



Influence of Cultural Intelligence and Psychological Capital on Service Quality: A Study of the Hotel Industry in Sabah, Malaysia

Mary Monica Jiony ^{1,*}, Tek Yew Lew ², Daria Gom ¹, Geoffrey Harvey Tanakinjal ¹ and Stephen Sondoh, Jr. 30

- Labuan Faculty of International Finance, Universiti Malaysia Sabah, Labuan 87000, Malaysia; daria@ums.edu.my (D.G.); geoffrey@ums.edu.my (G.H.T.)
- Faculty of Business, Curtin University Malaysia, Miri 98009, Malaysia; lew.tek.yew@curtin.edu.my
- Faculty Business, Economics & Accountancy, Universiti Malaysia Sabah, Kota Kinabalu 88400, Malaysia; jude@ums.edu.my
- Correspondence: marym@ums.edu.my

Abstract: Cultural intelligence (CQ) and psychological capital (PsyCap) are two critical characteristics that can be leveraged to develop dynamic hotel frontline employees capable of sustaining service excellence. While both the hotel industry and researchers have followed this trend, there are few studies in the research setting that delve into this relationship. This study examines the effects of cultural intelligence on service quality with psychological capital serving as a mediating variable. To confirm the proposed hypotheses, this study collects 300 questionnaires from four- and five-star hotels. For quantitative analysis, partial least squares structural equation modelling was used. The findings revealed that PsyCap is favorably associated with three components of CQ (metacognitive, motivational, and behavioral elements). Simultaneously, the CQ cognitive and behavioral elements were found to be positively related with service quality (SQ). These findings offer hotel managers practical guidance on how to evaluate critical internal resources and capabilities as a source to implementing and sustaining human resource practices.

Keywords: cultural diversity; skills development; training development; frontline employees; hotel; hospitality and tourism; Sabah; Malaysia

updates

Citation: Jiony, M.M.; Lew, T.Y.; Gom, D.; Tanakinjal, G.H.; Sondoh, S.J. Influence of Cultural Intelligence and Psychological Capital on Service Quality: A Study of the Hotel Industry in Sabah, Malaysia. Sustainability 2021, 13, 10809. https:// doi.org/10.3390/su131910809

Academic Editors: Asad Mohsin, Ana Brochado and Andi Tamsang Andi Kele

Received: 21 July 2021 Accepted: 20 August 2021 Published: 29 September 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 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

The hotel industry, being a major part of the travel and tourism sector, like many others, is always changing. It thrives during times of prosperity, weathers economic downturns, and continues to be a key source of wealth, employment, and development for the regions in which it operates [1]. Prior to the 2019 coronavirus pandemic, the sector accounted for 10.4 percent of global GDP; however, due to continued mobility limitations, this segment dropped to 5.5 percent the following year [2]. Nonetheless, this progression enables hotel companies to maintain a laser-like focus on the bottom line—the demands and wishes of their guests. Due to the industry's unique service orientation whereby each interaction between a customer and a guest is crucial, the industry has historically emphasized service quality as a critical component to sustain its business [3–6]. Past studies have shown that the skills required for the hotel industry are important and should not be disregarded because the industry is service-oriented [3,4,7]. In this regard, recognizing the elements influencing internal resources and capacities, as well as obtaining desired competitive advantage, is vital for survival, regardless of country.

1.1. Malaysia's Tourism Aspiration and Sabah's Development Corridor

Malaysia's service sector, in 2014, represented 53.5% of the Development National Product (GDP) with some 8.4 million staff members (60.9%) accounted for in the service Sustainability **2021**, 13, 10809 2 of 20

sector [8]. The service sector grew significantly to have contributed 56.5% to the GDP in 2020 while offering 9.3 million jobs [9]. Tourism in Malaysia has certainly seen growth over recent years and is one of the most significant contributors to the country's economic growth [10]. Malaysia is likely to be faced with a considerable number of challenges in the future; in particular, regarding Malaysia's initiative to make the tourism industry feasible, more experienced staff members are needed to handle the boom in tourism [10]. In this research, the focus is on the hotel industry in Sabah, Malaysia, whereby the state is challenged by the lack of trained and skilled employees who can provide higher service quality [11,12]. In 2018, visitor arrivals to this state notably increased with an arrival growth of 10.2% for the year compared to that of 2017, which was 9.4% [13]. Tourism in this state is of interest as natural resources, culture, and heritage branch from this region [14,15]. Sabah's possibilities in the services market can be seen in the state government's implementation of the Sabah Development Corridor (SDC) Plan (2008-2025), in which the tourist industry was determined as one of the financial drivers in Sabah [15,16]. Hence, this ambitious plan will undoubtedly be a challenge in terms of human capital management to enhance the quality of services and to sustain its competitive advantage [17]. Service providers are expected to be more concerned about the bottom line, which is customer satisfaction, as this is a starting point to create and strengthen customer loyalty (repeat visitors), which could develop into a long-term relationship [12,15]. To cater for such demand and to create a strong pool of competent employees, human capital will have to be strengthened to fill the gap in service quality [18].

In the context of Sabah, even though the tourism industry has grown steadily over the last decade, reports show that the industry is still faced by a dearth of experienced and trained staff capable of providing a fitting level of quality service [12,17]. The same report also related that the state needs to enhance its quality of services to make tourism viable economically [11]. The problem lies in the workers lacking skills, specifically soft skills [19]. Broadly speaking, soft skills or generic skills, in general, are attributes that can be cultivated through time to enable good communication skills, social skills, teamwork, customer service, and problem-solving abilities and are not acquired in a formal academic setting [20]. It has been documented that more studies should examine the issue of service quality in the state [11,12,17]. This scenario alone demonstrates that there is a significant disadvantage because, in the hotel industry, service quality is primarily based on guests' perceptions, and it is these guests who ultimately decide on the benefits of service quality in the respective hotels.

1.2. Cultural Intelligence (CQ) and Psychological Capital (PsyCap)

In this study, two critical characteristics, namely cultural intelligence (CQ) and psychological capital (Psycap), are examined. Scholars such as Ang et al. [21] and Arora and Rohmetra [22] have specifically advocated for cultural intelligence in their study, which they argue is necessary to complement high-quality service. The impact of cultural intelligence is essential in supporting employees, mainly those in the hotel industry, to carry out and handle themselves better in their daily jobs [23].

In terms of psychological capital, this has significant consequences for human resource management, since it reveals how employees are managed, which can positively influence how people use their creativity in the workplace. Though the benefits of employees' psychological capital (PsyCap) in the workplace are well documented, the extent to which PsyCap stems from the context in which people work is still inconclusive. Psychological capital (PsyCap) fits the call for a positive approach to understanding employee attitudes and how it functions as a personal resource, particularly within the hotel frontline employees as this variable acts a buffer to undesirable daily encounters with diverse guests [24].

1.3. Aim of Study

This study examines the influence of cultural intelligence and psychological capital as two essential attributes that may be harnessed to produce dynamic frontline hotel staff

Sustainability **2021**, 13, 10809 3 of 20

capable of sustaining service quality. This research investigates how the four dimensions of cultural intelligence, namely, metacognitive, cognitive, motivational, and behavioral, may influence the quality of service provided by frontline employees. CQ is notably a significant predictor of service quality in the tourist industry [25]. This present endeavor also responds to research findings that suggest more studies need to be done to examine the mechanism of PsyCap [26,27]. Given the aspects described in the previous sections, and responding to calls by scholars, this study develops a conceptual model that connects organizational practices, employees' psychological capital (PsyCap), and employee/organizational outcomes; this cultural intelligence and psychological capital research contribute to an organization's success by improving frontline employee services. Additionally, this study may enlighten hoteliers and human resources experts to develop useful training components in developing core proficiencies of their frontline employees. Four research questions were derived to address the aim of this study:

- 1. Does cultural intelligence (CQ) have an influence on the psychological capital of employees?
- 2. To what extent does psychological capital (PsyCap) influence service quality (SQ)?
- 3. Does cultural intelligence (CQ) have a significant influence on service quality (SQ)?
- 4. What is the mediation effect of psychological capital (PsyCap) in the relationship between cultural intelligence and service quality?

This paper is divided into six sections. The section that follows describe the underpinning theory and hypotheses development divided into six areas. The third section explains the methodology used, divided into four areas. Then, the findings are described in the fourth section, followed by discussion of the findings. Lastly, in the conclusions are presented with implication for academics and practitioners, proceeded by limitations and directions for future research.

2. Underpinning Theory and Hypotheses Development

2.1. COR and JD-R Theories

The present study's aims were two-fold. First, this paper examined the influence of cultural intelligence (CQ) on psychological capital (PsyCap) and service quality (SQ). Second, it investigated psychological capital (PsyCap) as a potential mediator between these two variables. Anchored by the theories of job demand-resources (JD-R) [16] and conservation of resources (COR) [24], this study adopted the conception that when resources are available, this subsequently improves employees' level of service quality.

The theory of conservation of resources (COR) theorises that, naturally, people strive to acquire, preserve, and protect resources invaluable to them [24] and they are motivated to expand their resource caravan. Thus, they would feel more empowered [28] and are more willing to "walk the extra mile" [29]. This theory affords vital implications for hospitality employees and their service interactions, whereby any adversity could in turn hurt or break the organisation. Such a notion could have an impact on Sabah's efforts to improve the quality of its services in order to make tourism economically feasible [11]. Research shows that consumers of the hotel industry have become more demanding and diversified, constantly seeking for high-quality and consistent hospitality services [3,30]. In other words, they want to get their money's worth and be exposed to quality experiences. As such, it is naturally expected that hotels must provide greater service quality to set themselves apart from their competitors and improve their reputation. From the customer's viewpoint, the most visible evidence of service of quality occurs during the service encounters, often known as the "moment of truth," when a customer engages with the employees, leaving an unforgettable impression. In these service encounters, the frontline employees are usually the first port of call for the customers: showing patience in difficult situations, handling problems, overcoming obstacles, yet striving to provide the best service. They play an immeasurable role in connecting hotels and customers, and contribute to building long-term relationships [31–33].

Sustainability **2021**, 13, 10809 4 of 20

JD-R theory centers around employees' welfare and their work environment, classified as job demand and job resources [34]. This approach proposes that workplace flexibility and employee welfare as a result of a balance between positive and negative job demands can lead to quality performance and returning customers [35]. According to Schaufeli [16], the JD-R model is especially relevant in the hospitality business when it comes to service quality and customer retention. Because of the high demand for diversified customer contact, the nature of hospitality employees' work puts them at a higher risk of burnout, which affects the quality of their work [36]. Frontline employees face stressful and uncertain situations in which they must maintain a cheerful disposition while dealing with demanding consumers [37]. Pienaar and Willemse [32] revealed that frontline employees should be given certain exposures to recognise stressful interpersonal interaction and taught the strategies to regulate these impacts. The role of frontline employees is critical in service delivery as customers' opinion of the establishment's service quality is represented by how skilful and motivated frontline employees are; this, therefore, requires identification of proper management of employees [21,38]. Studies conducted by Ang et al. [21] reveal that cultural intelligence allows prediction of performance and situational adjustment of individuals to function effectively in intercultural settings, and hence helps to prevent the exhaustion of their emotional resources [39]. Psychological capital, in this instance, can render a useful counterbalance between frontline employees' demanding daily work and the motivation to provide better service, entailing both the positive and negative work outcomes. This ultimately transcends to the enhancement of trust and loyalty of employees and customers.

2.2. Cultural Intelligence (CQ) and Psychological Capital (PsyCap)

According to Youssef and Luthans [37], the demand for cross-cultural abilities (cultural intelligence) has become increasingly vital in today's global economy. It was also suggested that CQ could improve PsyCap's relationships. The growing diversity in the workplace, particularly in the resort or tourism industry, necessitates employees' understanding of many cultures (Cognitive CQ) as well as the ability to interact effectively and appropriately in a diverse environment. Comparable to PsyCap, CQ can be improved via cultural training [40].

CQ consists of motivational CQ as the determination required to interact despite unfamiliarity and ambiguity, cognitive CQ is knowing and understanding the differences in diverse settings, and meta-cognitive CQ relates to the ability to plan and manage cultural differences. Finally, behavioral CQ refers to the capability to be situational when confronted with diverse situations [3]. CQ is detrimental to hotel employees as they need to be adequately exposed (or trained) to create meaningful guests experience [3]. Ang et al. [21] reported that CQ is considered state-like; for that reason, it can be developed over time. This is especially crucial for hotel front-line employees, who deal with people from all walks of life and must be properly taught in order to provide the best possible service [3]. The availability of CQ intervention (encouraging environment) results in increased productivity [41] and higher PsyCap that allows them to recharge their capabilities (replenish) meaningfully, which in return results in greater performance, lower tension levels, and better outlook [27]. A study by Dollwet and Reichard [42] endorsed the association between CQ and PsyCap, whereby the findings found a favourable relationship between cross-cultural PsyCap (an extended domain of PsyCap) and CQ.

Psychological capital (PsyCap) is a psychological resource comprising four capacities: hope, described as redirecting exertions toward goals and success; self-efficacy, described as having confidence; resilience, the ability to sustain and bounce back; and optimism, the capacity to generate encouraging attributions. CQ intervention can lead to increased productivity, and higher PsyCap enables employees to replenish their resource caravan, leading to higher performance, lower stress levels, and better well-being [42,43]. The construct of PsyCap has been empirically proven to be an important predictor of desirable work outputs [44,45]. These researches indicated a strong emphasis on developing personal

Sustainability **2021**, 13, 10809 5 of 20

capacities and skills, as this notion translates to significant positive relationships between PsyCap and positive employee attitudes and behavior as well as positive outcomes focused on job satisfaction and motivation [46]. While this is desirable in all industries, it is especially beneficial in labour-intensive industries such as the hotel industry, as the effects translate into increased service quality [47]. PsyCap inspires individuals to be confident positive thinkers with elevated job satisfaction and commitment towards work responsibility [48]. It allows tactfulness in exploring different options when presented with work challenges. Other studies have also indicated that a higher PsyCap has a significant effect on employee behavior, which impacts their job performance and outcomes [49,50].

Based on the above, the following is hypothesised:

Hypothesis 1a (H1a). *Perception of metacognitive CQ is positively related to PsyCap.*

Hypothesis 1b (H1b). *Perception of cognitive CQ is positively related to PsyCap.*

Hypothesis 1c (H1c). *Perception of motivational CQ is positively related to PsyCap.*

Hypothesis 1d (H1d). *Perception of behavioral CQ is positively related to PsyCap.*

2.3. Psychological Capital and Service Quality

Simons and Buitendach's [51] research identified significant positive connections between psychological capital, occupational engagement, and organisational commitment. The findings suggest that employees' PsyCap (hope, optimism, strength, and self-efficacy) can be considered as a source of positive emotions that influence employees' mindsets and behaviors, ultimately improving service quality. Employees with high PsyCap are satisfied with their life and career in general. These employees are also engaged in their work [41], subsequently leading to enhanced employee performance relevant to the hotel industry [51]. Karatepe and Karadas [52] in their research studies contended that employees with higher PsyCap are more satisfied with their life and job as a whole; these employees are also much more engaged in their work. PsyCap, as a potential source of positive emotions, relates to employee attitudes and behaviors, as well as their willingness to go the "extra mile," which results in enhanced service quality [53]. A similar view has likewise been put forward by Paek et al. [54], adding that it results in outstanding employee efficiency which matters in all industries. Nevertheless, in a service-oriented industry such as the hotel, this becomes primarily important. Drawing upon the findings put forth, the following is hypothesised:

Hypothesis 2 (H2a). PsyCap is positively related to SQ.

2.4. Cultural Intelligence and Service Quality (SQ)

Many studies have been conducted which highlight a link between training and aspects such as efficiency and commitments in different countries [55–58]. Nonetheless, to the author's knowledge, there have been minimal research studies being conducted in Sabah, Malaysia, related to influence of CQ on service sustainability and none that integrate the effects of CQ and SQ. This kind of integration is of importance to the hotel establishments as, logically, a suitable approach has to be in place to improve employee skills. One of the essential aspects behind greater service quality which has long been recognized is training of employees [28]. Past studies show a strong correlation between training of employees and level of service quality extended by frontline workers [59,60]. To complement training, Dhar [59] in his findings suggested taking into account the aspects of culture when investigating the relationship between various aspects concerning skills upgrade of employees. Customer-oriented and skilled employees who are capable and can anticipate customer needs often ensure a higher quality of service [61]. The current study

Sustainability **2021**, 13, 10809 6 of 20

is critical for hotel operations because, presumably, a strategy for improving employees' abilities must be in place as the hotel operation is service-oriented in nature [58,59].

Therefore, the following is hypothesized:

Hypothesis 3a (H3a). *Perception of metacognitive CQ is positively related to SQ.*

Hypothesis 3b (H3b). *Perception of cognitive CQ is positively related to SQ.*

Hypothesis 3c (H3c). *Perception of motivational CQ is positively related to SQ.*

Hypothesis 3d (H3d). *Perception of behavioral CQ is positively related to SQ.*

2.5. Psychological Capital (PsyCap) as the Potential Mediator

PsyCap is particularly valuable in labor-intensive industries, such as the hotel industry, as the effects translate to quality of service [24]. Reciprocal in nature, a higher PsyCap significantly affects employee behavior, impacting job performance and outcomes [62]. In 2014, a team led by Newman [27] called for researchers to study the underlying mechanism of how PsyCap influences individual-level outcomes. According to Luthans [41], PsyCap is "state-like"—more adaptable and developable over time. Taking into account the sample population of this study, the FLEs meet people of different background with varying needs and are exposed to a variety of situations daily, hence the need for them to be adaptive to a variety of situations. As such, and based on earlier discussions, this study investigated whether the emerging core construct of psychological capital plays a role in the relationship between CQ and SQ, and the following is hypothesized:

Hypothesis 4a (H4a). PsyCap mediates the relationship between metacognitive CQ and SQ.

Hypothesis 4b (H4b). *PsyCap mediates the relationship between cognitive CQ and SQ.*

Hypothesis 4c (H4c). *PsyCap mediates the relationship between motivational CQ and SQ.*

Hypothesis 4d (H4d). *PsyCap mediates the relationship between behavioral CQ and CQ.*

2.6. Research Model

This study posits that employees' assumptions regarding cultural intelligence have an effect on their level of service quality. Additionally, this study asserts that by fostering psychological capital, the FLEs' level of hope, efficacy, resilience, and optimism will influence their level of service quality. Thus, a research model, depicted in Figure 1, was presented to show the correlations between variables.

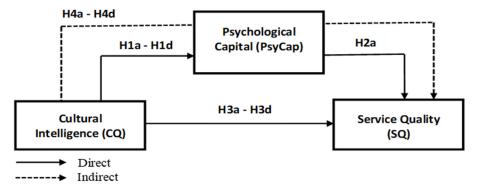


Figure 1. Research model.

Sustainability **2021**, 13, 10809 7 of 20

3. Materials and Methods

Using a survey as the main vehicle for data collection, this study adopted a quantitative, non-probabilistic purposive sampling method. Acknowledging the requirements set-forth by the participating hotels, the researchers used the drop-off/pick up method. This method is known to be able to minimize interviewer bias effects [63] and concurs that allowing people to answer questionnaires anonymously yields more credible reports. The human resources managers of the respective participating hotels were provided with a set of questionnaires to be distributed to the respondents as briefed, and the terms of anonymity, freedom of withdrawal, and the survey form returning process were explained.

3.1. Scope of Study

This study was focused on the hotel industry in Kota Kinabalu, Sabah, Malaysia, whereby the state is confronted with the lack of trained and skilled employees who can provide higher service quality [14]. Contextualising the theories of JD-R and COR, this study aimed to investigate the influence of cultural intelligence (metacognitive, cognitive, motivational, behavioral) and psychological capital (hope, efficacy, resilience, and optimism) on service quality (tangibility, responsiveness, communication, confidence, and reliability). The respondents were frontline employees and guests in the participating four and five-star rated hotel in Kota Kinabalu.

3.2. Target Respondents

In light of the study's objectives, the target population comprised frontline employees (FLEs) and their respective guests were selected. This study suggests that employees' perceptions of cultural intelligence and psychological capital, as well as their increased knowledge of them, are reciprocal in nature, affecting the level of service quality they provide. The target population was chosen because the hotel industry is a service-oriented industry driven by individuals (people) and primarily staffed by frontline employees. Two different sets of instruments were generated for this study: First, the fulltime frontline employees in the three major departments—front office, food and beverage, and house-keeping; second, their guests in the respective department in which they worked. For the purpose of this research, data collection was conducted in four- and five-star hotels in Kota Kinabalu, Malaysia. Kota Kinabalu, the point of entry of the majority of tourists, was a target location as it is the booming capital city of the state of Sabah, Malaysia. A total of 300 questionnaires were used for analysis.

3.3. Participants

Among the 188 questionnaires returned by frontline employees, a total of 150 responses were usable. The majority of the participants were female (51.33%), whereas the remaining 48.67% were male. The largest number of employees were from the front office at 44.67%, and the least were from the housekeeping department (20.67%). This study yielded 210 guest respondents; out of this total number, 157 responses were valid for use. The majority of the guest' respondents were female (50.57%) while there were slightly fewer male respondents (49.33%). A fairly large number of guests were tourists (84%), followed by business travelers (12.67%). The majority of the guests were from China (36.67%), followed by Korea (20%), and then domestics tourists (17%). The remaining respondents were from the U.K. and the rest of South-east Asia.

3.4. Instruments and Questionnaire Development

CQ was assessed via 20-item Cultural Intelligence Instrument scale [21], of which all four dimensions of this item were tested: metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ. This instrument has been validated with internal consistency; the four components showed good internal consistency, with alpha values above 0.70 (Nunnally, 1978): $\alpha = 0.89$ for CQ Strategy (4 items), $\alpha = 0.84$ for CQ Knowledge (6 items), $\alpha = 0.84$ for CQ Motivation (5 items), $\alpha = 0.84$ for CQ Behavior (5 items), and $\alpha = 0.90$ for

Sustainability **2021**, 13, 10809 8 of 20

the global scale, overall CQ [64]. Findings of other researchers: Cronbach's alpha ranging between 0.77 to 0.96 for the four items [21].

For the SQ, the item was measured via the 26-item Getty and Getty [65] Lodging Quality Index (LQI). The measurement has been tested, with all items showing a strong consistency and its constructs indicated by values of Cronbach's alpha higher than 0.70 [66]. A seven-point Likert scale was used to measure the four facets of CQ, namely, metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ, and the four dimensions of SQ, namely, tangibility, reliability, responsiveness, confidence, and communication, using scales that ranged from "1" for strongly disagree to "7" for strongly agree.

PsyCap was measured via the PCQ-24 questionnaire across four dimensions that were developed by Luthans et al. [49]. The reliability and validity of the PCQ-24 questionnaire have been validated in previous research [41]. The reliability and validity of this measurement have been validated [67] with a Cronbach's alpha of 0.84–0.89 for all subscales, suggesting that the major measure for the study was within the acceptable range. The scales ranged from "1" for strongly disagree to "6" for strongly agree. The questionnaires were translated into three different languages: English, Bahasa Melayu (Malay language), and Chinese. Back-translation was performed to compare/contrast the back-translation with the source text and to evaluate the quality of the translation. The translation allowed the diverse respondents to effectively respond to the questionnaires.

4. Results

Smart PLS (ver3.3.2) was used to predict the structural relationships between the independent variable, the mediator, and the dependent variable [68]. The researchers performed the analysis confirming the internal consistency and convergent validity as shown in Table 1. The results show factor loadings of more than 0.50, AVE values higher than 0.50, and CR values higher than 0.70, respectively [68]. For the CQ constructs, all factor loadings exceeded the threshold of 0.50, except for MET2, which showed a value of 0.671.

Table 1. Results of the measurement mode	Table 1.	Results	of th	e measurement	model.
---	----------	---------	-------	---------------	--------

Construct	Second-Order Construct	Item	Loading	CR	AVE
Behavioral		BEH1	0.855	0.847	0.734
		BEH3	0.859		
Cognitive		COG1	0.775	0.914	0.641
Ü		COG2	0.824		
		COG3	0.824		
		COG4	0.755		
		COG5	0.792		
		COG6	0.829		
Metacognitive		MET1	0.839	0.875	0.637
Ö		MET2	0.671		
		MET3	0.847		
		MET4	0.824		
Motivational		MOT1	0.768	0.851	0.590
		MOT2	0.718		
		MOT3	0.869		
		MOT4	0.706		
Норе		HOP2	0.799	0.870	0.575
•		HOP3	0.784		
		HOP4	0.785		
		HOP5	0.774		
		HOP6	0.638		

Sustainability **2021**, 13, 10809 9 of 20

Table 1. Cont.

Construct	Second-Order Construct	Item	Loading	CR	AVE
Efficacy		EFF1	0.751	0.852	0.538
•		EFF2	0.810		
		EFF3	0.729		
		EFF5	0.760		
		EFF6	0.599		
Resilience		RES2	0.807	0.828	0.547
		RES3	0.695		
		RES4	0.778		
		RES5	0.669		
Optimism		OPT1	0.613	0.805	0.514
•		OPT2	0.582		
		OPT3	0.791		
		OPT4	0.846		
Tangibility		TAN1	0.849	0.938	0.655
5 ,		TAN2	0.811		
		TAN3	0.812		
		TAN4	0.757		
		TAN5	0.778		
		TAN6	0.791		
		TAN7	0.846		
		TAN8	0.828		
Reliability		REL2	0.896	0.920	0.793
		REL3	0.876	0.7 = 0	
		REL4	0.899		
Responsiveness		RESP1	0.869	0.952	0.800
r		RESP2	0.905		0.000
		RESP3	0.934		
		RESP4	0.891		
		RESP5	0.871		
Confidence		CON2	0.864	0.927	0.761
Commerce		CON3	0.946	0.52.	0.7.01
		CON4	0.903		
		CON5	0.766		
Communication		COM1	0.861	0.927	0.759
Communication		COM2	0.853	0.727	0.707
		COM3	0.910		
		COM4	0.860		
	Service quality	Communication	0.821	0.925	0.713
	service quarty	Convenience	0.840	0., =0	010
		Reliability	0.834		
		Responsibility	0.904		
		Tangibility	0.820		
	Psychological capital	Норе	0.786	0.899	0.690
	i sychological capital	Optimism	0.780	0.077	0.070
		Resilience	0.827		

The HTMT results are shown in Table 2. This study detected no HTMT value that exceeded 0.90 and the square root of AVE is higher than the relationships between the indicators, thus indicating adequate discriminant validity for the constructs proposed in this research [69]. The path coefficient, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2) were utilized to examine the structural model [68].

Sustainability **2021**, 13, 10809 10 of 20

Table 2. HTMT results.

Indicator	Construct	BEH	COG	METCOG	MOT	PSYCAP SQ
BEH	Behavioral					
COG	Cognitive	0.601				
METCOG	Metacognitive	0.763	0.706			
MOT	Motivational	0.873	0.611	0.900		
PSYCAP	Psychological capital	0.579	0.216	0.417	0.528	
SQ	Service quality	0.106	0.240	0.072	0.108	0.280

Note: Discriminant validity established at HTMT^{0.90}.

Table 3 shows the results of the structural model with an indication of a large R^2 of 0.268 for PsyCap and a moderate R^2 of 0.167 for SQ. A blindfolding technique was used to generate the Q^2 values [68]. As shown in Table 3, the Q^2 scores for PsyCap (0.163) and SQ (0.101) were higher than zero, demonstrating adequate predictive relevance [68].

Table 3. R^2 and Q^2 .

Predictors	Target Construct	R^2	Evaluation Criteria	Q^2
Behavioral, cognitive, metacognitive, motivational Behavioral, cognitive, metacognitive, motivational	Psychological capital	0.268	Large	0.163
	Service quality	0.167	Moderate	0.101

Exhibited in Table 4 are the f^2 results following Cohen [70] recommended f^2 values of effect sizes of 0.02 (small), 0.15 (moderate) and 0.35 (large). The results indicate that metacognitive CQ, motivational CQ, and behavioral CQ had a large effect on PsyCap ($f^2 = 0.055, 0.036$, and 0.064, respectively). Additionally, cognitive CQ at 0.029 had a moderate effect on PsyCap ($f^2 = 0.029$). The predictor constructs metacognitive CQ and motivational CQ had a moderate effect on SQ ($f^2 = 0.018$ and 0.021, respectively), while behavioral CQ had a large effect on SQ ($f^2 = 0.043$). The mediator construct of PsyCap similarly had a relatively large effect on SQ ($f^2 = 0.066$).

Table 4. f^2 values.

Predictor	Target	f^2	Effect Size
Metacognitive	Psychological capital	0.055	Large
Cognitive	Psychological capital	0.029	Moderate
Motivational	Psychological capital	0.036	Large
Behavioral	Psychological capital	0.064	Large
Metacognitive	Service quality	0.018	Moderate
Cognitive	Service quality	0.001	Small
Motivational	Service quality	0.021	Moderate
Behavioral	Service quality	0.043	Large
Psychological capital	Service quality	0.066	Large

Table 5 shows the hypotheses results of the dimensions of cultural intelligence METCOG H1a (β = 0.182, t = 1.607, p < 0.05) as positively related to PsyCap; however, COG H1b (β = -0.210, t = 1.729, p = 0.042) presented non-statistical significance. MOT H1c (β = 0.270, t = 2.564, p < 0.01) and BEH H1d (β = 0.258, t = 2.969, p < 0.01) were shown to be positively related to PsyCap. For the relationship between the dimensions of CQ and SQ, out of the four dimensions of CQ, two were not positively related, namely, METCOG H3a (β = -0.046, t = 0.331, p = 0.370) and MOT H3c (β = -0.209, t = 1.865, p = 0.031). Similarly, the set of hypotheses testing PsyCap and SQ H2a (β = -0.273, t = 3.180, p = 0.001) showed a negative outcome and, hence, were rejected. On the contrary, COG H3b (β = 0.303, t = 2.261, p < 0.05) and BEH H3d (β = 0.207, t = 1.976, p < 0.05) were positively related to SQ, and therefore, supported.

Sustainability **2021**, 13, 10809 11 of 20

]	Hypothesis	Beta	STDEV	t-Value	p-Values	95% CI	Decision
H1a	METCOG→PsyCap	0.182	0.113	1.607	0.054 *	[0.006; 0.374]	Supported
H1b	COG→PsyCap	-0.210	0.121	$1.729 ^{\mathrm{NS}}$	0.042	[-0.407; 0.018]	Not supported
H1c	MOT→PsyCap	0.270	0.105	2.564 ***	0.005 **	[0.018; 0.426]	Supported
H1d	BEH→PsyCap	0.258	0.087	2.969 ***	0.002 **	[0.097; 0.388]	Supported
НЗа	METCOG→SQ	-0.046	0.139	0.331 ^{NS}	0.370	[-0.281; 0.178]	Not supported
H3b	$COG \rightarrow SQ$	0.303	0.134	2.261 *	0.012 *	[0.015; 0.474]	Supported
Н3с	$MOT \rightarrow SQ$	-0.209	0.112	1.865 NS	0.031	[-0.388; -0.020]	Not supported
H3d	BEH→SQ	0.207	0.105	1.976 ***	0.024 *	[0.022; 0.368]	Supported
H2a	PsyCap→SQ	-0.273	0.086	3.180 ^{NS}	0.001	[-0.404; -0.124]	Not supported

Table 5. Results of hypothesis testing.

Note: *p < 0.05** p < 0.01, *** p < 0.001, NS—Not significant. Note: METCOG, metacognitive; COG, cognitive; BEH, behavioral; MOT, motivational; PsyCap, psychological capital; SQ, service quality.

A bootstrapping procedure (5000 resamples) [68] was carried out to test for mediation (H4a). The results shown in Table 6 indicate that METCOG ($\beta=-0.050$, t=1.417, p=0.157; 95% CI LL = -0.141; and UL = 0.003); COG ($\beta=0.057$, t=1.570, p=0.116; 95% CI: LL = 0.003; and UL = 0.150), and MOT ($\beta=0.074$, t=1.919, p=0.055; 95% CI: LL = -0.165; and UL = 0.014) indicated no positive indirect effect on service quality and, therefore, were not supported. On the contrary, BEH ($\beta=-0.071$, t=2.016, p=0.044; 95% CI: LL = -0.140 and UL = -0.002) showed a positive indirect effect on service quality via psychological capital.

Table 6. Mediation effect analysis.

	Beta	STDEV	t-Value	p-Values	95% CI	Decision
H4a METCOG→PsyCap→SQ	-0.050	0.035	1.417	0.157	[-0.141; 0.003]	Not supported
H4b COG \rightarrow PsyCap \rightarrow SQ	0.057	0.037	1.570	0.116	[0.003; 0.150]	Not supported
H4c MOT→PsyCap→SQ	-0.074	0.038	1.919	0.055	[-0.165; 0.014]	Not supported
H4d BEH→PsyCap→SQ	-0.071	0.035	2.016	0.044	[-0.140; -0.002]	Supported

Note: METCOG, metacognitive; COG, cognitive; BEH, behavioral; MOT, motivational; PsyCap, psychological capital; SQ, service quality.

5. Discussion

The present study had the aim to investigate the relationship between cultural intelligence (CQ) and service quality (SQ), with psychological capital (PsyCap) serving as a mediator.

Data analysis seemed to support three of the four dimensions of cultural intelligence, namely the metacognitive, motivational, and behavioral aspects, significantly related to employees' psychological capital (Hypotheses 1a,c,d), while cognitive cultural intelligence was however insignificant (H1b).

The fact that metacognitive CQ positively affects PsyCap (H1a) suggests that FLEs can plan for eventual cultural differences [23]. Individuals with a higher metacognitive CQ are capable of planning, monitoring, and adjusting in response to cultural norms [21]. As a result, individuals are more aware of their surroundings during and after interactions, which contributes to increased feelings of hope in terms of being more motivated to accomplish goals, raised confidence or efficacy, the ability to cope (resilience) given the capability to respond to ambiguous situations, and optimism regarding life in general [42]. Additionally, past research has shown that motivated and energized employees are more likely to willingly contribute fresh resources to their caravan, resulting in a more reenergized capability, which leads to an improvement in overall well-being [71].

Motivational CQ also has a positive influence on employees' PsyCap (H1b), as expected. Frontline employees are conscious of their interest, context of work, and work environment, and it has been observed that they could navigate their skills effectively during unfamiliar and ambiguous situations. Those with high motivational CQ tend to

Sustainability **2021**, 13, 10809 12 of 20

divert their energy towards effectiveness in their work to realize their goals [3]. They enjoy dealing with people from different cultures, and they are self-assured in unfamiliar cultural circumstances [71,72]. The motivational aspects of cultural intelligence, as well as the four PsyCap capacities (hope, optimism, self-efficacy, and resilience), are regarded as essential traits and motivation [41], allowing employees to acquire and pursue personal resources such as creativity and productivity [73]. Drawing upon the JD-R and COR theories, these four capacities enable employees to cope with stressful and challenging situations.

Behavioral CQ (H1d) regards an individual's capacity to use acceptable verbal and nonverbal acts while engaging with people from diverse cultures [21]. This dimension enhances social interactions and focuses on how individuals modify their behavior to adapt to cultural differences. In this context of study, FLEs may have had a supportive environment, which is critical, as they are exposed to a variety of scenarios during their interactions with guests of diverse background. Increased confidence in their capacity to complete tasks efficiently benefits them, and this is normally complemented by a willingness to go the extra mile in completing work. That is, the more productive, the better the outcome. In this regard, employees who value these characteristics are more likely to have high PsyCap and be more involved in their work [52,73].

Cognitive CQ refers to an individual's cultural knowledge of the environment attained through education and experience in which he or she operates. The more knowledgeable the individuals, the more appropriate their behavior [21]. Similarly, the study findings by Brislin et al. [74] posited that such behaviors are displayed in those with high cognitive CQ whereby they can compare the similarities and differences across cultures, thus allowing them to respond accordingly. These behaviors complement the perspectives of PsyCap which has been empirically proven to be an important predictor of desirable work outputs [45,75]. The results generated for this study for the linkage between cognitive CQ and to PsyCap (H1b) however indicated that cognitive SQ does not influence employees' psychological capital. Further insights into the indifference unveiled two practical explanations. First, lack of support. This could have been associated with the absence or lack of supportive management in the work environment. To employees, a supportive working environment assures that the process of guiding, facilitating, and developing of employees is present to help them accomplish their goals. Iskhakova [76] in her research with a different set of respondents who are international students, attested that this is particularly so with those who are newly adjusting in an environment. All employees desire a workplace with such provision as this motivates them to adjust appropriately and accordingly. Second, lack of exposure. It is highly likely that the management may not have adequately prepared the FLEs in terms of cultural knowledge prior to commencement of their work. Many of them are from the Generation Z and Millennials group. Being exposed and trained to handle diverse guests is critical in this setting as the employee-guest interaction is high therefore a vast amount of knowledge and exposure is needed to navigate themselves effectively. As enlightened by the theory of COR, the lack of work preparation for the employees would negatively hasten their work commitment and job satisfaction, particularly in a situation in which there is a failure to gain key resources to allow them meaningful interaction; this could lead to stress [77]. This outcome is consistent with the JD-R theory, which claims that individuals endure stressful and uncertain situations and are expected to maintain a cheerful demeanor when dealing with difficult situations. Therefore, frontline employees should ideally be provided with some exposures, such as training to identify stressful interpersonal actions, and the techniques to manage these effects thus help them build their resource caravan [77].

Regarding the relationship between cultural intelligence and service quality, out of the four hypotheses (H3a, H3b, H3c, H3d), two were supported, which are discussed first. The findings imply that cognitive CQ (H3b) and behavioral CQ (H3d) are positively related to SQ.

In light of the findings, cognitive CQ, also known as knowledge, seems to be an important predictor of service quality (H3b). In the services sector, FLEs who have knowledge

Sustainability **2021**, 13, 10809 13 of 20

of diverse and comparable cultures can accomplish their intended task better. This also means that employees with the knowledge and ability to deal with cultural differences can handle multiple situations [78]. This outcome is in line with Lam and Cheung's [79] theory that hotel employees should ideally possess features of CQ in order to communicate effectively with culturally diverse guests. Age and years of employment, which are both associated with enhanced knowledge and work experience, may also have played a role in this positive result. In this present study, respondents who have been in their jobs for more than 4 years account for 18.7 percent, while those who have been in their jobs for more than 7 years accounted for 22.7 percent: a straightforward indicator that employees stay longer in their jobs. Even though it is changing, the approach to career management in the hotel industry is still traditional [80]. Employees continue to rise through the ranks by starting at the bottom and working their way up, which could take years. Employees who have been with the company for a longer amount of time, on the other hand, gain from this because it allows them to gather the resources needed to compete for job promotions or transfers. According to the COR theory, people are naturally motivated to obtain and preserve resources that are valuable and meaningful to them [77]. Additionally, employment experience, particularly within the same department or industry, makes them appear more confident and mature in their ability to withstand negative consequences, as they have gathered sufficient resources to allow for positive outcomes. The JD-R theory asserts that employee well-being is determined by a balance of available resources and the demanding nature of the job. This is especially true in the hotel industry, where service quality and customer retention are critical [16].

Behavioral CQ contributing positively to SQ (H3d) signifies the importance of flexibility in displaying appropriate behavior while interacting with people of diverse cultures. This research finding suggests that FLEs possess the requisite verbal and nonverbal skills to effectively communicate their intention. Behavioral CQ is essentially about how one is able to communicate with people from various cultural backgrounds through acceptable verbal and nonverbal behaviors in a diverse setting [21]. That is to say, those with a high behavioral CQ can quickly adapt to another's gestures to enable a pleasant intercultural conversation. Aside from having the ability to adjust both verbal and nonverbal behavior for effective communication, an individual must also have a varied range of behaviors that can be deployed flexibly in response to a variety of challenging situations [21,81]. Individuals with high behavioral CQ also understand how to employ culturally appropriate vocabulary, tone, gestures, and facial expressions [21]. The possible factors that contributed to the positive outcome are discussed. First, this study recorded 40 percent of those aged above 30 with longer employment. Employees who have worked for a longer period of time would have accumulated the necessary resources to present themselves maturely, and are therefore more likely to be able to handle ambiguous interactions better. According to a research study by Groves, Feyerherm, and Gu [82], behavioral CQ can be developed through observation of others and practice in a simulated environment. In their comparative study on negotiators improving negotiation skills, they discovered that those exposed to skilled negotiators performed at the highest level, but were unable to clearly explain the reason. Second, the language competency might have aided the employees in better engaging with their guests. Based on the researchers' interviews with the managers of the participating hotels, the capacity to communicate in at least two languages, English and Bahasa Melayu (the national language), is required for recruitment. Furthermore, some of the employees were able to converse in Chinese or other local dialects, which was not unusual. This important factor may have also had a role in the beneficial outcomes. When employees have enough resources (experience) and accumulated skills to handle guests from various backgrounds, they gain confidence, perform well ([83], and their employee-guest experience improves; therefore, they become more committed [84]). Third, the employees may enjoy their jobs (personality-fit jobs), hence naturally have a positive outlook towards work. Consequently, it is possible that their insights, personalities, and

Sustainability **2021**, 13, 10809 14 of 20

behavioral actions influence their ability to perform their jobs with flair, thereby increasing the likelihood of repeat visits [64].

The paragraphs that follow deliberate on the meta-cognitive (H3a) and motivational (H3c) aspects of CQ that do not influence service quality. This study reveals that the metacognitive aspect does not influence service quality (H3a) which implies that the employees were not consciously aware of the cultural preferences of others. The lack of appropriate training, younger workforce, and educational background may have played a role in the outcome. From this study, the respondents profile shows that a vast majority of them were between the age of 18 to 29, an indication that they had either no or minimal work exposure. Furthermore, they may have lacked educational credentials necessary to assist them in properly grasping the fundamental concepts of workplace dynamics, particularly those relating to communication in a variety of situations as this requires high-order thinking skills to understand, analyze, and evaluate ambiguous situations. Lacking in adequate guidance, training, and supervision could all have a negative impact on the overall quality of their work if they are not provided with suitable resources. This is supported by the JD-R theory, which states that if employees are not provided with adequate resources, they may face stressful and unpleasant situations [16]. They would struggle to replenish the resources that would allow them to retain a meaningful connection to their work, themselves, and their work environment. This can be inferred from the theory of COR, which proposes a concept that is comparable.

Despite the fact that hypotheses set H3c proposed the perception of motivation as significantly related to service quality, it was discovered that there was no statistical relationship. The findings contradicted prior research, such as that of Ang et al. [21]. Two factors that may have played a role in these findings are discussed next. First, supervisory support. Supportive management is critical to this discussion. Supportive management has been defined as the expression of concern and support by management for their employees' performance at their jobs [85]. Managers and supervisors make a genuine effort to help employees under their supervision develop their full potential so they can relate to the bottom line which is work outcome. Because of the demanding and extensive employee-guest contact that occurs in the hotel industry, some degree of supportive role is naturally expected. This is one of many crucial factors in keeping an employee happy and motivated since it affects their work performance. Not only can work demands sap employees' motivation and prevent them from achieving significant work goals, they can also be exacerbated by a lack of job resources. When considerable resources are lost or exhausted, job strain occurs [24]. Supervisors who are not adept in overseeing the employee work performance would likely encounter their adverse work results [86]. In this context of study, there could have been insufficient supporting supervisory role to enable the employees to interact with individuals from diverse backgrounds. Second, lack of skills. The success of hotels is heavily reliant on their employees providing exceptional service to their guests [66]. To provide this level of service, employees should ideally have the knowhow of effective interpersonal skills in addition to knowledge of the product or service they provide [67]. The FLEs may have lacked the essential resources, such as interpersonal skills, to deal with their guests more effectively, especially in ambiguous encounters. It can be highly frustrating to be unable to satisfy day-to-day work expectations owing to a lack of abilities, especially for new employees. Morale and motivation may suffer, which may have a negative impact on the hotel's overall competitiveness. Furthermore, they would be more susceptible to emotional exhaustion [16]. While they would be motivated to try their best, they may also be limited by a lack of basic job abilities.

Similarly, the findings also showed that PsyCap is not positively related to SQ (H2a). PsyCap is postulated in this study as a four-second-order construct: hope, optimism, resilience, and efficacy. These four characteristics, when combined, have been shown to help firms improve not only their staff productivity and happiness, but also the quality of their customer service [87,88]. Numerous studies have shown the relevance of psychological capital, demonstrating that the higher an employee's level of psychological capital (PsyCap),

Sustainability **2021**, 13, 10809 15 of 20

the more devoted and fulfilled they are, which affects their degree of job results [89–91]. This supports the COR theory that motivated employees are likely more willing to fill their resource caravans and go the extra mile. However, a perplexing finding from this study, which contradicts previous research, suggests that psychological capital and service quality have no significant association. This means the four PsyCap capacities of hope, efficacy, resilience, and optimism were ineffective in helping employees enhance their motivation, productivity, and satisfaction in efforts to enhance a meaningful employeeguest interaction. The negative results may have been due to the construct of PsyCap treated as a higher-order factor structure. Although conducted in a different setting, past research has examined a model that analyzed PsyCap as a four-factor construct (treated separately), indicating that the four-factor construct produced better results compared to the higher-order construct [92,93]. The fact that PsyCap was treated as a higher-order construct could have contributed to the unfavorable outcome. Previous research examined a model that analyzed PsyCap as a four-factor construct (treated independently) and found that it provided better results than the higher-order construct, despite the study being conducted in different contexts [93,94].

This study has proposed that psychological capital mediates the relationship between the aspects of cultural intelligence (meta-cognitive, cognitive motivational, and behavioral) with service quality (H4a, H4b, H4c, H4d). The findings indicate that the current body of evidence is insufficient to infer PsyCap as a mediator taken as one composite factor to mediate the relationship between CQ and SQ contradicting past studies that suggest PsyCap has a role in predicting venerable job outcomes [47,48,73]. The possible reasons for such findings could have been due to PsyCap being treated as a one composite factor. Previous studies have tested a model treating psychological capital as a four-factor construct (treated individually) and as one composite factor (treated collectively), which demonstrated a different outcome when the results of the two models were compared [92–94]. Dawkin [94] affirmed that a four-factor model of PsyCap established a greater criterion validity in relation to individual-level outcome variables than a second-order model in which the PsyCap components were merged into a single factor. Noting this, there is a need to take into account more specific aspects of background for the evaluation of the PsyCap such as replications of the questionnaire instruments in different contexts. Other likely reasons bring back to the background of this present study. In particular, the respondents' profile in terms of age-educational attainment and work exposure.

While the metacognitive, cognitive, and motivational dimensions of cultural intelligence do not indirectly pertain to service quality, psychological capital's mediating effect is noteworthy for the behavioral dimension of cultural intelligence. This result supports the body of prior knowledge [76,79]. The main significance of this finding is that it implies the FLEs as having the capacity to adjust and appropriately react to a variety of situations and interactions in addition to producing self-generated interactions (meaningful interactions) [53]. Further reflecting on this, the impact of psychological capital on employee behavior reveals that psychological capital has a positive impact on employees' innovative behavior [95]. This most likely indicates that the employees' inherent cheerful demeanor (natural disposition) and enthusiasm for their jobs influenced their behavior at work and in their surroundings [35]. Positive attitudes and interest in their jobs may have also impacted their ability to perform well [39]. This outcome can be explained using both the COR and JD-R theory: people are naturally motivated to acquire and safeguard resources that are deemed acceptable to them in terms of individual relevance and significance. This could aid them in developing personal characteristics and energies to obtain additional resources [77]. The JD-R theory recognizes employees' ability to modify their approach in order to remain pleasant despite dealing with haughty individuals [16,37].

6. Conclusions

This research presented an investigation on the influencing factors of cultural intelligence toward service quality with the use of psychological capital as a mediator in the hotel

Sustainability **2021**, 13, 10809 16 of 20

industry in Sabah, Malaysia. The outcomes highlight the effect of the influencing factors of cultural intelligence on psychological capital and service quality and the significant roles each play in explaining the fundamentals behind employees' capacities and willingness to nurture their employee-to-guest communication. It is suggested that hotel managers develop strategies particularly in training programs and support, as the findings suggest that an individual's metacognitive, cognitive, motivational, and behavioral resources all affect their overall service quality. As previously mentioned, frontline employees are confronted with different kinds of situations as they interact with different guests, therefore developing their soft skills will ultimately benefit both the employees and the organization. The findings discovered that the employees' natural disposition and interest in the job are indicators of their productivity, and given the appropriate mechanism, such as training and support, could help employees improve this.

Theoretically, this study documents that enhanced knowledge of cultural intelligence has impacts on the psychological capital of frontline employees which overall affect service quality. The model has been tested in the research setting and the result indicates the theories of COR and JD-R play a role in the motivational, behavioral, and cognitive aspects. This study contributes to the current body of knowledge in the given context by delving into the JD-R model and COR theory and integrating their importance and practicality into the aspects of cultural intelligence, psychological capital, and service quality relevant to the research setting. Apart from contributing to the literature, the development of this model and integration of theory has the potential to have implications for management and employee training in the hospitality industry. Additionally, it adds to the current literature of cultural intelligence and psychological capital, addressing calls from academics to investigate cultural intelligence and its impact on the psychological well-being of hotel frontline employees [3,23].

From the managerial perspectives, findings of this study provide practical guidance for hotel managers on how to utilize cultural intelligence and psychological capital to implement realistic training programs that continuously improve frontline employees' performance and productivity. Moreover, this study aids managers in deciding on the type of training to develop employees' capabilities and enthusiasm. In retrospect, given the challenges or uncertainty around the impact of the current coronavirus disease (COVID-19) pandemic, developing sustainable training programs may serve as a foundation for addressing industry-specific issues, increasing economic returns, and retaining company competitiveness.

The major limitations of this study are the inability to obtain consent from several hotels due to privacy and confidentiality concerns, and the fact that data collection was limited in Kota Kinabalu. This practice may affect the generalizability and representativeness of the findings to some extent. In the future, sampling could take place in more Malaysian regions or in other countries. This could enhance an understanding of the interactions between various facets of cultural intelligence, psychological capital, and service quality. This is especially important because globalization will not stop and workforce mobility will continue apace.

On directions for future studies, researchers may focus on employing a longitudinal study. Researchers may be able to detect changes or developments in the characteristics of the target population at both the group and individual levels if their observations are carried out over an extended period of time. Additionally, a large sample size is recommended to obtain a robust result. Despite the fact that a large sample-size study could necessitate greater financial and time commitments, larger sample sizes do have the obvious advantage of providing more data for researchers to work with.

Sustainability **2021**, 13, 10809 17 of 20

Author Contributions: Conceptualization, methodology, and writing—original draft, M.M.J.; supervision and review, T.Y.L.; resources and project administration, D.G.; supervision, methodology, and review, G.H.T.; methodology and validation, S.S.J. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by UMS Research Grant Scheme (SGPUMS-SBK0394-2018).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all parties involved in the study.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The authors declare no conflict of interest regarding the publication of this paper.

References

- 1. Khan, N.; Hassan, A.U.; Fahad, S.; Naushad, M. Factors Affecting Tourism Industry and Its Impacts on Global Economy of the World. 2020. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3559353 (accessed on 13 July 2020).
- Travel, W.T.T.C. Tourism: Economic Impact 2018: World; World Travel and Tourism Council: London, UK, 2019.
- 3. Bharwani, S.; Jauhari, V. An exploratory study of competencies required to co-create memorable customer experiences in the hospitality industry. *Int. J. Contemp. Hosp. Manag.* **2013**, 25, 823–843. [CrossRef]
- 4. Sinaga, O.; Lis, M.; Razimi, M.S.A. Education and Core Skills in the Performance with Mediating Role of Employee Innovation. *Pol. J. Manag. Stud.* **2019**, *19*, 363–373. [CrossRef]
- 5. Karatepe, O.M. High-performance work practices and hotel employee performance: The mediation of work engagement. *Int. J. Hosp. Manag.* **2013**, 32, 132–140. [CrossRef]
- 6. Kasuma, J.; Esmado, M.I.; Yacob, Y.; Kanyan, A.; Nahar, H. Tourist perception towards homestay businesses: Sabah experience. *J. Sci. Res. Dev.* **2016**, *3*, 7–12.
- 7. Hoang, L.V.; Vu, H.M.; Ngo, V.M. Factors Affecting Job Pursuit Intention in Hotel Industry in Ho Chi Minh, Vietnam. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 281–290. [CrossRef]
- 8. Lashley, C. Marketing hospitality and tourism experiences. In *Handbook of Hospitality Marketing Management*; Routledge: London, UK, 2008; pp. 4–31.
- 9. Department of Statistics. Strategy Paper 18. 2014. Available online: https://www.epu.gov.my/sites/default/files/2021-05/Strategy%20Paper%2018.pdf (accessed on 7 January 2020).
- 10. E.P.U. Eleventh Malaysia Plan 2016–2020 Anchoring Growth on People; Prime Minister's Department: Putrajaya, Malaysia, 2015.
- 11. Institute for Development Studies (Sabah). Sabah Development Corridor Blueprint, 2008–2025: Harnessing Unity in Diversity for Wealth Creation and Social Well-Being; Institute for Development Studies (Sabah): Sabah, Malaysia, 2007. Available online: https://www.sedia.com.my/SDC_Blueprint/Blueprint_Eng/1.LeverageSabah'sGeographicalLocation,Natural%20Resources, CulturalHeritageandBiodiversityforBalancedGrowth.pdf (accessed on 12 July 2020).
- 12. Mulok, D.; Mansur, K.; Kogid, M. The Sabah Development Corridor (SDC). *Pros. Persidang. Kebangs. Ekon. Malays. Ke* 2015, 10, 406–413.
- 13. Sabah Tourism Board. Sabah Tourism Statistics. 2020. Available online: https://www.sabahtourism.com/assets/uploads/visitor-jan-nov-2020.pdf (accessed on 26 September 2020).
- 14. SEDIA. Chapter 2 Build High-Margin Services Sector in Tourism and Logistics. 2011. Available online: https://www.sedia.com.my/SDC_Blueprint/Blueprint_Eng/2.BuildHigh-MarginServicesSectorinTourismandLogistics.pdf (accessed on 12 July 2020).
- 15. Hwa, M.A.C. Emotional labor and emotional exhaustion. J. Manag. Res. 2012, 12, 115–127.
- 16. Schaufeli, W.B. Applying the Job Demands-Resources model. Organ. Dyn. 2017, 2, 120–132. [CrossRef]
- 17. Hwa, M.A.C.; Amin, H. Why emotion at work matters: Examining the influence of emotional labour and emotional intelligence on workplace behaviours among service workers in east Malaysia. *Kajian Malays*. **2016**, *34*, 79–105.
- 18. Mok, C.; Sparks, B.; Kadampully, J. Service Quality Management in Hospitality, Tourism, and Leisure; Routledge: London, UK, 2013.
- 19. Lack of Skills, Mismatch of Young Workers Main Problems. *Daily Express*. 13 December 2018. Available online: http://dailyexpress.com.my/news.cfm?NewsID=129469 (accessed on 13 August 2020).
- 20. Arora, P.; Rohmetra, N. Cultural intelligence: Leveraging differences to bridge the gap in the international hospitality industry. *Int. Rev. Bus. Res. Pap.* **2010**, *6*, 216–234.
- 21. Ang, S.; Van Dyne, L.; Koh, C.; Ng, K.Y.; Templer, K.J.; Tay, C.; Chandrasekar, N.A. Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision Making, Cultural Adaptation and Task Performance. *Manag. Organ. Rev.* 2007, 3, 335–371. [CrossRef]
- 22. Rohmetra, N.; Arora, P. The interface between cultural intelligence and customer satisfaction: The hospitality "perspective". *Int. J. Eng. Ind. Manag.* **2015**, *4*, 59–76.
- 23. Alshaibani, E. Investigating the Relationship between Cultural Intelligence and Service Quality in Hospitality: A Cross-Cultural Study. Ph.D. Thesis, Buckinghamshire New University, High Wycombe, UK, 2015.

Sustainability **2021**, 13, 10809 18 of 20

24. Hobfoll, S.E.; Freedy, J. Conservation of resources: A general stress theory applied to Burnout. In *Professional Burnout: Recent Developments in Theory and Research*; CRC Press: Boca Raton, FL, USA, 1993.

- 25. Karatepe, O.M.; Kilic, H. Relationships of supervisor support and conflicts in the work-family interface with the selected job outcomes of frontline employees. *Tour. Manag.* **2007**, *28*, 238–252. [CrossRef]
- 26. Zhen, Y.; Mansor, Z.D. A review on the relationship between psychological capital and job attitudes with the mediating effect of work engagement in hotel industry. *J. Crit. Rev.* **2020**, *7*, 591–600.
- 27. Newman, A.; Ucbasaran, D.; Zhu, F.E.I.; Hirst, G. Psychological capital: A review and synthesis. *J. Organ. Behav.* **2014**, 35, S120–S138. [CrossRef]
- 28. Andi Kele, A.T. Employee Empowerment in Luxury Hotels in East Malaysia. Ph.D. Thesis, The University of Waikato, Hamilton, New Zealand, 2020.
- 29. Halbesleben, J.R.B.; Neveu, J.P.; Paustian-Underdahl, S.C.; Westman, M. Getting to the "COR": Understanding the role of resources in conservation of resources theory. *J. Manag.* **2014**, *40*, 1334–1364. [CrossRef]
- 30. Breda, Z.; Pacheco, C.; Dinis, G. Future Trends in the Hospitality Industry: An Analysis from the Consumers' Point of View. In Proceedings of the Tourism in Southern and Eastern Europe: Creating Innovative Tourism Experiences: The Way to Extend the Tourist Season, Opatija, Croatia, 16–18 May 2019. [CrossRef]
- 31. Qian, J.; Law, R.; Wei, J.; Shen, H.; Sun, Y. Hotels' self-positioned image versus customers' perceived image: A case study of a boutique luxury hotel in Hong Kong. *Tour. Rev.* **2021**, *76*, 198–211. [CrossRef]
- 32. Pienaar, J.; Willemse, S.A. Burnout, engagement, coping and general health of service employees in the hospitality industry. *Tour. Manag.* **2008**, *29*, 1053–1063. [CrossRef]
- 33. Hochschild, A.R. The Managed Heart; University of California Press: Berkeley, CA, USA, 1983.
- 34. Xanthopoulou, D.; Bakker, A.B.; Demerouti, E.; Schaufeli, W.B. The role of personal resources in the job demands-resources model. *Int. J. Stress Manag.* **2007**, *14*, 121–141. [CrossRef]
- 35. Steger, M.F.; Littman-Ovadia, H.; Miller, M.; Menger, L.; Rothmann, S. Engaging in work even when it is meaningless: Positive affective disposition and meaningful work interact in relation to work engagement. *J. Career Assess.* 2013, 21, 348–361. [CrossRef]
- Masdek, N.R.N.M.; Aziz, Y.A.; Awang, K.W. Impact of selected organisational characteristics on psychological and behavioral outcomes of hotel front-line employees. *Pertanika J. Soc. Sci. Humanit.* 2011, 19, 369–383.
- 37. Youssef, C.M.; Luthans, F. Positive global leadership. J. World Bus. 2012, 47, 539–547. [CrossRef]
- 38. Crowne, K.A. What leads to cultural intelligence? Bus. Horiz. 2008, 51, 391–399. [CrossRef]
- 39. Van Dyne, L.; Ang, S.; Ng, K.Y.; Rockstuhl, T.; Tan, M.L.; Koh, C. Sub-dimensions of the four-factor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. *Soc. Personal. Psychol. Compass* **2012**, *6*, 295–313. [CrossRef]
- 40. Luthans, F.; Avolio, B.J.; Avey, J.B.; Norman, S.M. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Pers. Psychol.* **2007**, *60*, 541–572. [CrossRef]
- 41. Luthans, F.; Norman, S.M.; Avolio, B.J.; Avey, J.B. The mediating role of psychological capital in the supportive organizational climate—Employee performance relationship. *J. Organ. Behavior. Int. J. Ind. Occup. Organ. Psychol. Behav.* **2008**, 29, 219–238. [CrossRef]
- 42. Dollwet, M.; Reichard, R. Assessing cross-cultural skills: Validation of a new measure of cross-cultural psychological capital. *Int. J. Hum. Resour. Manag.* **2013**, 25, 1669–1696. [CrossRef]
- 43. Presbitero, A. Cultural intelligence (CQ) in virtual, cross-cultural interactions: Generalizability of measure and links to personality dimensions and task performance. *Int. J. Intercult. Relat.* **2013**, *50*, 29–38. [CrossRef]
- 44. Slåtten, T.; Mehmetoglu, M. Antecedents and effects of engaged frontline employees. *Manag. Serv. Qual. Int. J.* **2011**, 21, 88–107. [CrossRef]
- 45. Nolzen, N. The concept of psychological capital: A comprehensive review. Manag. Rev. Q. 2018, 68, 237–277. [CrossRef]
- 46. Wang, H.; Sui, Y.; Luthans, F.; Wang, D.; Wu, Y. Impact of authentic leadership on performance: Role of followers' positive psychological capital and relational processes. *J. Organ. Behav.* **2014**, *35*, 5–21. [CrossRef]
- 47. Harkison, T. The use of co-creation within the luxury accommodation experience—Myth or reality? *Int. J. Hosp. Manag.* **2018**, 71, 11–18. [CrossRef]
- 48. Alfandi, A.M.; Bridge, N.N. Training Impact on the Performance of Employees "A Case of Jordanian Travel and Tourism Institutions". *Int. Bus. Manag.* **2016**, *10*, 377–384.
- 49. Luthans, F.; Youssef, C.M.; Avolio, B.J. *Psychological Capital: Developing the Human Competitive Edge*; Oxford University Press: Oxford, UK, 2007; p. 3.
- 50. Kaplan, M.; Biçkes, D.M. The Relationship Between Psychological Capital and Job Satisfaction: A Study of Hotel Businesses in Nevşehir. *J. Manag. Econ.* **2013**, *20*, 232–242.
- 51. Simons, J.C.; Buitendach, J.H. Psychological capital, work engagement and organizational commitment amongst call centre employees in South Africa. SA J. Ind. Psychol. 2013, 39, 1–12. [CrossRef]
- 52. Karatepe, O.M.; Karadas, G. Do psychological capital and work engagement foster frontline employees' satisfaction? A study in the hotel industry. *Int. J. Contemp. Hosp. Manag.* **2015**, 27, 1254–1278. [CrossRef]
- 53. Safavi, H.P.; Bouzari, M. The association of psychological capital, career adaptability and career. *Tour. Manag. Perspect.* **2019**, 30, 65–74. [CrossRef]

Sustainability **2021**, 13, 10809

54. Paek, S. Why is hospitality employees' psychological capital important? The effects of psychological capital on work engage-ment and employee morale. *Int. J. Hosp. Manag.* **2015**, *50*, 9–26. [CrossRef]

- 55. Sa, M.L.L.; Choon-Yin, S.; Chai, Y.K.; Joo, J.H.A. Knowledge creation process, customer orientation and firm performance: Evidence from small hotels in Malaysia. *Asia Pac. Manag. Rev.* **2020**, 25, 65–74.
- 56. Johnson, K.R.; Park, S. Mindfulness training for tourism and hospitality frontline employees. *Ind. Commer. Train.* **2020**, *52*, 185–193. [CrossRef]
- 57. Castro-Casal, C.; Vila-Vázquez, G.; Pardo-Gayoso, Á. Sustaining Affective Commitment and Extra-Role Service among Hospitality Employees: Interactive Effect of Empowerment and Service Training. *Sustainability* **2019**, *11*, 4092. [CrossRef]
- 58. Ahmed, U.; Phulpoto, W.; Umrani, W.A.; Abbas, S.I. Diving deep in employee training to understand employee engagement. *Bus. Econ. J.* 2015. [CrossRef]
- 59. Dhar, R.L. Service quality and the training of employees: The mediating role of organizational commitment. *Tour. Manag.* **2015**, 46, 419–430. [CrossRef]
- 60. Kim, J.; Noh, Y. The effects of psychological capital and risk tolerance on service workers' internal motivation for firm performance and entrepreneurship. *Int. Entrep. Manag. J.* **2016**, 12, 681–696. [CrossRef]
- 61. Arroyo-López, P.E.; Cárcamo-Solís, M.D.L.; Álvarez-Castañón, L.; Guzmán-López, A. Impact of training on improving service quality in small provincial restaurants. *J. Foodservice. Bus. Res.* **2017**, *20*, 1–14. [CrossRef]
- 62. Abbas, M.; Raja, U. Impact of psychological capital on innovative performance and job stress. *Can. J. Adm. Sci. Rev. Can. Sci. Adm.* **2015**, 32, 128–138. [CrossRef]
- 63. Lelkes, Y.; Krosnick, J.A.; Marx, D.M.; Judd, C.M.; Park, B. Complete anonymity compromises the accuracy of self-reports. *J. Exp. Soc. Psychol.* **2012**, *48*, 1291–1299. [CrossRef]
- 64. Martins, H.; Yarosh, M.; Lukic, D. Cultural Intelligence Scale: Validation in a Multicultural Setting of Erasmus Mundus Students and Alumni. In Proceedings of the EAWOP 2015—17th congress of the European Association of Work and Organizational Psychology, Oslo, Norway, 20–23 May 2015.
- 65. Getty, J.M.; Getty, R.L. Lodging quality index (LQI): Assessing customers' perceptions of quality delivery. *Int. J. Contemp. Hosp. Manag.* **2003**, *15*, 94–104. [CrossRef]
- 66. Eshetie, S.K.; Seyoum, W.; Ali, S.H. Service Quality and Customer Satisfaction in Hospitality Industry: The Case of Selected Hotels in Jimma Town, Ethiopia. *Glob. J. Manag. Bus. Res.* **2016**, *16*, 73–86.
- 67. Zhong, L.F. Effects of Psychological capital on employees' Job performance, organizational commitment, and organizational citizenship behavior. *Acta Psychol. Sin.* **2007**, *39*, 328–334. (In Chinese)
- 68. Hair, J.F., Jr.; Matthews, L.M.; Matthews, R.L.; Sarstedt, M. PLS-SEM or CB-SEM: Updated guidelines on which method to use. *Int. J. Multivar. Data Anal.* **2017**, *1*, 107–123. [CrossRef]
- 69. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]
- 70. Cohen, J. A power primer. Psychol. Bull. 1992, 112, 155. [CrossRef] [PubMed]
- 71. Bogilović, S.; Skerlavaj, M. Metacogonitive and Motivational Cultural Intelligence: Superpowers for Creativity and Culturally Diverse Environment. *Econ. Bus. Rev.* **2016**, *18*, 55–76. [CrossRef]
- 72. Şahin, F.; Gurbuz, S.; Köksal, O.; Ercan, Ü. Measuring Cultural Intelligence in the Turkish Context. *Int. J. Sel. Assess.* **2013**, 21, 135–144. [CrossRef]
- 73. Nguyen, H.M.; Ngo, T.T. Psychological Capital, Organizational Commitment and Job Performance: A Case in Vietnam. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 269–278. [CrossRef]
- 74. Brislin, R.; Worthley, R.; Macnab, B. Cultural intelligence: Understanding behaviors that serve people's goals. *Group Organ. Manag.* **2006**, *31*, 40–55. [CrossRef]
- 75. Avey, J.B.; Luthans, F.; Smith, R.M.; Palmer, N.F. Impact of positive psychological capital on employee well-being over time. *J. Occup. Health Psychol.* **2010**, *15*, 17–28. [CrossRef]
- 76. Iskhakova, M. Does Cross-cultural Competence Matter when Going Global: Cultural Intelligence and Its Impact on Performance of International Students in Australia. *J. Intercult. Commun. Res.* **2018**, *47*, 121–140. [CrossRef]
- 77. Rockstuhl, T.; Seiler, S.; Ang, S.; Van Dyne, L.; Annen, H. Beyond General Intelligence (IQ) and Emotional Intelligence (EQ): The Role of Cultural Intelligence (CQ) on Cross-Border Leadership Effectiveness in a Globalized World. *J. Soc. Issues* **2011**, *67*, 825–840. [CrossRef]
- 78. Rand, I. Cultural Intelligence: The Essential Intelligence for the 21st Century. 2015. Available online: https://culturalq.com/wp-content/uploads/2019/06/SHRM-Livermore-Van-Dyne-2015-Cultural-Intelligence.pdf (accessed on 12 July 2020).
- 79. Lam, R.; Cheung, C.; Lugosi, P. The Impacts of Cultural and Emotional Intelligence on Hotel Guest Satisfaction: Asian and Non-Asian Perceptions of Staff Capabilities. *J. China Tour. Res.* **2021**, *17*, 455–477. [CrossRef]
- 80. Azarvand, J.; Feizi, M.; Alipour, H. Surveying the Relationship Between Cultural Intelligence and Organizational Commitment at Islamic Azad University. *Arab. J. Bus. Manag. Rev. (Oman Chapter)* **2013**, *3*, 78–84. [CrossRef]
- 81. Rosli, N.N.; Zainal, S.R.M. The Roles Of Supportive Management and Employees' commitment to Service Quality towards Service Recovery Performance among Hotel Employees in Malaysia. *Management* **2020**, *5*, 78–87.
- 82. Groves, K.S.; Feyerherm, A.; Gu, M. Examining Cultural Intelligence and Cross-Cultural Negotiation Effectiveness. *J. Manag. Educ.* **2015**, *39*, 209–243. [CrossRef]

Sustainability **2021**, 13, 10809 20 of 20

83. Grobelna, A. Emotional exhaustion and its consequences for hotel service quality: The critical role of workload and supervisor support. *J. Hosp. Mark. Manag.* **2021**, *30*, 395–418. [CrossRef]

- 84. Boshoff, C.; Allen, J. The influence of selected antecedents on frontline staff's perceptions of service recovery performance. *Int. J. Serv. Ind. Manag.* **2000**, *11*, 63–90. [CrossRef]
- 85. Adair, W.L.; Hideg, I.; Spence, J.R. The culturally intelligent team: The impact of team cultural intelligence and cultural heterogeneity on team shared values. *J. Cross-Cult. Psychol.* **2013**, *44*, 941–962. [CrossRef]
- 86. Kawachart, P.; Remøy, H.; Dobbelsteen, A.V.D.; Knaack, U. Customer Satisfaction with Luxury Hotel in Bangkok: The Influence of Housekeeping Services Quality; (No. eres2013–296); European Real Estate Society (ERES): Nottingham, UK, 2013.
- 87. Mathe, K.; Scott-Halsell, S.; Kim, S.; Krawczyk, M. Psychological Capital in the Quick Service Restaurant Industry: A Study of Unit-Level Performance. *J. Hosp. Tour. Res.* **2017**, *41*, 823–845. [CrossRef]
- 88. Farrukh, M.; Ansari, N.Y. Effect of psychological capital on customer value cocreation behavior: The mediating role of employees' innovative behavior. *Benchmarking Int. J.* **2021**. [CrossRef]
- 89. Cid, D.T.; Martins, M.D.C.F.; Dias, M.; Fidelis, A.C.F. Psychological Capital Questionnaire (PCQ-24): Preliminary Evidence of Psychometric Validity of the Brazilian Version. *Psico-USF* **2020**, *25*, 63–74. [CrossRef]
- 90. Gürlek, M.; Uygur, A. Service-oriented high-performance human resource practices and employee service performance: A test of serial mediation and moderation models. *J. Manag. Organ.* **2021**, *27*, 197–233. [CrossRef]
- 91. Aziz, H.M.; Othman, B.J.; Gardi, B.; Ahmed, S.A.; Sabir, B.Y.; Ismael, N.B.; Hamza, P.A.; Sorguli, S.; Ali, B.J.; Anwar, G. Employee Commitment: The Relationship between Employee Commitment And Job Satisfaction. *J. Humanit. Educ. Dev.* **2021**, *3*, 54–66. [CrossRef]
- 92. Abbasi, S.; Kamal, A.; Masood, S. Translation and Validation of Psychological Capital Questionnaire. *Pak. J. Psychol. Res.* **2020**, 35, 209–225. [CrossRef]
- 93. Dawkins, S.; Martin, A.; Scott, J.; Sanderson, K. Building on the positives: A psychometric review and critical analysis of the construct of Psychological Capital. *J. Occup. Organ. Psychol.* **2013**, *86*, 348–370. [CrossRef]
- 94. Dawkins, S. New Directions in Psychological Capital Research: A Critical Analysis and Theoretical and Empirical Extensions to Individual-And Team-Level Measurement. Ph.D. Thesis, University of Tasmania, Hobart, Australia, 2014.
- 95. Cassel, S.H.; Thulemark, M.; Duncan, T. Career paths and mobility in the Swedish hospitality sector. *Tour. Geogr.* **2017**, *20*, 29–48. [CrossRef]