



## Influence of CHSE Certification in Shaping Guest's Protection Motivation Appraisals and Intention to Stay

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### Abstract

*This research article aims to examine Indonesian hotel guests' appraisal toward their intention to stay at CHSE-certified Hotels in Indonesia. The Indonesian Government introduced the Cleanliness, Health, Safety, and Environmental Sustainability (CHSE) certification to ensure the. Three years after its first implementation in 2020, there has been very limited understanding of the influence of CHSE certification on guests' behavior, and protection and motivations perceptions. Drawing from the Protection Motivation Theory, this research aims to examine the influence of CHSE certification on guests' protection- motivation attitudes, and their intention to stay in CHSE-certified hotels. Analyzing a sample of 370 online survey responses generated through Populix, hypothesis testing found that guests' perceived severity, self-efficacy, and response cost significantly and positively influenced their intention to stay. Results imply that the implementation of CHSE certification has increased guests' awareness of the severity of Covid-19's effects on public health. Additionally, the certification encourages guest protection (self-efficacy) and abides by the suggested and required protocols (response cost). Practical and research implications and future research suggestions of the study are discussed.*

### Abstrak

Artikel riset ini bertujuan untuk meneliti penilaian psikologis tamu hotel Indonesia terhadap perilaku intensi dia untuk tinggal di Hotel bersertifikasi CHSE di Indonesia. Pemerintah Indonesia memperkenalkan sertifikasi Kebersihan, Kesehatan, Keselamatan, dan Kelestarian Lingkungan (CHSE) untuk memastikan keamanan kesehatan masyarakat dan keselamatan perusahaan pariwisata, termasuk akomodasi, untuk beroperasi. Tiga tahun setelah penerapannya yang pertama, masih terdapat pemahaman yang terbatas mengenai pengaruh sertifikasi CHSE terhadap perilaku tamu, serta persepsi perlindungan dan motivasi. Berdasarkan Teori Motivasi Perlindungan, penelitian ini bertujuan untuk menguji pengaruh sertifikasi CHSE terhadap sikap motivasi perlindungan para tamu, dan niat mereka untuk menginap di hotel bersertifikat CHSE. Menganalisis sampel dari 370 tanggapan survei online yang dihasilkan melalui Populix, pengujian hipotesis menemukan bahwa tingkat keparahan yang dirasakan tamu, efikasi diri, dan biaya respons secara signifikan dan positif mempengaruhi niat mereka untuk menginap. Hasil penelitian ini menyiratkan bahwa penerapan sertifikasi CHSE telah meningkatkan kesadaran para tamu akan tingkat keparahan dampak Covid-19 terhadap kesehatan masyarakat. Selain itu, sertifikasi ini mendorong perlindungan tamu (self-efficacy) dan mematuhi protokol yang disarankan dan diwajibkan (response cost). Implikasi praktis dan penelitian serta saran penelitian di masa depan dari penelitian ini juga dibahas.

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## INTRODUCTION

Indonesia's 2017 tourism receipts are reported to total to IDR 200 billion, contributing 4.1% of the country's GDP according to OECD in 2023. Amidst the Covid-19 pandemic, Indonesia's Ministry of Tourism and Creative Economy (known as *Kemenparekraf*) lead an inter-ministry effort to protect the collapsing tourism and creative economy industries. *Kemenparekraf* socialized the new CHSE (Cleanliness, Health, Safety, and Environmental Sustainability) certification, the certification aimed to address the public health concern aligned with conducting tourism businesses and visiting tourism attraction sites in the country. Recent press release from *Kemenparekraf*, there has been 2,689 hotels, 2,419 hotels, 206 attractions, 39 Diving attractions, 30 transportation services companies that have been CHSE certified (*Kemenparekraf* in 2021, <https://www.kemenparekraf.go.id/ragam-pariwisata/8-Sektor-Parekraf-Telah-Tersertifikasi-CHSE>).

From the onset of the pandemic in June to July 2020, *Kemenparekraf*, including other industry actors, associations, governments, and academics, began drafting CHSE guidelines. Details of the protocol manual were gathered and based on various sources of established organisations' health-related guidelines. The basis for the hotel CHSE manual includes but not limited to the following: a) Indonesian Hotel and Restaurant Association (PHRI) operational guidelines during Covid-19; b) Ministry of Health Emergency Public Health Protocols; c) Ministry of Manpower regulation on occupational safety; d) Ministry of Creative Economy and Tourism on destination sustainability; e) Singapore's SG Clean checklist for hotels; f) WHO Operational Considerations for Covid-19; g) UNWTO Global Guideline to restart tourism; h) WTTC Global Protocols for New Normal: Hotels (*Kemenparekraf* in 2020, <https://api2.kemenparekraf.go.id/storage/app>

[/media/pdf/CHSE%202020/media\\_1598981537\\_Handbook\\_Hotel\\_FINAL\\_31072020-EDISI\\_JULI.pdf](/media/pdf/CHSE%202020/media_1598981537_Handbook_Hotel_FINAL_31072020-EDISI_JULI.pdf)).

After completing the draft phase in August 2020, *Kemenparekraf* and its relevant stakeholders socialized, educated, and trial-tested the new protocol to industry stakeholders which include businesses in the tourism sector (i.e. hotels, restaurants, attractions) as well as the creative economy sector (i.e. movie cinema, performance arts, culinary, music). Between September to December 2020, the assessment phase began when *Kemenparekraf* integrated teams on both national and provincial levels as well as with certifying bodies assessed and verified the implementation of CHSE at industry actors' places of business. Businesses that pass assessment and verification will receive CHSE certification with a validity of one year. Along with the certification, certified businesses are labelled with "InDOnesiaCARE" as a symbol of support for the CHSE protocol.

The implementation of CHSE has attracted the interest of tourism operators and academic researchers. Tourism research has investigated the influence of mandatory CHSE protocol towards customers' perceptions and found that CHSE has made guests feel safer from Covid-19 (Illiyina et al., 2021). Similarly, CHSE protocols made tourism destinations feel safer (Avichena et al., 2021). Moreover, having CHSE certification is a critical factor in influencing customers' stay decisions in tourism establishments (Avichena et al., 2021). Despite the early research on CHSE effectiveness, there is still limited understanding of the overall effectiveness of CHSE certification to tourism destinations and how it affects tourism business operations. On a similar note, lack of understanding of the effects of CHSE on tourist consumer behaviors moving forward from the pandemic. To address this gap, we draw from Protection Motivation Theory (PMT) to further understand CHSE certification effectiveness on customer

behaviors and on business operations. Protection Motivation Theory, developed by Rogers (1975), helped to researchers to understand individual human responses to fear appeals, such as the Covid-19 Pandemic and its fatal effect.

During the time of Covid-19, guests and visitors view hotel establishments as commercial social spaces that has potential high risk of being infected. Thus, staying at a hotel at that time is considered a risky endeavor that increase someone's chance of being infected with Covid-19. PMT in the hospitality industry have been mostly applied in the context of tourism businesses such as restaurants, hotels, or destinations to examine psychological and behavioral responses of guests or tourism business customers from an incident (e.g. Norovirus outbreak) or risky environment that induce individual fear and anxiety (Fisher et al., 2018; Fan et al., 2022; Byrd et al., 2022). Given the utility of PMT theory in aforementioned research mostly occur in Western countries, there is still a need to examine its application within the Indonesian hospitality context. Hence, the overarching aim of this research which is to examine the influence of PMT dimensions on guests' intention to stay at CHSE hotels in Indonesia. This study aims to answer the following research questions: (1) How does CHSE affect guests' threat appraisal during their stay at the hotel?; (2) How does CHSE affect guests' coping appraisal during their stay at the hotel?; (3) What is the influence of PMT dimensions on guests' intention for future stay at the hotel?

This study would contribute to further discussion of industry-wide implementation of mandatory health and safety standards for Indonesia hospitality industry. This study provides a better understating of the effect of a public health intervention on the experience of hotel guests during a public health crisis. The following section presents the literature review and hypothesis formation, followed by the methodology used in this study. Results of the hypothesis testing and

discussion follows. Conclusion, limitations and future research concludes the paper.

## LITERATURE REVIEW

### CHSE & The ASEAN Response

Indonesia is among the countries in Southeast Asia Region to introduce a hygiene and sanitation standard to promote public and environmental health. The government of Singapore introduced a similar program called the SG Clean program to address the ongoing fears of doing commercial activities in public spaces (Goh, March 8, 2020, <https://www.straitstimes.com/singapore/health/coronavirus-certificates-dished-out-for-hawker-stalls-meeting-new-hygiene-standards> ).

The goal of SG Clean was to help the public and businesses work to develop good hygiene and sanitation habits to keep Singapore clean from uncontrolled infections arising during the pandemic (SG Clean, 2023, <https://www.sgclean.gov.sg/about/>). The Malaysian Association of Hotels (MAH) launched the first-ever industry-wide hygiene and safety label certification program called "The Clean & Safe Malaysia" (Lai, July 7, 2020, <https://www.thestar.com.my/news/nation/2020/07/07/tourism-boost-hygiene-and-safety-label-for-hotels-launched-in-malaysia>). The goal of the program is to extend hygiene and safety standards from government public health requirements and ensure that certified hotels continue to exercise good practices, policy judgment, and continuous improvement in protecting local travelers from covid-19. All initiatives from ASEAN member states show the seriousness of ASEAN countries to welcome back local and international travelers while protecting their community and ensuring the sustainability of the tourism sector in the region. The pandemic paved the opportunity to drive concerted regional efforts in improving the competitiveness of Southeast Asia destinations.

One of the strategic directions stated in The ASEAN Tourism Strategic Plan (ATSP) 2016 – 2025 is to increase competitive strength of ASEAN the epicentrum of tourism destination ([ASEAN, 2015, https://asean.org/wp-content/uploads/2012/05/ATSP-2016-2025.pdf](https://asean.org/wp-content/uploads/2012/05/ATSP-2016-2025.pdf)). In seven of strategic actions supporting this direction, the ASEAN state members agreed on the objective “To Implement and Expand ASEAN Tourism standards for Facilities, Service, Destination”. The consequence of Covid-19 in the region had stoked a collective positive effort across ASEAN member states as exemplified by Indonesia, Malaysia, Singapore, among other to enhance environmental health and hygiene resiliency.

Today, CHSE is part of Indonesia's national certification standard (SNI 9042:2021). According to Indonesia National Standardization Body (BNS) SNI CHSE certification serves to provide assurance for visitors and general public on the service and goods offering in the tourism establishment had met prescribed protocol on cleanliness (*Kesehatan*), hygiene (*Kebersihan*), safety (*Keselamatan*), and environmental health (*Kebersihan Lingkungan*) (Badan Standarisasi Nasional, Desember 5 2021, <https://bsn.go.id/main/berita/detail/12609/bsn-luncurkan-sni-dan-skema-akreditasi-chse>). CHSE covers and certified diverse type of tourism businesses including Tourism Area Business, Tourism Transportation Services Business, Hotel Business, Homestay / Tourist Lodges, Restaurant Business, Restaurant Business, MICE and other tourism businesses according to development needs and provisions of laws and regulations. For lodging, CHSE protocol covers all areas of service in a hotel (see Figure 1).

The CHSE Guidance for Lodging loads multiple area of coverage which must be considered by the hotel management. In its guidance, there are at least seven steps need to be undertaken by the hotel management to ensure that CHSE applied inside the area. It includes the mandatory protocol by the

employees, temperature checking, washing hands, sanitising system, and controlling distance between individuals. The protocol starts from the entry point of the hotel, followed by the lobby area (front desk and concierge), and the guest room. Furthermore, the guidance also covers other area inside the hotel including the restaurant or coffee shop, banquet, housekeeping area, office, employee area (locker and dining room), kitchen, and any public area.



**Figure 1.** CHSE Guidance for Lodging – Area of Coverage (Source: Kemenparekraf, 2020)

The CHSE (Clean, Health, Safety & Environment) Certification Program is the system of granting credential to hotel establishments in ensuring and providing reassurance for the hotel that they implement cleanliness and safety protocol during the pandemic. During its implementation, The CHSE certification problem faces multiple problems and challenges, particularly as it was made only to overcome the pandemic issue and makes it unsustainable. Other studies questioned the effectiveness of CHSE certification in promoting resilience to the



destination 13/02/2024 19:27:00. Previous literatures show the concern of travelers and business ecosystem towards the effectiveness and sustainability of CHSE certification. Moreover, the concerns raised to understand the impact of CHSE certification towards travelers' attitude and their intention to visit. None of these literatures cover the impact of CHSE certification and how it can influence the travelers' choice, threat, and coping appraisal.

### **The Role of Hygiene and Consumer Choice**

Research on food safety, particularly from coming from Western countries shows customers are concerned about food safety, especially when they eat at restaurants (Ali et al., 2019; Almanza, 2019; Byrd et al., 2022; Kim et al., 2022; Kim et al., 2021; Knight et al., 2007). Research found that patrons are less inclined to choose to eat in restaurants with low health inspection results (Knight et al., 2007). Additionally, customer satisfaction is found to be impacted by both the food safety score and perceptions of the score. In a Worsfold (2006) study, 99% of the respondents indicated that when deciding whether to eat out, food safety was significant consideration. The importance of inspection reports has also been suggested by the Consumer Reaction to Environmental Contamination Model (CREC Model), where knowledge about the cleanliness of the restaurant is one of the factors that affect consumers' emotional reaction and may affect their response to the restaurant such as avoidance or return intention (Almanza, 2019).

### **Theory of Protection & Motivation**

Protection motivation theory (PMT) has been employed broadly to a variety of health-related behaviours and situations (Milne et al., 2000), such as respiratory pandemics and food safety. The PMT is proposed for the first time by Rogers (1975) which proposes three important components of a fear appeal: (a) the magnitude of harm, (b) the probability of health-incident

occurrence, and (c) effectiveness of a protective response.

The PMT model is especially appropriate to pandemic research because it considers how people's assessments of threats and coping mechanisms collectively influence their desire to defend themselves against threats. Kim et al. (2022) have used PMT model to understand the effect of covid-19 toward local restaurant and its hygienic commitment. Kim et al. (2022) also proposed the latest PMT model that utilised in examining guest's behaviours in the hospitality industry particularly in the Covid-19 era. Nazneen et al. (2021) investigates the use of PMT theory in the context of travel avoidance due to the perceived Covid-19 impacts and travel avoidance. Although the above studies discover the safety perception and travel avoidance concerning PMT theory, it has yet to study the impact of multiple prevention strategy, including certification affecting the customer's perception.

PMT proposes that public outlook toward behaviour change and its behavioral motivation is based on one's threat appraisal and coping appraisal (Fisher et al., 2018). Wang et al. (2019) evaluates travellers' self-protections against health risk through applying PMT theory and found that both threat and coping appraisals can enhance travellers' protection motivations. Furthermore, Wang et al. (2019) study also underline the mediating role played by protection motivation on actual behaviours. During the Pandemic, healthy anxiety comes from health threat from catching the virus when acquiring restaurant food.

Facing this health hazard, consumers process the risk in front of them by evaluating its threat (i.e, threat appraisal process) and weight appropriate coping response (i.e, coping appraisal process). Thus, the two construct of threat appraisal and coping appraisal lead consumers toward the protection motivation and the consequent protection behaviour.

### Threat Appraisal

Threat appraisal considers consumer's perceived threat (Milne et al., 2000). The threat appraisal construct consists of perception of vulnerability and of severity (Fisher et al., 2018). Perceived vulnerability evaluates the degree of consumer's belief in the threat occurring to them. Perceived severity is about the seriousness of the threat to consumer's health (Milne et al., 2000).

Previous research on threat appraisal in the hospitality research shows that threat appraisal negatively affects customers' patronage to a hospitality establishment or destination (Choi et al., 2019). Fan et al. (2022) finds that guest's threat appraisal of hotel covid-19 risk, and safety protocols affects their intention to stay. In food and beverage, Ali et al. (2019) found that customers have heightened perceived vulnerability and severity with restaurants, whom had been cited to serve foods that cause foodborne illness. This heightened level of threat appraisal significantly decreases customers' intention to patronize the restaurant. On destination traveling, Zheng et al. (2021) also finds similar behavioural pattern with destination's covid-19 risk, increased level of covid-19 risk produced higher level of traveller's threat severity and susceptibility level. Consequently, these factors increase travel fears and resistance for travellers to travel to a given destination. Based on the discussions above, we present the following hypotheses:

**H1a:** Perceived vulnerability of Covid-19 significantly influences customer's intention to stay at the hotel.

**H1b:** Perceived severity of Covid-19 significantly influences customer's intention to stay at the hotel.

### Coping Appraisal

Coping appraisals involve the evaluation of an individual's capacity to effectively manage and respond to a perceived threat. The construct under

consideration comprises two cognitive components, namely efficacy variables (specifically response efficacy and self-efficacy) and response costs (Floyd et al., 2000). Response efficacy refers to an individual's judgment of the effectiveness of a coping response in deterring or mitigating a threat. On the other hand, self-efficacy assesses an individual's belief in their ability to successfully carry out the recommended coping response in order to protect oneself (Milne et al., 2000). Response costs refer to the many costs, such as monetary expenses, time commitments, and effort exerted, that are linked to the execution of coping responses (Floyd et al., 2000). Additionally, response costs can also encompass the barriers that hinder individuals from engaging in coping responses (Fisher et al., 2018). According to Floyd et al. (2000), the likelihood of engaging in coping behaviors is positively influenced by response efficacy and self-efficacy, while the likelihood of coping is negatively influenced by response costs.

According to Milne et al. (2000), meta-analytic review of protection motivation theory, protection motivation is synonymous with intention to perform a behaviour. In the context of hotel industry, Fan et al. (2022) found that consumers' lodging consumption, during the pandemic, depend on their internal protection motivation assessment and the lodging facilities external prevention practices, irrespective of the property type and travel purposes. Notably, their research also found that consumers are willing to put forth extra efforts and spend more for a safe stay at lodging accommodations.

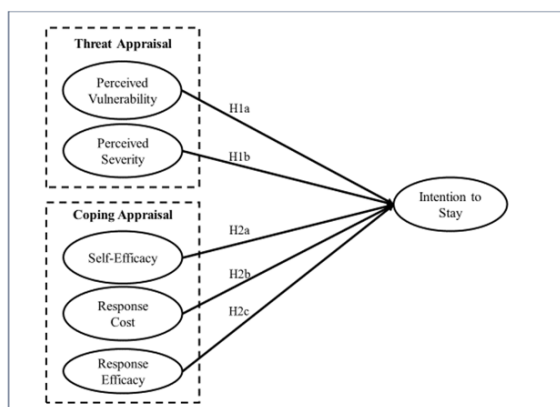
Previous research on hospitality domain also found coping appraisal to increase guests' intention to stay at or patronize a hospitality establishment (Floyd et al., 2000). In Fisher et al., (2018) study on the impact of Norovirus on Cruise ship, coping appraisal construct (Self-efficacy, Response Efficacy, & Response Cost) was found to be strong motivators for cruise's

guests protection motivation during a Norovirus outbreak. Within hotel settings, Hsieh et al., (2021) found guest's self-efficacy strongly enhances their intention to stay and hotel response efficacy mediated guests' threat perception and individual self-efficacy on their intention to stay at the hotel. Similar outcome was also found in restaurant setting, Byrd et al. (2022) examination of coping appraisal and in-restaurant dining intention showed positive influence between a restaurant patron's coping appraisal (i.e., self-efficacy, response efficacy, and response cost) and their intention for in-restaurant dining. The previous discussion has led to the following hypotheses:

**H2a:** Self-efficacy in complying with CHSE significantly influences customer's intention to stay at the hotel.

**H2b:** Response cost of complying with CHSE significantly influences customer's intention to stay at the hotel.

**H2c:** Perceived response efficacy in implementing with CHSE significantly influences customer's intention to stay at the hotel.



**Figure 2.** Hypothesis Model of PMT Framework for CHSE Study

## RESEARCH METHOD

The study was conducted with customers of Indonesian hotels which are CHSE certified. Purposive sampling was employed to select respondents based on their

qualities, knowledge and experience (Etikan et al., 2016). Based on the context of this study, the respondents sought were Indonesian travellers who have knowledge and experience in staying at Indonesian CHSE-certified hotels. Respondents were screen to Indonesian who are 18 years old and above and have checked in between mid-2020 to 2023.

The constructs of the Protection Motivation Theory encompassed the dimensions of threat appraisal and coping appraisal. The measures utilized for assessing danger appraisal and coping appraisal were derived from the work of Byrd et al. (2022). The perception of threat encompasses factors such as perceived susceptibility and perceived seriousness. The measure of perceived susceptibility in this study assesses participants' subjective perception of their likelihood of getting Covid-19. Specifically, two items were employed to gauge this perception, with each item being evaluated on a 7-point Likert scale ranging from 1 (indicating an extremely low risk) to 7 (indicating an extremely high likelihood). Perceived severity encompasses the evaluation made by the participant on the gravity or severity associated with acquiring Covid-19. In this study, two specific items were employed to measure perceived severity, namely, the respondent's belief that obtaining Covid-19 will result in a significant illness. The measurement of each item was conducted using a scale ranging from 1 (representing significant disagreement) to 7 (representing strong agreement).

The construct of coping appraisal was utilized to assess the coping appraisals of individuals in their response to the contraction of Covid-19. The construct consists of three distinct variables, namely self-efficacy, response efficacy, and response cost. Self-efficacy refers to the respondents' own belief in their ability to decrease the danger of contracting Covid-19 while

residing in a hotel. This construct encompasses two specific components, namely the belief that one is capable of living in the hotel while effectively reducing the likelihood of Covid-19 transmission. Response efficacy refers to the evaluation made by the individual regarding the likelihood of acquiring Covid-19 while residing at the hotel, indicating that staying at the hotel does not elevate the risk of receiving the virus. Response cost pertains to the evaluation made by individuals regarding the benefits and drawbacks associated with choosing to stay at a hotel during the Covid-19 pandemic. This evaluation is based on two specific factors, namely the perceived advantages of staying at the hotel and the potential downsides that may arise due to the presence of Covid-19. The measurement of items falling under the category of coping appraisal was conducted using a Likert scale consisting of seven points, with a rating of 1 indicating strong disagreement and a rating of 7 indicating strong agreement.

The variable of intention to stay was employed in relation to the concept of protective motive behavior. The concept of "intention to stay" refers to the inclination of customers to choose a CHSE-certified hotel for their future accommodation needs. The measures included in this study were derived from Bryd et al (2022) research, consisting of a set of three items. These items specifically assessed the intention of individuals to stay at a CHSE-certified hotel, either for personal purposes or in the company of their family or partners. The measurement of items falling under the category of coping appraisal was conducted using a Likert scale consisting of seven points, with a rating of 1 indicating strong disagreement and a rating of 7 indicating strong agreement.

Participants were provided with instructions to assess their degree of agreement with the statements pertaining to each construct, drawing from their past

encounters at a hotel that has been accredited by CHSE.

The study utilized a quantitative online survey to explore the perceptions of travellers on CHSE certification. Responses were collected from the online panel. The online questionnaire was developed based on the literature on PMT and consumers' intention to stay. The questionnaire was presented in Bahasa Indonesia and is divided into four sections: demographics questions, threat appraisal section, coping appraisal section and protection motivation behaviour. Multiple revisions were made in consultation with a senior tourism researcher to improve the questionnaire's content and face validity.

The online questionnaire was distributed through an online marketing research firm, Populix. Populix (<https://info.populix.co/en/home-en/>) was selected as the survey platform due to its competitiveness in collecting data across Indonesian panel. After screening the data for completeness and response engagement, a total of 400 usable responses were collected between May to July 2023. Of the 400 responses, 55% are female, 29% are aged 25-30 years old while 1% for ages 55 years old and above, 26% spends IDR 2.7 million, and 24% spend above IDR 6.5 million. Descriptive results on the socio-demographic of the respondents are described in Table I.

## RESULTS AND DISCUSSION

### Regression Analysis

All variables were tested for reliability, results exhibited internal consistency with Cronbach's  $\alpha$  more than 0,70, except perceived vulnerability (PV) which has 0.227 (See Table IV). As a result, PV was omitted from the regression analysis. Q-Q Plot of residuals look normal. Data was screened for outliers and were removed, due to large residual from what is predicted. All variables in the model have VIF less than 10 indicating the absence of multicollinearity.

Hypothesis Testing



Results for multiple linear regression showed a direct effect of independent variables on dependent variables. H1a proposed that customers perceived vulnerability (PV) to Covid-19 significantly influences customers' intention to stay at the hotel. H1a was not tested during regression analysis due to having low-reliability measures as stated above. Hypothesis 1b proposed that the perceived severity (PS) of Covid-19 significantly influences customers' intention to stay at the hotel. Regression results showed that perceived severity has a positive significant relationship with guest's intention to stay at CHSE-certified hotels with  $\beta=0.095$  ( $t=2.288$ ,  $p\text{-value} < .05$ ). H2a proposed that self-efficacy (SE) of Covid-19 significantly influences customers' intention to stay at the hotel. Results show that self-efficacy is significantly related to the intention to stay with  $\beta=0.122$  ( $t=2.117$ ,  $p\text{-value} < .05$ ). H2b hypothesized that response efficacy (RE) of Covid-19 significantly influences customer's intention to stay at the hotel. Results found that response efficacy showed a small relationship to guests' intention to stay at CHSE-certified hotels with  $\beta=0.027$  ( $t=0.441$ ) and was found to be insignificant ( $p\text{-value} > .05$ ). The last hypothesis (H2c) proposed that the response cost (RC) of Covid-19 significantly influences customer's intention to stay at the hotel. Results show that response cost showed a significant influence over guests' intention to stay at CHSE-certified hotels with  $\beta=0.484$  ( $t=8,323$ ,  $p\text{-value} < .05$ ). Based on the results, H1a, H2a, H2c were supported by the analysis (See Table 1).

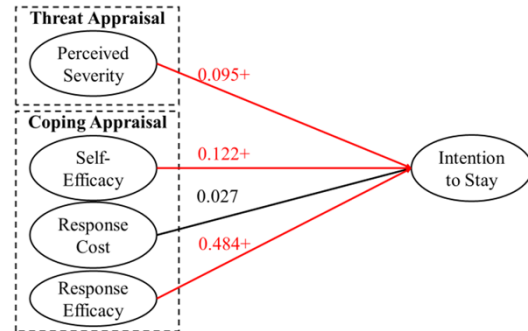
Table 1. Multiple Regression Analysis Results

Direct Effect	$\beta$	t	p-value	Hypothesis
H1b. Perceived Severity → Intention to Stay	0.095	2.288	<.05	Supported
H2a. Self-Efficacy → Intention to Stay	0.122	2.117	<.05	Supported
H2b. Response Efficacy	0.027	0.441	>.05	Not Supported
H2c. Response Cost	0.484	8.323	<.05	Supported

→ Intention to Stay				
H2c. Response Cost	0.484	8.323	<.05	Supported
→ Intention to Stay				

Note. Perceived Vulnerability was omitted from the analysis, due to low Cronbach's  $\alpha$ . Critical  $p$ -value is less than .05.  $n = 400$

Figure 3.0 Hypothesis Testing



## Discussion

The study found support for H1b, H2a, H2c on PMT constructs and the role of CHSE in increasing guests' intention to stay at the hotel. For threat appraisal dimension, perceived severity is significant and has positive influence on guest's intention to stay at CHSE-certified hotels. The significance of perceived severity in the research findings suggests that guests still perceived Covid-19 as risks that may have harmful effects on them, however they are resolute that CHSE-certified hotels are better in managing their fear of Covid-19 than those which are not certified. Findings echoes previous findings on the role of perceived severity and its effect on patronage of an infected restaurant (Ali et al., 2019), and increased travel fear (Choi et al., 2019; Zheng et al., 2021). While previous findings show negative effect between perceived severity and PMT behaviour, the context of this study is to evaluate their perception of threat in severity on Covid-19, and their risk-management behaviour in choosing to stay at CHSE-certified hotels.

Under coping appraisal dimension, response cost and customer's self-efficacy, were found to increase guests' intention to stay. Self-efficacy is the belief that one can successfully enact the recommended

behaviour. The response costs are the costs associated with the recommended behaviour. Hotel response efficacy maybe not found significance, as the perception of covid-19 risks has subsided. Other factors may include the lack of guests' understanding of CHSE initiatives during their stay at the hotel, which may reduce its importance on guest's intention to stay.

Research findings showed that guests believe in the efficacy of CHSE in removing or preventing risks of contracting from Covid-19, while staying at the hotel. Furthermore, guests may have confidence that they are able to follow and comply with the recommended guidelines and protocols set forth by CHSE. This is evident by the significance of response cost, suggesting that guests are willing to comply and do what are asked by the CHSE protocols during their hotel stay. Such finding followed [Fan et al. \(2022\)](#) findings that customers are willing to pay extra cost and put forth extra efforts for safe stay at the hotels during the pandemic. However, findings contradicted the significant influence of hotel response efficacy, government and social trust in increasing guests' intention to stay on [Hsieh et al. \(2021\)](#) study.

The findings reveal that CHSE certification able to influence consumer choice and their travel motivation during pandemic. Moreover, it also expands previous studies by confirming influence of certification in increasing business and consumer's confidence, during and post pandemic. The study can confirm previous literatures to provide the milestone for CHSE certification to become more sustainable for tourism sector in hotel industry, in Indonesia.

### **Industry Implication**

During the 2020-2021 Covid-19 Pandemic, international tourist arrivals dropped by on average 70% compared to pre-pandemic level. Asia pacific alone, according to UNWTO, experienced a 93% dropped in tourist arrivals. Indonesia suffered a 90 % YTD loss in tourist arrivals in 2021 along

with its tourism expenditures and receipts (UNWTO, 2023, <https://www.unwto.org/tourism-data/international-tourism-and-covid-19>).

Today, Indonesia is on track to recovery on the path to its pre-pandemic 2019 level. By December 2022, Indonesia tourist arrivals are -31% difference compared to its 2019 pre-pandemic level. A vast improvement compared to -88% difference in the previous year.

In Tourism & Travel Development Index (TTDI) ranking latest 2021 report, Indonesia gained the most ranking of any countries (World Economic Forum, 2022, <https://www.weforum.org/reports/travel-and-tourism-development-index-2021/in-full/about-the-travel-tourism-development-index/>). However, they gained and lost score within the healthy & hygiene, safety & security and environmental sustainability. While previously in 2019, Indonesia posted a score of 4.5 & 5.4 in health & hygiene as well as safety & security in the competitiveness index. In 2021, Indonesia maintained the same score of 5.4 for safety & security, but suffered a loss of 0.6 (13%) to 3.9 in health & hygiene. For environmental sustainability, Indonesia gained a score of 3.9, which represents a 11.4 % increase from 2019.

Indonesia's tourism performance indirectly showed that CHSE has helped hotel operators in going through some of the worst tourism condition. CHSE has made Indonesian hotel industry more resilient against crisis and helped them to reduce some of the impacts made by Covid-19 and its stringent public health protocols.

While foreign tourists were barred or came in a very minimal number during the pandemic, Indonesian hotels, meanwhile, was able to accommodate locals who desire to enjoy some vacation within their domicile area or popularly known as staycation. Hotels with certified CHSE were able to assure guests that their stay follows strict health and safety protocols. These type of businesses, although not great in number, allows the hotel

to operate and remain marketable (Liputan 6, June 23 2021, <https://www.liputan6.com/bisnis/read/4589445/chse-jadi-dna-industri-perhotelan-bangkit-dari-pandemi>). This level of quality assurance is necessary to staycation guests' decision in choosing their accommodation. Furthermore, hotels, particularly in selected gateway cities, manage to receive governmental contract as quarantine hotel for arriving foreign visitors, who stayed a minimum of 7 – 14 days. Without CHSE, hotels would not be eligible for such contract and lose out on business (Marriott, 2023; Sandy, 2021, <https://www.cnbcindonesia.com/news/20211005172921-4-281670/nih-daftar-35-hotel-karantina-turis-asing-yang-masuk-ke-bali>)

For the tourism as a whole, quality assurance certification such as CHSE helps make a world a more friendlier place to travel. Basic hygiene and sanitation issues often ubiquitous with developing tourism destinations that result in guests staying at foreign-chain hotels or resorts over the local ones.

Hygiene and sanitation scheme such as CHSE improves equity on quality between local and foreign chain hotels. This results in greater capacity for destination to accommodate more tourists looking to explore new experiences. Other destinations may take an example of Indonesia CHSE initiative and implement quality assurance framework of their own. If more global destinations of the world implement such framework, hopefully the world can be a safer, cleaner, and more sustainable place to travel.

Holistically, CHSE is one example of many initiatives or innovation other destination around the world take to tackle this pandemic in their respective tourism sector. This should speed up tourism recovery path of many countries and more importantly help realizing UNWTO sustainable development goals of a more responsible, sustainable, and universally accessible

tourism (UNWTO, 2023, <https://www.unwto.org/tourism4sdgs>).

### Theoretical Contribution

Findings from the research confirms and contradicts previous findings within the PMT framework studies. It confirms previous studies on the role of standardized protocols and standards in improving customer's assurance on the efficacy of Covid-19 protocols. Coping appraisal was found to be significant with response efficacy and cost being the strongest predictors. However, the findings contradict with previous studies where threat appraisal was significant in covid-19 situation. The findings able to extend the original PMT framework proposed by Rogers (1975) in the context of hospitality industry, by answering the concerns from hotels' guests during the pandemic.

This study also extends previous research by Kim et al. (2022) that also examining customer's preference and commitment in conscious consumption under the threat of Covid-19. Perhaps, due to plateauing and mute incidents of Covid-19 compared to its 2020 and 2021 peak, guest's threat appraisal of Covid-19 had also rescinded (Saptowalyono & Wulan, 2023, <https://www.kompas.id/baca/english/2023/06/21/en-status-pandemi-covid-19-dicabut-indonesia-memasuki-masa-endemi>). The findings also able to expand previous literature by Nazneen et al. (2021) about the cognitive perceptions of risk in hotel business context. This study brings different perspective of PMT framework in the new area, extending previous literature by (Nazneen et al., 2021). Meanwhile, it confirms previous study by Wang et al. (2019) that by confirming that threat and coping appraisals can enhance travellers' protection motivations.

### CONCLUSION

In summary, PMT shows that CHSE is effective in inspiring confidence among hotel guests to stay at the hotel during the Covid-

19 period. The CHSE protocol helps hotel guests to reduce its threat appraisal and improve coping appraisal of the Covid-19 risks.

The study have several key findings related to consumer response and behaviour when staying CHSE certified hotels. Research finds that customers still perceive Covid-19 to be significant in its severity toward their intentions to stay. While statistically indicator showed positive significance,

Research findings indicate the perceived severity to be significant in influencing customer's intention to stay at CHSE hotel. This implies that CHSE provides higher level of assurances to guests during the pandemic. While Covid-19 is perceived to be severe in guests' mind, guests would still prefer to stay in CHSE-certified hotels than those without CHSE.

CHSE also facilitates guests' to protect themselves during their stay during their pandemic. Findings reveal that guests' feel that they can protect themselves, while staying at CHSE-certified hotels. They also expressed that CHSE-hotels facilitate means for them to minimize the risk of contracting Covid-19.

Furthermore, findings in guest's response efficacy also provide further support on the central role of CHSE in ensuring a safe and healthy guest's stay experience. Guests at CHSE-certified hotel guests feel the risk of contracting Covid-19 at their chose hotels are minimal and their stay does not increase the chances of them getting Covid-19.

With CHSE, hotels are not only more operationally resilient, but they can create a more secure and safe environment for the guests to enjoy their hotel experience. The higher level of quality assurance engendered from CHSE inspires higher level of trust among customers to book their stays at these hotels. In spite of the bleak time and fears invoked by Covid-19 pandemic, CHSE protocols permit hotel customers to look forward to a secured and fulfilling hospitality experience. For the hotel industry and the

wider tourism sector, tourism businesses can still proceed cautiously with the assistance of CHSE.

### **Limitations & Future Research**

This study has several limitations and suggestions for future research. The study use of measurements could be expanded. Measures used for the PMT framework only have two items per scale and the statement wording needs more careful examination. Future studies should consider using other threat and coping appraisal scales from previous studies.

The study utilizes online survey questionnaire among Indonesian hotel customers who have stayed in Indonesia CHSE certified hotels. The generalizability of the findings is limited to Indonesia under the context of CHSE. Hence, careful interpretation of the findings in similar research context. Findings of the study opened many possibilities of research topics for future research. In the future, researchers can explore the more topics on quality assurance and organizational standards particularly to environmental health within hospitality and tourism by using theory of protection motivation. They could further expand PMT by adding mediating and moderating variables to capture the contextual uniqueness of Indonesian hospitality and tourism marketplace and Indonesian consumer behaviours.

Future research may also employ different experimental designs, to examine differences in consumer behaviour, psychographic factors, or service condition. Gender differences in consumer lifestyle and preference could also be examined under such design. It may reveal gender-based affective and cognitive route in responding to stimuli for a hotel experience. The potential findings from these future studies could help Indonesia hospitality practitioner's in better designing their accommodation experience and satisfying their guests. Current study only examines CHSE regarding its effect for the accommodation sector. Future research may



replicate, adjust, or modify the study to examine the role of CHSE in influencing consumer behaviour and perception in other tourism sector such as food and beverage, event, attractions, etc.

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