintzberg, H. *The Manager's Job: Folklore and Fact*; Routledge Publication: London, UK, 2003.
71. Batt, R. Who benefits from teams? Comparing workers, supervisors, and managers. *Ind. Relat. A J. Econ. Soc.* **2004**, *43*, 183–212. [CrossRef]
72. Deb, M.; David, E.L. An empirical examination of customers' adoption of m-banking in India. *J. Mark. Intell. Plan.* **2014**, *32*, 475–494. [CrossRef]
73. Akter, S.; Fosso Wamba, S.; Dewan, S. Why PLS-SEM is suitable for complex modelling? An empirical illustration in big data analytics quality. *Prod. Plan. Control* **2017**, *28*, 1011–1021. [CrossRef]
74. Ringle, C.; Wende, S.; Becker, J. SmartPLS 3. SmartPLS GmbH: Boenningstedt. Google Scholar. SAS Insights, Artificial Intelligence: What It Is and Why It Matters. 2015. Available online: https://www.sas.com/en_us/insights/analytics/what-is-artificial-intelligence.html. (accessed on 12 March 2021).
75. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
76. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Erlbaum: Mahwah, NJ, USA, 1988.
77. Hair, J.F., Jr.; Hult, G.T.M.; Ringle, C.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage Publications: New York, NY, USA, 2016.
78. Steger, M.F.; Frazier, P. Meaning in life: One link in the chain from religiousness to well-being. *J. Couns. Psychol.* **2005**, *52*, 574–582. [CrossRef]
79. Gerhold, L. COVID-19: Risk perception and coping strategies: Results from a survey in Germany. *PsyArXiv* **2020**, 1–11. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.