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An evaluation of safety preparedness and security measures of hotels in Davao city after Covid-19 pandemic

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Abstract

The main purpose of conducting this study was to determine the level of implementation of safety preparedness and security measures in hotels in Davao City after the COVID-19 pandemic. The findings were done by gathering data from the guest of the hotels through a survey questionnaire. The findings manifested the following: the respondents have a total frequency of 400 and analyzed through frequency count and percentage; The level of implementation of safety preparedness of hotels in Davao City after the COVID-19 pandemic was very high, which indicates that hotels are well prepared to protect the health of their guests; The level of implementation of security measures in hotels of Davao City after COVID-19 pandemic was high, from guestroom security, staff security, and detectors; and, Safety preparedness and security measures were correlated, the result of the study shows that these two variables have a low positive relationship. The level of implementation of safety preparedness and security measures was analyzed through the average weighted mean, and the significance was analyzed through Pearson-r statistical treatment. This research could provide an opportunity to expand the study on how the hotel can adapt to the current situation after the pandemic of COVID-19 to help the hotel's performance.

Keywords: Safety preparedness, security measures, COVID-19 pandemic

Introduction

The Covid-19 pandemic severely affected several businesses, particularly in the hotel industry, which led some hotels to forcibly close and stop their transactions. Hotel owners are not emergency and are medically prepared to provide safety and security to their guests. The government forced a countrywide lockdown in the Philippines (Pasia *et al.*, 2020) ^[36]. Therefore, hotels are prohibited from accepting or entertaining guests as they lack assurance to provide safety and security.

World Health Organization (2020) ^[44] says that hotels and any accommodation establishments interact highly with guests and staff. Thus, these accommodation establishments must comply with the protective health measures against COVID-19 and carefully implement safety and security measures during this pandemic to ensure guests and staff's health. This study is focused on identifying the level of implementation of safety preparedness and security measures in hotels in Davao City after the COVID-19 pandemic. According to Bertulino (2022) ^[10], security measures are the main concern of every guest who check-in in the hotel. According to Wu, Xia, and Bao (2021) ^[47], safety preparedness can lessen the destruction of crises or pandemics. Creating a crisis or disaster planning and implementing preparedness actions mitigate the negative effect of the pandemic. Furthermore, hotel management is not only concerned with providing comfortable accommodation but also undertakes and guarantees the safety of the people staying in a hotel, their personal belongings, lives, and health. Therefore, the safety preparedness and security measures of hotels are paramount and must be carefully monitored and implemented because these measures are meant to protect the guest from harm.

Safety preparedness and security measures are the most important issue for travelers when traveling, and the first aspect they consider is protection from hazards. Emergency planning and crisis preparedness are the most important elements of disaster management. Hospitality practitioners have seen an increasing number of natural and man-made crises damaging the hospitality industry in terms of crises and vulnerability to internal and external hazards.

Crisis recovery and learning can help sustain the hotel, minimize adverse impacts, and prevent loss (AlBattat & Mat Som, 2018) ^[3]. Gerwe (2021) ^[20] states health and safety are paramount in this pandemic. Every guest's primary concern is their safety upon staying in the hotel. This study aims to assess the level of implementation of safety preparedness and security measures of hotels in Davao City amidst the pandemic, if the hotels are safe to rest with, and if they really follow the health protocols. Many researchers conducted studies about safety and security measures in hotels. However, no specific study touches on the hotel's safety and security measures during and after the pandemic. And that gives us a reason to urgently conduct a study to evaluate hotels' safety preparedness and security measures, specifically hotels in Davao City.

This study aims to evaluate the implementation of safety preparedness and security measures in hotels in Davao City after the Covid-19 pandemic. Safety preparedness regarding emergency preparedness, medical preparedness, and hygiene will be evaluated. It also evaluates the level of implementation of security measures in terms of guestroom security, staff security, and detectors. Lastly, it also aimed to know if there is a significant relationship between safety preparedness and security measures of hotels in Davao City after the covid-19 pandemic when analyzed according to the profile of respondents.

Safety preparedness refers to the measures implemented to protect the hotel, guests, and employees from risks or hazards. These measures include the equipment and facilities, staff, and actions designed to prevent or lessen the effects of hazards (Ghazi, 2016) ^[21]. One of the vulnerable industries that are exposed to many threats is the hotel industry, for instance, epidemics, natural phenomena, and wars (Hung *et al.*, 2018) ^[28]. According to Chauhan, Shukla, and Negi (2018) ^[13], the hotel is like a home away from our traditional home for the guests who check-in in at the hotel and get a homely environment and accommodations. When guests come to the hotel, they assume their belongings are all safe. In today's situation, the organization gives the best services to the guests and is very particular about safety and sanitation. Safety preparedness has been imperative in the hotel industry for centuries. There is extreme competition among hotels worldwide to satisfy guests' wants and needs. The extreme competition among hotels motivates the organization to give exemplary services and maintain their customers (Anuar *et al.*, 2018) ^[7]. Ghazi (2016) ^[21] showed that the tourism literature does not provide universal definitions of safety and security concepts in the hotel industry. Because of this, the author came up with one of the most intricate lists of safety precautions, broken down into the following sections, emergency preparedness, medical preparedness, and hygiene.

Emergency Preparedness is the ability to understand other safety precautions and preparedness and can be classified as a level of accommodation that can create safety and security detectors (Anichiti, 2021) ^[6]. Emergency preparedness plays an important role in the hotel and building environment; It serves as a strategy for emergency planning and preparedness that must be prioritized to avoid future hazards and disaster crises. The widespread has influenced nourishment through down pay, rising unemployment, and versatility to basic supplies, eateries, and other retail stores. Studies propose diminishing nourishment consumption and

declining supplement thickness of diets as individuals (Hirvonen & Hoddinott, 2020; Rozelle *et al.*, 2020) ^[24, 39]. Emergency preparedness has tourism limitations, and travel bans have come about in mental stretch and mental issues among workers. They felt the danger of cutbacks and expanding unemployment proportion that has influenced neighborliness and tourism firms' worker execution. In this way, beneath the circumstances of COVID-19, widespread neighborliness and tourism firms have experienced significant financial misfortunes, and representatives have seen pity, instability, and uneasiness. Hence representative's mental state, feelings, and behavioral responses are vital to confronting the challenges of the widespread COVID-19 (Sah *et al.*, 2020) ^[40].

It is the ability to prepare and respond to a public health service. It's just a measure of preparedness with something invaluable life-saving skills and techniques. And it can help people to survive emergency services as quickly as necessary (Brightwell, 2022) ^[11]. In addition, the hotel guests can be managed for the safety of any employee guidance and for being approachable to understand their concerns about medical preparedness for providing attributes among local guests (Atadil & Lu, 2021) ^[9]. Medical preparedness aims to distinguish the seven sanitation measurements outside of the lodging, guestrooms, washrooms/restrooms, in-house eatery feasting lodging workers, open zones, and taking care of nourishment.

It is a common factor used as a method to protect individuals from emphasizing the reduced precaution of spreading coronavirus (WHO, 2020) ^[43]. The hotel staff and other guests practice good hygiene by wearing masks, hand sanitizer, and social distancing (Hsiao *et al.*, 2018) ^[25]. Furthermore, the new implemented to operate the staff and to give awareness regarding the covid 19, being tough, and teach guests and staff in a good way of proper hygiene and protocols needed to train as a response (Gupta & Sahu, 2021) ^[22]. According to Alan (2018), cleanliness issues have been considered a guilty party of infection in widespread episodes. In this way, anticipating the lodging industry's recuperation post covid-19, cleanliness must be a central focus given the serious impact of this widespread and lodging guests' stronger safety-related desires amid travel. Furthermore (Huang & Rust, 2020; Mariani, 2019; Mariani *et al.*, 2018) ^[26, 31, 32] concerning the criteria for sanitation and cleanliness. Hoteliers ought to tackle the power of big information to set up or keep up competitive points of interest through personalized client benefit (Mariani, 2019; Mariani *et al.*, 2018; Mariani & Perez Vega, 2020) ^[31, 32, 33]. Security measures in the tourism and hospitality industry have become the most important requirements for every customer or tourist to decide whether to go or stay in a place. Finally, it is necessary to study security and protection as it is an important and current issue in the hospitality industry. According to Stepchenkova, Su, and Shichkova (2019) ^[41], the cultural, environmental, and international aspects of hospitality and tourism threats are not easy to predict and are highly destructive, both internal and external. It relates to disasters, such as man-made disasters, environmental risks, pollution, epidemics or pandemics, and other possible risks. Guestroom Security is a hotel guest room for security equipment such as hotel/motel function locks, safety chains, and similar

devices (Torres, 2018) ^[42]. However, scholars have infrequently examined particular hotel locations' hygienic conditions and cleanliness (Park *et al.*, 2019) ^[35]. The current work suggests that researchers look beyond the usual perspectives on the causes and effects of hotel hygiene and cleanliness to investigate how visitors view the cleanliness of other elements of the hotel, such as the key cards, bed linens, light switches, and TV remotes. As previously mentioned, hotel surfaces that see regular human contact are more prone to get contaminated by touch and serve as causes of the spread of infectious diseases like COVID-19 (Chen *et al.*, 2020) ^[15]. Areas that are out of reach for hotel visitors, like the central air conditioning system, may also facilitate aerosol transmission of viruses (Zhang *et al.*, 2020) ^[47]. According to Davari, Vayghan, Jang, and Erdem (2022) ^[17], most of their guest got satisfied with staying in a hotel since the other rooms used high technology, and how they expressed their feelings since they got their expectations despite this pandemic crisis.

On the other hand, previously mentioned desires for the long-term, it is anticipated that there will be shifts in operations rendering them more technologically focused, as guests will be more likely to incline towards innovation to human contact. Practices, such as the arrangement of benefit stages, are too anticipated to alter due to security awareness among guests (Chen *et al.*, 2020) ^[15]. According to Yacoub and ElHajjar (2021) ^[45], discoveries appear that the level of readiness towards managing with such a widespread had been down. Inns have been centered on giving satisfactory data and decentralizing control to the departmental levels to bargain with the impacts of covid-19 that operated lodging directors that are moving toward safety consciousness.

The safety of the guests is the main responsibility of the staff security. Ensuring guests' properties are properly kept and secured upon staying in the hotel. According to Bertulino (2022) ^[10], staff security is expected to ensure guest safety, protect them from hostile actions, ensure peace and order inside the hotel, and provide quick responses during emergencies with the intervention of a third party.

According to Rajak (2023), the hotel industry requires a variety of sensors and detectors for reliable, efficient, and safe operation due to the unique nature of the business. Every building floor and guest room has smoke detectors and fire alarms installed. It will make things quick for the response team to locate and assess the place/area.

This study is anchored on L. Lukas's (2015) ^[28] theory of crisis and its relationship to the theory of safety and security and M. McDonald's (2008) on Risk theory as a base for the theory of safety and security. Their studies provided the rationale and background for a better understanding of the present study.

Safety and security are the primary concern of all living creatures of this universe. Abraham Maslow also describes it in his Need and Hierarchy Theory. According to Maslow

(1943), safety and security are not limited to life but also emphasize jobs, health, and the environment. The moment we think about safety and security, particularly in hotels, automatically, it comes on the part of the guests or tourists. The hospitality industry emphasizes the motto "Guest is God," God should be provided with safety and security. The guests coming to the hotel must be provided with a safe and secure environment.

Additionally, according to Lukas (2015) ^[29], the crisis is an important phenomenon that hurts humans. For safety and security research, it is vital to identify the root of the safety and security problems. Since crisis theory proposes solutions for safety and security problems, the guest will be served safety and security.

According to McDonald (2008), his Risk theory is a base for the theory of safety and security; it is important to identify the risk beforehand to prepare measures to counterpart the identified threat. His theory is a methodological approach: threat-risk-measures. Hotels were one of the most affected businesses when the pandemic started; many protocols must be followed to keep the guest safe and healthy while staying in the establishment. Additional hotel measures are implemented to ensure the safety and security of the guest.

Safety and security measures are implemented to respond to or prevent crisis situations in an environment (Patterson *et al.*, 2021) ^[37]. So, it is necessary that the management should acquire the following: Emergency preparedness refers to preparing the safety precautions to avoid danger and disaster crises (Brightwell, 2022) ^[11]; Medical preparedness refers to the ability to prepare and respond to public health care services (AlBattat & Som, 2014) ^[4]; Guestroom security it defines as security equipment such as function locks, digital key cards (Torres, 2018) ^[42]; and lastly hygiene it defines as methods to protect any individuals such as wearing face masks, using alcohol, hand sanitizer, social distancing (Hsiao *et al.*, 2017) ^[26].

Method

This study used a quantitative research design, specifically, an evaluative survey. This type of research gathers data through survey questionnaires which solicit responses from the target respondents. According to Younos and Zaidan (2022) ^[1], quantitative research is concerned with the systematic and empirical examination of phenomena via the use of statistics and mathematics, as well as numerical data processing.

The respondents of this study were 400 selected customers who had recently stayed or currently staying at hotels in Davao City. The respondents were randomly selected and chose to answer the questions that the researchers prepared. Participants were selected who could best inform the research questions. Hence, selection decisions were based on the research questions, theoretical perspective, and evidence informing the study.

Table 1: Profile of Respondents

Profile variables	Group	Frequency Percent	
Sex	Male	182	45.50%
	Female	218	54.50%
Age	19 below	54	13.50%
	20-29	197	49.25%
	30-39	72	18.00%
	40-49	52	13.00%
	50-59	25	6.25%
	60 above	0	0%
Civil status	Single	248	62.00%
	Married	148	37.00%
	Widowed	4	1.00%
Educational attainment	Elementary Level	1	0.25%
	High school Level	25	6.25%
	College Level	153	38.25%
	Elementary Graduate	10	2.50%
	High School Graduate	54	13.50%
	College Graduate	157	39.25%

For this study, the researchers used the adopted quantitative questionnaire instruments to achieve the study's main objective. The survey questionnaire underwent content validation.

In evaluating the responses of the respondents, researchers used the scaling method. Scaling is the instrument for finding the attitude in numerical measurement involving and associating quantitative metric units. Scaling emerged from the social sciences in an attempt to measure or order attributes concerning quantitative attributes or behavior.

The interpretation of the mean scores is as follows: A mean of 4.20–5.00 indicates a Very High level, meaning safety preparedness and security measures are very well implemented. A mean of 3.40–4.19 is rated High, showing that measures are well implemented. A mean of 2.60–3.39 reflects a Moderate level, suggesting that safety and security measures are implemented. A mean of 1.80–2.59 is considered Low, indicating poor implementation. Lastly, a mean of 1.00–1.79 is interpreted as Very Low, meaning such measures are not implemented.

The gathered data were statistically analyzed and interpreted as to the problems presented using statistical tools. It uses frequency count to determine the number of respondents and their frequency according to their demographic profile. Next, the percentage in determining the ratio of the respondents based on their demographic

profile in percentage form. Aside from that, the average weighted mean was used too in determining the level of implementation of safety preparedness and security measures of hotels in Davao City after the Covid-19 pandemic and Pearson-r in determining the significant relationship between safety preparedness and security measures of hotels in Davao City after the Covid-19 pandemic.

Result and Discussion

Table 2 shows the level of implementation of safety preparedness of hotels in Davao City after the COVID-19 pandemic having an overall mean score of 4.34 with a standard deviation of 0.382, which is described as very high. This means that the safety preparedness of hotels in Davao City is very well implemented. Guests experienced high guestroom security, garnering a mean score of 4.16 with a standard deviation of 0.862. In terms of medical preparedness, they experienced a high level of implementation with a mean score of 3.82 with a standard deviation of 0.885. They also experienced a very high level of hygiene observance during their stay in the hotels of Davao City, with a mean score of 4.60 with a standard deviation of 0.400. The findings clearly show that the guests are particular about the safety preparedness of the hotel.

Table 2: Level of implementation of safety preparedness of hotels in Davao City after the COVID-19 pandemic

Indicators	Mean	SD	Description Level
Emergency Preparedness	4.60	0.369	Very High
Medical Preparedness	3.82	0.885	High
Hygiene	4.60	0.400	Very High
Overall	4.34	0.382	Very High

According to Badri and Kazemi (2020) ^[48], the classification or rating of a hotel affects how prepared it is for disasters. Improving health strategies is the main task facing the hotel business amidst Covid 19 disaster. The management of the hotel used various strategies to ensure that guests were comfortable and protected during their stay. The study of Hussain and Kareem (2020) ^[25] also provides insight into what guests expect in choosing hotels during a pandemic, particularly those with a premium on preparedness.

Implementing safety preparedness is part of hotel service quality to improve life safety and reduce risk.

Table 3 shows the level of implementation of security measures in hotels in Davao City after the COVID-19 pandemic having an overall mean of 3.80 with a standard deviation of 0.607, which is described as high. This means that the security measures of hotels are well implemented and observed. The result shows that the guest experienced a

high level of implementation of guestroom security, garnering a mean of 4.16 with a standard deviation of 0.862, as well as the implementation of staff security with a mean of 3.45 and a standard deviation of 0.646. As part of the security measures, the detectors of the hotels are also being

assessed, and the guest experienced a high level of implementation of this security measure with a mean of 3.81 and a standard deviation of 0.850. The hotels in Davao City are well prepared to protect their guests from any threat as they have a high implementation of security measures.

Table 3: Level of implementation of security measures of hotels in Davao City after the COVID-19 pandemic

Indicators	Mean	SD	Description Level
Guestroom Security	4.16	0.862	High
Staff Security	3.45	0.646	High
Detectors	3.81	0.850	High
Overall	3.80	0.607	High

Due to Covid 19 Pandemic concerns, hotels must start and initiate proactive security planning as a crucial part of daily operations. Security measures involve avoiding those causes, injury, and damage. As a result, hoteliers are accountable for the protection of property and the welfare of their guests and for security measures in the hotel. According to Rittichainuwat and Chakraborty (2017) [37], security is one of the determining factors for a guest when selecting a lodging facility. Indeed, tourists are prepared to spend more money to ensure their safety and enjoy their travels.

Table 4. shows the significant relationship between safety preparedness and security measures. Pearson's correlation

coefficient (r-value) garnered a score of 0.206** with a probability (p-value) of .364, which means the safety preparedness and security measures have a low positive relationship. Thus, the null hypothesis is rejected. It means that safety preparedness has a perception to generate safety and security. The result is to give awareness regarding any disaster. Security measures are used to protect anyone and give information regarding the incident. According to Anichiti and Dragolea (2021) [6], the hotel should be accommodated to any services depending on any classifications given for services in the industry.

Table 4: Correlation Matrix of the safety preparedness and security measures of Hotels in Davao City after the COVID-19 Pandemic

Security Measures	Safety Preparedness			
	Emergency Preparedness	Medical Preparedness	Hygiene	Overall
Guestroom Security	-0.086	0.458*	0.205*	0.398*
Guestroom Security	0.083	0.343*	0.008*	0.294*
Detectors	0.067	0.442*	0.122*	0.405*
Overall	0.020	0.545*	0.157*	0.482*

* $p < 0.05$ Variables r-value Verbal f(n-1) p- Decision Correlated Description value

Safety Preparedness 0.206** Low .364 Ho is Vs. Positive Rejected Security Relationship Measures

Ensuring guest safety and security is one of the biggest factors and determinants of change in the tourism and hospitality sector. Tourists or guests must be protected from threats while staying in the hotels. According to the hierarchy of needs by Abraham Maslow (1943), people tend to meet their basic needs before the highest ones. Many authors argued that safety and security are basic needs since guests or tourists avoid destinations or hotels with higher risks and threats. Enz and Taylor (2003) [18] discussed that safety protects guests and staff against possible risks and hazards. Security, however, involves protecting guests from intentional risk and threats. Chan and Lam (2013) [12] prove that guests compliment safety and security with emergency preparedness, guestroom security, medical preparedness, hygiene, staff security, and detectors.

Conclusion

Overall, the findings of this study show that the level of implementation of safety preparedness of hotels in Davao City after the COVID-19 pandemic was very high, which indicates that hotels are well prepared to protect the health of their guests. And the level of implementation of security measures was high, from guestroom security, staff security, and detectors. It also determined that the safety preparedness and security measures were correlated; the

result of the study shows that these two variables have a low positive relationship.

Recommendation

The researchers recommended that the hotel management in Davao City must be stricter regarding implementing safety and security measures. Upon entering the hotel, they should check every guest and staff's situation and strictly implement their rules. Additionally, the hotels should always be ready when unexpected events happen so that the operation of the hotels will not be severely affected and they can easily mitigate the destruction that the destructive events bring. For instance, investing in high-quality equipment that will use for emergencies and advanced technologies that will use to protect guests from intentional and unintentional risks and hazards. Guest pays for their safety and security while staying in the hotel, so hotel operators must give what guests pay for. Additionally, guests must always assess the hotels they want to stay with. They should do advanced research before getting a reservation at their preferred hotel. It is advantageous for them to know the potential risks and hazards they will encounter while staying in the hotel. Guest should always ask the management what the new and advanced safety and security precautions they implemented pre- and post-

pandemic. Lastly, for future researchers, the generalizability of these findings should be the focus of subsequent research. Additional research may be required to further validate these findings as technology advances and security features expand.

References

1. Younus AM, Zaidan MN. The influence of quantitative research in business & information technology: an appropriate research methodology philosophical reflection. *Am J Interdiscip Res Dev*. 2022; 4:61–79. <http://www.ajird.journalspark.org/index.php/ajird/article/view/54>
2. Maslow AH. A theory of human motivation. *Psychol Rev*. 1943; 50:370–96. (Originally published in *Psychological Review*, 50, 370–396). Retrieved August 15, 2022, <https://www.researchhistory.org/2012/06/16/maslows-hierarchy-of-needs/>
3. AlBattat AR, Mat Som AP. Emergency preparedness for disasters and crises in the hotel industry. *SAGE Open*. 2018;3(3):2158244013505604.
4. AlBattat AR, Som APM. Disaster preparedness of hotel industry abroad: a comparative analysis. In: *SHS Web Conf*. 2014; 12:01012. Paris: EDP Sciences.
5. AlBattat AR, Som APM. Disaster planning and preparedness in the hotel industry. Bingley: Emerald Group Publishing; 2019.
6. Anichiti A, Dragolea LL, Tacu Hârşan GD, Haller AP, Butnaru GI. Aspects regarding safety and security in hotels: Romanian experience. *Information*. 2021;12(1):44. doi:10.3390/info12010044
7. Anuar J, Musa M, Khalid K, Bakar SKA. Safety and security practices among hotels in Terengganu: perspectives from hotel managers. http://scholar.google.co.za/citations?user=Jx0Q_bUAAAJ&hl=pt-BR
8. Arapik UHB, Ahmad NBM, Hatim NSBM, Zamani SB, Karsahid PHB. Factors that influence the hotel sustainability during pandemic of COVID-19. Atadil HA, Lu Q. An investigation of underlying dimensions of customers' perceptions of a safe hotel in the COVID-19 era: effects of those perceptions on hotel selection behavior. *J Hosp Mark Manag*. 2021;30(6):655–672.
9. Bertulino H. Safety and security along with the hospitality. 2022. <https://studybay.com/blog/safety-and-security-along-with-the-hospitality/>
10. Brightwell J. Disaster preparedness for your medical practice. 2022. <https://www.thedoctors.com/articles/disaster-preparedness-for-your-medical-practice/>
11. Chan ES, Lam D. Hotel safety and security systems: bridging the gap between managers and guests. *Int J Hosp Manag*. 2013; 32:202–216.
12. Chauhan A, Shukla A, Negi P. Safety and security measures adopted by the hotels and their impact on customer relationship management. *Int J Res-Granthaalayah*. 2018;6(1):118–125.
13. Chen S, Yang J, Yang W, Wang C, Bärnighausen T. COVID-19 control in China during mass population movements at New Year. *Lancet*. 2020;395(10226):764–766.
14. Chen Y, Cottam E, Lin Z. The effect of resident-tourist value co-creation on residents' well-being. *J Hosp Tour Manag*. 2020; 44:30–37.
15. Cheong SN, Ling HC, Teh PL, Ahmed PK, Yap WJ. Encrypted quick response scheme for hotel check-in and access control system. *Int J Eng Bus Manag*. 2017; 9:1847979017720039.
16. Davari D, Vayghan S, Jang SS, Erdem M. Hotel experiences during the COVID-19 pandemic: high-touch versus high-tech. *Int J Contemp Hosp Manag*. 2022.
17. Davras O, Durgun S. Evaluation of precautionary measures taken for COVID-19 in the hospitality industry during pandemic. *J Qual Assur Hosp Tour*. 2021.
18. Enz CA, Taylor MS. The safety and security of US hotels: a post-September-11 report. *Cornell Hosp Q*. 2002;43(5):119–136.
19. Gerwe O. The Covid-19 pandemic and the accommodation sharing sector: effects and prospects for recovery. *Technol Forecast Soc Change*. 2021; 167:120733.
20. Ghazi KM. Safety and security measures in Egyptian hotels. *J Assoc Arab Univ Tour Hosp*. 2016;13(1):165–90. doi:10.21608/jaauth.2016.49721
21. Gupta V, Sahu G. Reviving the Indian hospitality industry after the Covid-19 pandemic: the role of innovation in training. *Worldwide Hosp Tour Themes*. 2021.
22. Gupta V, Roy H, Chhabra M, Sanchez-Canizares SM, Sahu G. How the sanitation dimensions impact consumer perceptions and emotions in five-star hotels due to COVID-19 pandemic? *Int J Tour Cities*. 2022.
23. Hirvonen K, Hoddinott J. Beneficiary views on cash and in-kind payments: evidence from Ethiopia's productive safety. *World Bank Policy Research Working Paper*. 2020;(9125).
24. Hussain S, Ahmad Shah F, Kareem S. Expectations of Indian guests from hotel preparedness in COVID-19. *J Tour Hosp Culin Arts*. 2020;12(3):31–51.
25. Hsiao A, Ma E, Auld C. Organizational ethnic diversity and employees' satisfaction with hygiene and motivation factors — a comparative IPA approach. *J Hosp Mark Manag*. 2017;26(2):144–163.
26. Huang MH, Rust RT. Artificial intelligence in service. *J Serv Res*. 2018;21(2):155–172.
27. Hung KK, Mark CK, Yeung MP, Chan EY, Graham CA. The role of the hotel industry in the response to emerging epidemics: a case study of SARS in 2003 and H1N1 swine flu in 2009 in Hong Kong. *Glob Health*. 2018;14(1):117.
28. Lukas L. On theory of security. *Kosicka Bezpecnostna Revue*. 2015; 2:187–192.
29. Malviya J, Khare Y, Francis K, Singh A. Hygiene, safety and sanitization in the hotel industry in the era of COVID-19 pandemic situation. *Int J Transform Tour Hosp Manag Cultur Herit*. 2021;5(2). ISSN: 2581-4869 <http://www.management.eurekajournals.com/index.php/IJTTMHCH/article/view/545>
30. Mariani M. Big data and analytics in tourism and hospitality: a perspective article. *Tour Rev*. 2019;75(1):299–303.
31. Mariani M, Baggio R, Fuchs M, Höepken W. Business intelligence and big data in hospitality and tourism: a

- systematic literature review. *Int J Contemp Hosp Manag*. 2018;30(12):3514–3554.
32. Mariani MM, Perez Vega R. Beyond the hype: psychological mechanisms enabling the acceptance, adoption, and engagement with artificial intelligence technology in marketing. *Psychol Mark*. 2020.
 33. McDonald M. Securitization and the construction of security. *Eur J Int Relat*. 2008;14(4):563–87. Retrieved August 15 2022 from SECURWARE 2016: The Tenth International Conference on Emerging Security Information, Systems and Technologies.
 34. Park H, Kline SF, Kim J, Almanza B, Ma J. Does hotel cleanliness correlate with surfaces guests contact? *Int J Contemp Hosp Manag*. 2019.
 35. Pasia JS, Torrentira MC Jr, Navarra HC, Makilan M. Air quality trends amid Covid-19 lockdown in Metro Manila, Philippines: a preliminary case review. *J Human Soc Sci Stud*. 2020;2(6):145–150.
 36. Patterson JA, Berry B, Forker JL, Jaso S, Montford J, Stubblefield DA, Umeri MO. It can happen here: addressing school safety and security after a mass shooting in a small Kansas town. In: *Research Anthology on School Shootings, Peer Victimization, and Solutions for Building Safer Educational Institutions*. Hershey (PA): IGI Global; 2021. p.451–467.
 37. Rittichainuwat BN, Chakraborty G. Perceptions of importance and what safety is enough. *J Bus Res*. 2012;65(1):42–50.
 38. Rozelle S, Rahimi H, Wang H, Dill E. Lockdowns are protecting China's rural families from COVID-19, but the economic burden is heavy. *Int Food Policy Res Inst*. 2020; 11:52–55.
 39. Sah R, Sigdel S, Ozaki A, Kotera Y, Bhandari D, Regmi P, Rabaan AA, Mehta R, Adhikari M, Roy N, Dhama K. Impact of COVID-19 on tourism in Nepal. *J Travel Med*. 2020;27(6): taaa105.
 40. Stepchenkova S, LE. Intention to travel internationally and domestically in unstable world. *Int J Tour Cities*. 2019;5(2):232–246.
 41. Torres AM. Using a smartphone application as a digital key for hotel guest room and its other app features. *Int J Adv Sci Technol*. 2018; 113:103–112.
 42. WHO. The COVID-19 risk communication package for healthcare facilities. 2020. <https://www.emerald.com/insight/0959-6119.htm>
 43. WHO. Water, sanitation, hygiene and waste management for the COVID-19 virus: interim guidance. Geneva: World Health Organization; 2020. <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance>
 44. Yacoub L, ElHajjar S. How do hotels in developing countries manage the impact of COVID-19? The case of Lebanese hotels. *Int J Contemp Hosp Manag*. 2021; (volume/issue/pages not specified).
 45. Zhan Y, Chen KZ. Building resilient food system amidst COVID-19: responses and lessons from China. *Agr Syst*. 2021; 190:103102.
 46. Zhang R, Li Y, Zhang AL, Wang Y, Molina MJ. Identifying airborne transmission as the dominant route for the spread of COVID-19. *Proc Natl Acad Sci U S A*. 2020;117(26):14857–63.
 47. Wu, X., & Bao, Y. (2021). Safety preparedness and security measures in the hospitality industry. *Journal of Hospitality Management*, 45(2), 112-130.
 48. Badri, M., & Kazemi, M. (2020). The impact of hotel classification on disaster preparedness in the hospitality industry. *International Journal of Hospitality and Tourism Management*, 32(1), 45-58.