PROTECTIVE MEASURES AGAINST COVID-19 AND THEIR IMPACT ON GUEST SATISFACTION AND BEHAVIOUR INTENTIONS: THE CASE OF THE HOTEL INDUSTRY OF SERBIA

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Abstract: After drastically changing the global tourism and hospitality industry, the current pandemic made hotel companies better understand the new situation and begin to adapt to new market developments. The hotel industry has made significant advances and changes in its business to guarantee the health and safety of guests. This research aimed to examine the consequence of hotels' protective measures against the COVID-19 virus on guest attitudes about protective measures, satisfaction and behavioural intentions. Research findings indicate the protective measures versus COVID-19 utilized by hotels in Serbia positively impact guest attitude towards the measures and guest satisfaction. In contrast, the impact on behavioural intentions is not statistically significant. Additionally, guest attitude towards the measures positively affects guest satisfaction. Guest satisfaction positively affects guest behavioural intentions, while the relationship between guest attitudes and behavioural intentions is not statistically significant.

1. Introduction

The COVID-19 virus is all around, and it has become a significant concern and anxiety at all levels. The World Health Organization affirmed a pandemic at the beginning of March 2020, which caused main changes in society and the economy (Mandarić et al., 2022; Trajkov et al., 2022; Dramićanin & Perić, 2021; Perić et al., 2021; Neuburger & Egger, 2020; Dašić et al., 2020). All countries have activated their reserves, and the governments of all countries are wondering how long this will last, without finding a particular answer (Slavuljica-Gardašević, 2021). The world is entering the third year of the pandemic. International, regional and local restrictions related to travel directly hit national economies, and the tourism sector was affected the worst - international travel, domestic tourism, visits and other complementary segments, such as air transport, public transport (train, ship, bus), accommodation, catering facilities (cafeterias and restaurants), congresses, festivals, business meetings and sports events (Bradić-Martinović & Kovačević, 2021). The hotels were the first to be affected. The restriction of movement and the forbid on travel directly affected their activity.

COVID-19 has caused great concern among hoteliers regarding the safety of services, which has led to the reshaping of services, all to decrease infection among guests and employees (Kim & Han, 2022; Berry et al., 2020). This caused significant business changes to adapt to the guidelines and recommendations of local authorities and the World Health Organization. The hotels are places with a high level of contact between employees and guests, and the World Health Organization issued the instruction "COVID-19 management in hotels and other entities of the accommodation sector" (Kim & Han, 2022). Hoteliers in the Republic of Serbia not only complied with the instruction above, but in cooperation with the Business association of hotel and restaurant industry - Serbia (HORES), following the example of European national associations that are members of HOTREC[1], they were among the first in Europe to create the stamp "Clean & Safe" (Turistički svet, 2020). The hotels guarantee hygiene, health and safety prescribed standards to prevent the spreading and control of the virus and other potential infections.

The appearance of the COVID-19 virus and its rapid spread, in concert with media coverage, negatively affected the behaviour of tourists (Quan et al., 2022). Consequently, increased awareness of risks reduces tourists' intentions to travel during COVID-19 (Perić et al., 2021). Organizations struggle to resolve the reasons for confident consumer behaviour as it affects business achievement. During the COVID-19 pandemic, plentiful changes in guest behaviour appeared. Organizations must conduct marketing research to understand them, which is the

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[1]HOTREC is the umbrella Association of Hotels, Restaurants, Pubs and Cafes and similar establishments in Europe

basis for adopting adequate marketing strategies (Perčić, & Spasić, 2021). The results of empirical studies show that during the COVID-19 pandemic, consumer attitudes towards purchasing behaviour have changed, i.e., that protective measures implemented by organizations to reduce the risk of infection have a positive effect on consumer attitudes, satisfaction and behavioural intentions (Quan et al., 2022; Untaru & Han, 2021). In the context of the hotel industry, only one study in China in 2020 (Quan et al., 2022) investigated the impact of protective measures against COVID-19 on guest attitudes, satisfaction and behavioural intentions. According to the above, this empirical research aims to observe the impact of protective measures applied by hotels in Serbia on guest attitudes, satisfaction and behavioural intentions.

2. Literature review

2.1. Protective measures against COVID-19 in the hotel industry

The crisis induced by the COVID-19 infection has caused a chain of health and safety protocols and procedures in the hotel industry (Hu et al., 2021). This is principally essential, and the hotel business and complementary activities are more liable to health crises due to the elevated risk of infection among guests and employees (Robina-Ramírez, 2021). Social distancing was one of the primary measures to prevent infection from the COVID-19 virus. Conversely, social distancing is not a sufficient measure to prevent disease. Consequently, hotels apply a series of hygiene and health and safety protocols to prevent and control the spread of the COVID-19 virus. In their study, Kim & Han (2022) illustrated examples of global hotel companies and their protective measures to avoid the spread of COVID-19 and provide a safe and protected stay for their guests. In connection with the current health crisis, the Republic of Serbia, i.e. HORES, introduced the "Clean & Safe" certification as a recognizable mark for hotels so that potential guests know that a particular hotel is adequately prepared to combat the COVID-19 virus.

Cleanliness and hygiene in the hotel industry have been relevant since the emergence of SARS in 2003, and it was significant for the revival of the hotel industry after the outbreak of the epidemic. In addition, research shows that when choosing a hotel, guests pay attention to cleanliness and hygiene (Kim & Han, 2022; Choe 2021; Awan et al., 2020; Henderson & Ng, 2004; Chien & Law, 2003). Researchers from Romania found that defensive measures against the COVID-19 virus adopted by retail establishments had a positive effect on consumer safety during shopping, as well as on attitudes and satisfaction, which contributed to an increase in their behavioural intentions (Untaru & Han, 2021). In the context of hoteliers, a study from China examined the relationship between protective measures against COVID-19 with the perception of financial risk, guest attitude, satisfaction

and behavioural intention, and the research results showed that defensive measures against COVID-19 have a significant impact on the perception of financial risk, guest attitudes, satisfaction and behavioural intentions (Quan et al., 2022). More expressly, the results show that the protection measures in opposition to COVID-19 applied by Chinese hotels are essential in encouraging potential guests to visit hotels safely. Accordingly, the following hypotheses are proposed:

- H_1: Protective measures versus COVID-19 implemented by the hotel have a positive effect on the guest attitude towards the measures;
- H_2: Protective measures versus COVID-19 implemented by the hotel have positive effects on the guest satisfaction;
- H_3: Protective measures versus COVID-19 implemented by the hotel have positive effects on the guest behavioral intentions.

2.2. Guest attitude toward measures

The attitude primarily refers to the "degree to which a customer has a positive or negative assessment when using a specific product or service" (Yu, 2020, p. 3). On the other hand, Quan et al. (2022) point out that attitude is "an independent predictor of behavioural intention". Product or service attachment, satisfaction and loyalty are often seen as a positive attitude of consumers towards a company and its products or services, which further implies the company's business success (Yu, 2020; Trang et al., 2019; Manaktola & Jauhari, 2007). Consequently, attitude is an important component of guest retention in the hotel industry (Yu, 2020; Verma et al., 2019). The feelings about possible infection are a critical predictor of guests. In this context, guest attitudes can be defined as "guests' overall assessment of the protective measures taken by hotels against the outbreak of the COVID-19 virus" (Quan et al., 2022). A positive attitude towards a destination or a hotel facility determines the probability of a repeat visit and is therefore essential, primarily because of behavioural intention (Alegre & Juaneda, 2006). Several studies indicate that guest attitude directly affects satisfaction and behavioural intention (Makanyeza et al., 2021; Wang et al., 2020; Sukhu et al., 2019; Karem Kolkailah et al., 2012; Manaktola & Jauhari, 2007). Two studies of the service sector (trade and hospitality) examined consumer (guest) attitudes toward satisfaction and behavioural intentions (Quan et al., 2022; Untaru & Han, 2021). It is based on the statement that guests' attitudes towards the protective measures taken by hotels and other hospitality establishments positively impact guest satisfaction and behaviour. Accordingly, the following hypotheses are presented:

- H_4: The guest attitude towards the protective measures implemented by the hotel has a positive impact on the guest satisfaction;
- H_5: The guest attitude towards the protective measures implemented by the hotel has a positive impact on the guest behavioral intentions.

2.3. Guest satisfaction and behavioral intentions

The study of guest satisfaction in the tourism and hotel industry is most often observed through expectations and disconfirmation (Prayag et al., 2019). According to Oliver (1980) guest satisfaction can be described as "an assessment based on a comparison between the actual experiences of consumers with products and services and their initial expectations". As a result, guests are satisfied when the services provided by the hotel assemble or go beyond their expectations (Yu et al., 2022). Guest satisfaction plays a crucial role in guest behaviour after consuming hotel services, which can be manifested as repeat intention and loyalty (Quan et al., 2022). Higher guest satisfaction creates more positive behavioural intentions (Prayag et al., 2019). Several studies in tourism and hotel management dealt with the analysis of guest satisfaction and behavioural intention, and the results confirmed the impact of satisfaction on guest behavioral intention (Rasoolimanesh et al., 2022; Padlee et al., 2019; Zemke et al., 2017; Tussyadiah, 2016; Amoah et al., 2016; Berezan et al., 2013). The connection was also investigated, and the findings accord with the results of the previously mentioned studies (Quan et al., 2022). Accordingly, the following hypothesis was formulated:

- H_5: Guest satisfaction has a positive impact on guest behavioral intentions.

3. Methodology

3.1. Questionnaire and data collection

The research was implemented in February 2022, using a questionnaire technique distributed in the hotels of Vrnjačka Banja, Prolom Banja and Lukovska Banja. Of the total number, 97 correctly completed questionnaires were returned. The questionnaire for this research contained 22 questions. The first group includes questions related to the measurement of the constructs addressed by the study (protective measures versus COVID-19, guest attitude, satisfaction and behavioural intention), which were conceived based on literature analysis (Quan et al., 2022; Yu et al., 2021; Untaru & Han, 2021) (see Appendix), in the second group, there werw demographic questions. Respondents answered the questions from the first group by choosing a number on a Likert scale from 1 to 5, where the value 1 indicates the least intensity and five the highest intensity. The questionnaire contains 17 questions, and they are the subject of PLS-PM analysis.

The univariate extreme values were acknowledged through a box-plot for all variables, and the Cooks' distance indicator was used to identify multivariate extreme values. 8 multivariate extreme values were recognized, which were disqualified in subsequently analysis, so that the final sample contains 89 respondents. There are no missing data among these 89 respondents.

4. Results

4.1. Descriptive statistics

The Kolmogorov-Smirnov and Shapiro-Wilk tests were used for univariate normality test, and it was performed for each indicator. The test results and descriptive statistics are specified in the following table.

Table 1. Descriptive statistics and indicator distribution test of normality

Items*	Kolmogorov-Smirnov		Shapiro-Wilk		Kurtozis	Skjunozis	M	SD
	Stat.	p	Stat.	p				
PM 1	0.966	0.000	0.731	0.000	6.080	-1.535	4.360	0.801
PM 2	0.932	0.000	0.854	0.000	3.461	-0.797	3.809	1.032
PM 3	0.944	0.000	0.855	0.000	3.300	-0.714	3.854	1.006
PM 4	0.977	0.000	0.790	0.000	3.223	-0.892	4.258	0.805
PM 5	0.966	0.000	0.790	0.000	4.319	-1.150	4.213	0.872
GA 1	0.977	0.000	0.812	0.000	2.832	-0.766	4.169	0.856
GA 2	0.966	0.000	0.802	0.000	4.401	-1.082	4.157	0.851
GA 3	0.966	0.000	0.811	0.000	4.006	-1.007	4.146	0.873
GA 4	0.955	0.000	0.812	0.000	3.553	-1.055	4.045	1.021
GS 1	0.987	0.000	0.791	0.000	2.600	-0.670	4.281	0.754
GS 2	0.955	0.000	0.834	0.000	3.302	-0.817	4.011	0.983
GS 3	0.987	0.000	0.754	0.000	3.571	-0.839	4.382	0.666
GS 4	0.977	0.000	0.787	0.000	3.227	-0.948	4.247	0.843
INT 1	0.966	0.000	0.814	0.000	3.093	-0.827	4.124	0.939
INT 2	0.966	0.000	0.845	0.000	2.789	-0.700	3.989	0.983
INT 3	0.977	0.000	0.820	0.000	2.959	-0.758	4.112	0.859
INT 4	0.977	0.000	0.797	0.000	2.695	-0.780	4.225	0.850

* PM - protection measures against COVID-19; GA - guests' attitude; GS - guests' satisfaction; INT - behavioral intention.

Source: Calculation by plspm version 0.4.9.

In the previous table, not a single variable is normally distributed, but there is a marked curvature of the distribution to the left.

4.2. Measurment model specification

Partial least square path analysis was performed in the R programming language version 4.0.4 using the package pslpm version 0.4.9.

The following figure shows a theoretical model for analyzing the impact of measures to effect the COVID-19 virus on attitudes, guest satisfaction and behavioral intentions.

Figure 1. Conceptual research model
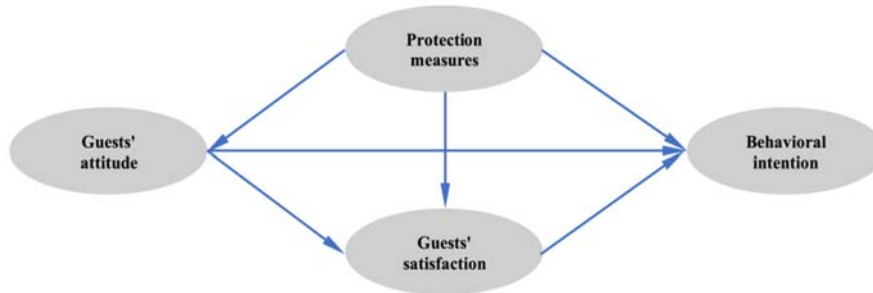
Source: Constructed from a literature review

The validity and discriminativeness (sensitivity) of the latent variables was examined using the Cronbach alpha and Rho coefficients, by comparing the indicator loadings with "its factor" and the loadings with other factors.

The following table shows the correlation coefficients among the constructs calculated on the basis of the scores obtained by PLS regression.

Table 2. PLS regression

Variable	Cronbach alpha	Rho	AVE	PM	GA	SAT	INT
PM	0.863	0.901	0.644	1.000			
GA	0.913	0.939	0.793	0.716	1.000		
GS	0.901	0.932	0.774	0.777	0.753	1.000	
INT	0.932	0.951	0.831	0.653	0.716	0.866	1.000

Source: Calculation by plspm version 0.4.9.

In the previous table, Cronbach's alpha and the Rho coefficient are more advanced than the minimum bound for all constructs. Consequently, all constructs are unidimensional, i.e., the indicators measure the same latent variable. The values in the AVE column are higher than 0.5. The latent variable causes more than 50% of the variance of the indicator.

The model has excellent discriminatory power because groups distribute the indicators, so each indicator has a higher correlation coefficient (loading) concerning "its factor" than others. The constructs are well differentiated from each other. Similarly, the loading with its factor is above 0.5 for each indicator, meaning that the hidden factor explains more than 50% of the variation in the respondents' answers to the questions.

Table 3. Loadings and cross-loadings

Items	Protection measures against COVID-19	Guests' attitude	Guests' satisfaction,	Behavioral intention
PM 1	**0.850**	0.675	0.721	0.570
PM 2	**0.793**	0.435	0.525	0.375
PM 3	**0.716**	0.464	0.439	0.338
PM 4	**0.812**	0.622	0.717	0.621
PM 5	**0.834**	0.611	0.634	0.624
GA 1	0.692	**0.894**	0.712	0.650
GA 2	0.640	**0.895**	0.693	0.717
GA 3	0.630	**0.916**	0.706	0.629
GA 4	0.579	**0.856**	0.554	0.537
GS 1	0.690	0.706	**0.930**	0.849
GS 2	0.720	0.577	**0.801**	0.634
GS 3	0.650	0.690	**0.882**	0.802
GS 4	0.679	0.670	**0.900**	0.750
INT 1	0.623	0.644	0.826	**0.928**
INT 2	0.595	0.651	0.818	**0.912**
INT 3	0.564	0.674	0.759	**0.900**
INT 4	0.598	0.641	0.752	**0.904**

Source: Calculation by plspm version 0.4.9.

4.3. Structural model

The following picture shows the structural model.

Figure 3.Construction model with path coefficients

Source: Calculation by plspm version 0.4.9.

The model is moderately good at explaining the variations of the latent variable guests' attitude (51%) and guests' satisfaction (68%) and good at explaining the variations of the inconsistent behavioural intention (76%). The mean redundancy

column shows the percentage of the variance of the dependent variable that is predicted by the independent latent variables associated with the latent dependent variable. i.e., the independent latent variables' ability to predict the dependent variable's value. The model's power for predicting the variable guest attitude and satisfaction is average, while it is higher for inconsistent behavioural intention.

The GoF index as a global measure of the model's predictive power is 0.701, which is only slightly higher than the limit of 0.7, which usually indicates high predictive power (Sanchez, 2013).

Table 4. Review of the structural model

Variables	Type of variables	R^2	Block communality	Mean redundancy
PM	Exogenous	0.000	0.644	0.000
GA	Endogenous	0.512	0.793	0.406
GS	Endogenous	0.683	0.774	0.528
INT	Endogenous	0.764	0.831	0.634

Source: Calculation by plspm version 0.4.9.

The following table will show the effect that each variable has on the other variables, with the complete number of connections in the model.

Table 5. Influence of the structural model

Relationships	Direct effects	Indirect effects	Total effects
PM → GA	0.716	0.000	0.716
PM → SAT	0.487	0.290	0.777
PM → INT	-0.109	0.762	0.653
GA → SAT	0.716	0.000	0.405
GA → INT	0.487	0.330	0.510
GS → INT	-0.109	0.000	0.815

Source: Calculation by plspm version 0.4.9.

A direct impact is an effect resulting from the direct influence of one variable on another variable. An indirect impact is an effect one variable has on another but through some third variable. To illustrate, protective measures versus COVID-19 affect guests' satisfaction directly, but there is also an impact of protection measures versus COVID-19 on guest attitude and guest attitude on guest satisfaction. It is an indirect effect of protective measures against COVID-19 on guest satisfaction through guest attitude. In the most complicated case, guest attitude affects behavioural intention directly, but also through the path PM → GA → GS → INT and PM → GS → INT, so there are two indirect effects. The total influence is the sum of the direct and indirect effects.

4.4. Bootstrap path coefficients

The model parameters were verified using the bootstrap verification method. The results of the bootstrap path coefficients test are shown in the following table.

Table 6. Bootstrap path coefficients

Path	Original	Mean.Boot	Std.Error	perc.025	perc.975
PM → GA	0.716	0.715	0.058	0.597	0.805
PM → SAT	0.487	0.485	0.129	0.213	0.671
PM → INT	-0.109	-0.094	0.099	-0.272	0.119
GA → SAT	0.405	0.401	0.118	0.200	0.638
GA → INT	0.180	0.175	0.091	0.000	0.338
GS → INT	0.815	0.808	0.089	0.629	0.996

Source: Calculation by plspm version 0.4.9.

Based on the results shown in the previous table, the confidence intervals in the paths PM → INT and GA → INT cover 0, which implies that the mentioned coefficients are not statistically significant at the 5% confidence level. In accordance with the results of the bootstrap path coefficients, the subsequently table shows the summary outcome of testing the research hypotheses.

Table 7. Results of hypothesis testing

Hypotheses	Results
H₁Protective measures versus COVID-19 implemented by the hotel have a positive effect on the guest attitude towards the measures	Supported
H₂Protective measures versus COVID-19 implemented by the hotel have positive effects on the guest satisfaction	Supported
H₃Protective measures versus COVID-19 implemented by the hotel have positive effects on the guest behavioral intentions	Not supported
H₄The guest attitude towards the protective measures implemented by the hotel has a positive impact on the guest satisfaction	Supported
H₅The guest attitude towards the protective measures implemented by the hotel has a positive impact on the guest behavioral intentions	Not supported
H₆Guest satisfaction has a positive impact on guest behavioral intentions	Supported

Source: Results of bootstrap path coefficients

According to the results, it can be concluded that the protective measures against COVID-19 implemented by hotels in Serbia positively impact the guest attitude towards the measures (H1) and guest satisfaction (H2). In contrast, the impact on behavioural intentions is not statistically significant (H3). Furthermore, the results show that guest attitude towards the measures positively affects guest satisfaction (H4). Guest satisfaction positively affects guest behavioural intentions

(H6), while the relationship between guest attitudes and behavioural intentions is not statistically significant (H5). The relationship between protection measures and the purpose of the guests' behaviour (H3) and among the attitude and the behaviour intention (H5) is not statistically significant; additional analyzes were performed, where the moderator variable guest satisfaction was included among these variables. To examine whether guest satisfaction has a moderating effect on the relationship between measures and intentions, PLS was used. The results indicate the impact of protective measures on intentions is insignificant (B=-0.301; SE=0.169), indicating no moderator effect. The relationship between attitude and behavioural intention, where the outcome is B=-0.269; SE=0.188, showed no moderating effect between these variables.

5. Discussion and conclusion

Safety issues of hotels and other hospitality services are significant during the COVID-19 pandemic, given the requirement of adapting to the situation by the guidelines and recommendations of local authorities and the World Tourism Organization. (Kim & Han, 2022; Berry et al., 2020). This research aimed to examine the effect of protective measures versus the COVID-19 virus implemented by hotels on guests' attitudes about protective measures, satisfaction and behavioural intentions. For testing the hypotheses, the PLS-PM approach was applied. The hypotheses were tested using bootstrap path coefficients. Research findings have shown that protective measures versus the COVID-19 virus implemented by hotels have positive effects on guest attitude and satisfaction, which agrees with previous studies' results (Quan et al., 2022; Untaru & Han, 2021). As a result, it is evident that guests positively accept defensive measures implemented by hotels to eliminate the COVID-19 virus and that they play an essential role in improving guest satisfaction. Also, the results, as in previous studies (Quan et al., 2022; Untaru & Han, 2021), confirmed that guest attitude towards measures has a positive effect on guest satisfaction, and satisfaction positively affects behavioural intentions. However, what is interesting in the research results is that there is no statistically significant relationship between the protective measures versus COVID-19 implemented by the hotel and behavioural intentions, which is identical to the results obtained by Untaru and Han (2021), and contrary to the results of Quan's study et al. (2022) where the relationship between the observed variables was confirmed. The research outcome determined that there is no statistically significant relationship between the guest's attitude about the measures and behavioural intention, contrary to previous studies' findings (Quan et al., 2022; Untaru & Han, 2021).

5.1. Theoretical and practical implication

This study contributes to a better consideration of research constructs from the perspective of the current COVID-19 pandemic. Also, the theoretical involvement is reflected in the confirmation and expansion of the concepts of defensive measures implemented by hotels against the COVID-19 virus, guest attitude about the application of measures, satisfaction and behavioural intention, especially given defensive measures against COVID-19 contribute to a positive attitude and increase guest satisfaction.

The presented research results show that the protective measures implemented by hotels versus the COVID-19 virus play a significant role in increasing guest satisfaction, which implies that hotel managers in Serbia should continue to promote the certificate, i.e. the "Clean & Safe" seal, because they guarantee that adhere to hygienic and health-safety prescribed standards, to prevent the reach and control of the COVID-19 virus, especially taking into consideration that research has shown that hotel guests have a positive attitude towards protective measures. Therefore, the imperative of hotel organizations that do not apply protective measures should be focused on the introduction of hygiene and health measures to prevent the reach of the COVID-19 virus and, in this way, increase the number of guests because research has shown that perceived health risk and preventive health behaviour influence behavioural intentions (Perić et al., 2021; Chua et al., 2020).

5.2. Limitation and future research

Certain limitations should be considered when interpreting the results of this study. The most important end relates to the sample size and the hotels in the spas. In this sense, the problem of the sweeping statement of the results remains the inability to generalize the results of the empirical research to the entire population. The generalization of the obtained results is limited only to hotels that are located in spa destinations. In this sense, broader research is necessary, primarily due to the generalization of the results. Future research should test the model at the peak of the tourist season to determine whether hotel guests have similar perceptions of hygiene and health measures to prevent the extent of the COVID-19 virus. Also, it would be interesting to include perceived health risks in the model.

References

Alegre, J., & Juaneda, C. (2006). Destination loyalty: Consumers' economic behavior. *Annals of tourism research*, *33*(3), 684-706.

Amoah, F., Radder, L., & van Eyk, M. (2016). Perceived experience value, satisfaction and behavioural intentions: A guesthouse experience. *African Journal of Economic and Management Studies*, *7*(3), 419-433.

Awan, M. I., Shamim, A., & Ahn, J. (2020). Implementing 'cleanliness is half of faith'in re-designing tourists, experiences and salvaging the hotel industry in Malaysia during COVID-19 pandemic. *Journal of Islamic Marketing*, *12*(3), 543-557.

Berezan, O., Raab, C., Yoo, M., & Love, C. (2013). Sustainable hotel practices and nationality: The impact on guest satisfaction and guest intention to return. *International Journal of Hospitality Management*, *34*, 227-233.

Berry, L. L., Danaher, T. S., Aksoy, L., & Keiningham, T. L. (2020). Service safety in the pandemic age. *Journal of Service Research*, *23*(4), 391-395.

Bradić-Martinović, A., Kovačević, I. (2021). *Poslovanje hotela tokom pandemije COVID-19.* In: *Poslovanje u periodu pandemije - izazovi i šanse* (72-90). Beograd: Institut ekonomskih nauka Beograd.

Dašić, D. R., Tošić, M. Z., & Deletić, V. (2020). The impact of the COVID-19 pandemic on the advertising and sponsorship industry in sport. *Bizinfo (Blace)*, *11*(2), 105-116.

Chien, G. C., & Law, R. (2003). The impact of the severe acute respiratory syndrome on hotels: a case study of Hong Kong. *International journal of hospitality management*, *22*(3), 327-332.

Choe, Y., Wang, J., & Song, H. (2021). The impact of the Middle East Respiratory Syndrome coronavirus on inbound tourism in South Korea toward sustainable tourism. *Journal of Sustainable Tourism*, *29*(7), 1117-1133.

Dramićanin, S., &Perić, G.(2021). Determining the differences in tourist's risk perception and travel intention during COVID-19 health crisis: case study of Serbia. *Thematic Proceedings of the Sixth International Scientific Conference Tourism challenges amid COVID-19* (775-786). Vrnjačka Banja: University of Kragujevac, Faculty of Hotel Management and Tourism.

Henderson, J. C., & Ng, A. (2004). Responding to crisis: severe acute respiratory syndrome (SARS) and hotels in Singapore. *International journal of tourism research*, *6*(6), 411-419.

Hu, X., Yan, H., Casey, T., & Wu, C. H. (2021). Creating a safe haven during the crisis: How organizations can achieve deep compliance with COVID-19 safety measures in the hospitality industry. *International Journal of Hospitality Management*, *92*, 102662.

Karem Kolkailah, S., Abou Aish, E., & El-Bassiouny, N. (2012). The impact of corporate social responsibility initiatives on consumers' behavioural intentions in the Egyptian market. *International Journal of consumer studies*, *36*(4), 369-384.

Kim, J. J., & Han, H. (2022). Saving the hotel industry: Strategic response to the COVID-19 pandemic, hotel selection analysis, and customer retention. *International Journal of Hospitality Management*, 103163.

Makanyeza, C., Svotwa, T. D., & Jaiyeoba, O. (2021). The effect of consumer rights awareness on attitude and purchase intention in the hotel industry: Moderating role of demographic characteristics. *Cogent Business & Management*, *8*(1), 1898301.

Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *Management*, *19*(5), 364-377.

Mandarić, M., Sekulić, D., & Davidson, R. (2022). A study of the influence of the COVID-19 pandemic on tourist behaviour and expectations: A case of Serbia. *Hotel and Tourism Management*, *10*(1), 53–65.

Neuburger, L., Egger, R. (2020). Travel risk perception and travel behavior during the COVID-19 pandemic 2020: a case study of the DACH region. *Current Issues in Tourism*, 1-14.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*(4), 460-469.

Padlee, S. F., Thaw, C. Y., & Zulkiffli, S. N. A. (2019). The relationship between service quality, customer satisfaction and behavioural intentions. *Tourism and hospitality management*, *25*(1), 121-139.

Perčić, K., & Spasić, N. (2021). How Millennials and Generation Z organise travel during the COVID-19 pandemic. *Hotel and Tourism Management*, 9(2), 79–94.

Perić, G., Dramićanin, S., & Conić, M. (2021). The impact of Serbian tourists' risk perception on their travel intentions during the COVID-19 pandemic. *European Journal of Tourism Research*, *27*, 2705.

Prayag, G., Hassibi, S., & Nunkoo, R. (2019). A systematic review of consumer satisfaction studies in hospitality journals: Conceptual development, research approaches and future prospects. *Journal of Hospitality Marketing & Management*, *28*(1), 51-80.

Quan, L., Al-Ansi, A., & Han, H. (2022). Assessing customer financial risk perception and attitude in the hotel industry: Exploring the role of protective measures against COVID-19. *International Journal of Hospitality Management*, *101*, 103123.

Rasoolimanesh, S. M., Iranmanesh, M., Seyfi, S., Ari Ragavan, N., & Jaafar, M. (2022). Effects of perceived value on satisfaction and revisit intention: Domestic vs. international tourists. *Journal of Vacation Marketing*, 13567667221086326.

Robina-Ramírez, R., Medina-Merodio, J. A., Moreno-Luna, L., Jiménez-Naranjo, H. V., & Sánchez-Oro, M. (2021). Safety and health measures for COVID-19 transition period in the hotel industry in Spain. *International Journal of Environmental Research and Public Health*, *18*(2), 718.

Sanchez, G. (2013). *PLS Path Modeling with R.* Berkeley: Trowchez Editions.

Slavuljica-Gardašević, A. (2021). Uticaj Covid-19 na hotelijerstvo i aviosaobraćaj - primjena kriznog komuniciranja i prilagodjene marketing strategije tokom pandemije. *Megatrend revija*, *18*(1), 195-212.

Sukhu, A., Choi, H., Bujisic, M., & Bilgihan, A. (2019). Satisfaction and positive emotions: A comparison of the influence of hotel guests' beliefs and attitudes on their satisfaction and emotions. *International Journal of Hospitality Management*, *77*, 51-63.

Trajkov, A., Andreevski, C., & Biljan, J. (2022). Measuring the impact of the COVID-19 crisis on the foreign tourist receipts. *Economic Themes, 60*(1), 1-19.

Trang, H. L. T., Lee, J. S., & Han, H. (2019). How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam. *Journal of Travel & Tourism Marketing*, *36*(1), 14-28.

Turistički svet. (2020). *HORES: Pečat „Čisto &Sigurno" garancija da je hotel čist i bezbedan.*https://www.turistickisvet.com/news/hospitality/hores-pecat--cisto--sigurno--garancija-da-je-hotel-cist-i-bezbedan-1.html (16 February 2022).

Tussyadiah, I. P. (2016). Factors of satisfaction and intention to use peer-to-peer accommodation. *International Journal of Hospitality Management*, *55*, 70-80.

Untaru, E. N., & Han, H. (2021). Protective measures against COVID-19 and the business strategies of the retail enterprises: Differences in gender, age, education, and income among shoppers. *Journal of Retailing and Consumer Services*, *60*, 102446.

Verma, V. K., Chandra, B., & Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, *96*, 206-216.

Wang, L., Wong, P. P., & Narayanan, E. A. (2020). The demographic impact of consumer green purchase intention toward green hotel selection in China. *Tourism and Hospitality Research*, *20*(2), 210-222.

Yu, J. (2020). Exploring the role of healthy green spaces, psychological resilience, attitude, brand attachment, and price reasonableness in increasing hotel guest retention. *International Journal of Environmental Research and Public Health*, *17*(1), 133.

Yu, J., Seo, J.,& Hyun, S. S. (2021). Perceived hygiene attributes in the hotel industry: customer retention amid the COVID-19 crisis. *International Journal of Hospitality Management*, *93*, 102768.

Yu, M., Cheng, M., Yang, L., & Yu, Z. (2022). Hotel guest satisfaction during COVID-19 outbreak: The moderating role of crisis response strategy. *Tourism Management*, *93*, 104618.

Zemke, D. M. V., Chen, Y. S., Raab, C., & Zhong, Y. (2017). Hotel design, guest satisfaction, and behavioural intentions. *Anatolia*, *28*(3), 338-350.

Chua, B. L., Al-Ansi, A., Lee, M. J., & Han, H. (2020). Tourists' outbound travel behavior in the aftermath of the COVID-19: role of corporate social responsibility, response effort, and health prevention. *Journal of Sustainable Tourism*, *29*(6), 879-906.

Appendix

Items	
PM 1	There are hand sanitizer dispensers in the hotel.
PM 2	The number of guests was limited in order to ensure social distance when using entertainment facilities in the hotel.
PM 3	Due to the pandemic, the hotel has offered free cancellation after booking or rebooking for other dates.
PM 4	Hotel staff wears masks.
PM 5	Protective measures aimed at limiting and preventing the disease COVID-19, give me a sense of safety during my stay at the hotel.
GA 1	The implementation of protective measures versus COVID-19 in this hotel has a positive value for me.
GA 2	The implementation of protective measures versus COVID-19 in this hotel has a wise value for me.
GA 3	The implementation of protective measures versus COVID-19 in this hotel has a useful value for me.
GA 4	The implementation of protective measures versus COVID-19 in this hotel has a pleasant value for me.
GS 1	I am satisfied with my stay in this hotel.
GS 2	I am satisfied with the protective measures versus COVID-19.
GS 3	I had a pleasant stay at this hotel.
GS 4	I felt relaxed during my stay at this hotel.
INT 1	I will visit this hotel again.
INT 2	I am willing to visit this hotel in the future.
INT 3	I will gladly recommend this hotel to my friends.
INT 4	I will share the experience gained by staying at this hotel with my friends.

MERE ZAŠTITE OD INFEKCIJE COVID-19 I NJIHOV UTICAJ NA ZADOVOLJSTVO GOSTIJU I NAMERE PONAŠANJA: PRIMER HOTELSKE INDUSTRIJE SRBIJE

Apstrakt: Pandemija COVID-19, nakon što je drastično promenila globalnu turističku i hotelsku industriju, učinila je da hotelska preduzeća bolje razumeju novu situaciju i počnu da se prilagođavaju novim dešavanjima na tržištu. Hotelski sektor je napravio značajne pomake i promene u svom poslovanju kako bi osigurala zdravlje i bezbednost gostiju. Cilj ovog istraživanja bio je da se ispita efekat mera zaštite od virusa COVID-19 koje sprovode hoteli na stavove gostiju o zaštitnim merama, zadovoljstvu i namerama ponašanja. Nalazi istraživanja su pokazali da mere zaštite od COVID-19 koje sprovode hoteli u Srbiji pozitivno utiču na odnos gostiju prema merama i zadovoljstvo gostiju, dok uticaj na namere ponašanja nije statistički značajan. Dodatno, stav gostiju prema merama pozitivno utiče na zadovoljstvo gostiju, a to zadovoljstvo gosta pozitivno utiče na namere ponašanja gostiju, dok odnos između stavova gostiju i namera ponašanja nije statistički značajan.

Ključne reči: mere zaštite,COVID-19, stav gostiju, zadovoljstvo, namere ponašanja.

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Sandra Dramićanin enrolled in the Faculty of Economics in Kragujevac, study program: Business Economics and Management, in 2006 and graduated in 2011, defending her thesis on "Tourist propaganda of Vrnjačka Banja". During the 2012/2013 school year, she enrolled in master's studies at the Faculty of Economics in Kragujevac, study program: Business Economics and Management. She graduated in 2015, defending her master's thesis on the topic "Key assumptions for improving the leadership potential of managers in Serbia". In the 2017/2018 academic year, she enrolled in doctoral studies at the Faculty of Hotel Management and Tourism in Vrnjačka Banja, study program: Hotel Management and Tourism. The main areas of research are: management in tourism and hotel management, human resources management, leadership.