

## WILL DOMESTIC TOURISTS ADHERE TO HEALTH AND SAFETY PROTOCOL DURING POST COVID 19 PANDEMICS? EVIDENCE FROM INDONESIA

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**Abstract** – *The purpose of this paper is to investigate the Indonesian domestic tourists' protection behavior intention when travelling during the post-pandemic phase. This study employs the protective motivation theory (PMT) that involves the variables of perceived severity, perceived vulnerability, response efficacy, and self-efficacy to predict the protective behavior intention. Data were collected through 210 distributed questionnaires toward Indonesian domestic travelers. The collected data was analyzed by using SmartPLS. The Indonesian domestic travelers are mostly willing to comply with the health and safety procedure as imposed by the government when travelling during the post-pandemic phase. However, the respondents do not perceive themselves as vulnerable to the spread of covid 19 virus during traveling. The compliance toward the implementation of health and safety protocols and self confidence among Indonesian domestic tourists are high during traveling. Nevertheless, they do not consider themselves to be vulnerable with the covid 19. The results revealed that people are well-accustomed with the new normal to protect themselves from the exposure of covid 19 during traveling. The value of this study is the finding that the majority of Indonesian domestic tourists have adopted the safety and health protocol which increase their coping strategy in dealing with covid 19 as a threat during traveling.*

**Keywords:** *Indonesian domestic travelers; protection motivation theory; covid 19; post-pandemic.*

### INTRODUCTION

The spread of COVID 19 virus on March 2020 had a detrimental impact toward businesses, which resulted in low economic gains compare to the previous fiscal year. Governments around the globe took precautionary measures to anticipate the spread of COVID 19 virus by implementing restrictions on mobility, temporary closure of business centers, and the intermittent social distancing policy. Such precautionary measures also imposed on tourism sector, since travel-related activities may accelerate the virus spread between destinations. Additionally, international access between nations were also compromised that further impact the economic loss within the tourism sector. In general, UNWTO estimated a decline of 1 billion international tourists' arrivals with 100-120 million jobs at risk as a result.

COVID 19 also had a negative impact in Indonesia where its tourism sector experienced a loss of IDR 20 billion, within the span of 2020. Several issues contribute to the economic loss, such as the direct impact of the decreasing international tourists which reached 78% from all international access points, drop of hotel occupancy rate up to 56%, and international events cancellation with potential revenue loss of IDR 6 billion. Nevertheless, World Bank predicted that the Indonesian economy would grow to 4.8% on 2021 due to the optimism from the consumers. The Indonesian consumers expected their income would be recovered and apparently prepared for future travel activities. At the same time, the government-imposed acceleration programs to support the development for super-priority destinations, such as Lake Toba, Borobudur, Likupang, Labuan, and Bali (Susilawati et al., 2020). Further, due to international travel restrictions, for both inbound and outbound, an opportunity arises where Indonesian tourism sector would target domestic travellers. In this regard, the Indonesian tourism sector should be operated with new regulations which include the adherence of domestic tourists on health and safety protocols.

Indonesian tourism is predicted to gain its recovery momentum on 2021, where arrangements are conducted from both DMOs and local communities to accommodate the health and safety protocol on each destination. The main objective is to prevent the spread of corona virus at respective destinations during post pandemic tourism. Several arrangements have been documented by previous studies, for instance, counseling and socialization on health and safety protocols on small islands (i.e., Tanjung Kelayang in Bangka Belitung, Kepulauan Seribu Morotai in North Maluku, Wakatobi in Southeast Sulawesi, Labuan Bajo in East Nusa Tenggara, and Mandalika Manado Bitung-Likupang islands) (Hakim, 2020), emphasizing the importance of health and safety protocol to improve household economy, public health, social life, and environment in Bali (Yuniti et al., 2020), strategy formulation to monitor the performance of tourism infrastructure that involve various stakeholders (i.e., attraction service providers, tour agency, accommodations, and transportation service providers) (Sinulingga, 2021), and protection management planning to deal with over-tourism on geopark destinations (i.e., Rinjani, Bromo, Ciletuh, Raja Ampat, Pangandaran, Belitong, Lake Toba, Ngarai Sianok-Maninjau, and Tambora) (Cahyadi and Newsome, 2021). Subsequently, health and safety arrangements were also conducted toward employees that work on the tourism sectors with the aim to prepare them for post pandemic tourism, which include hotel and recreation sites workers (Japutra and Situmorang, 2021; Riadil, 2020).

Overall, previous studies show the major concerns from DMOs, local communities, and other stakeholders regarding the implementation of health and safety protocols. The substantial economic loss during the pandemic become the driver for the tourism suppliers to ensure not only the economic recovery, but also social and environmental issues. As Cahyadi and Newsome (2021) and Hakim (2020) suggest, over-tourism has led to major social and environmental issues, such as pollution, natural resource degradation, waste, vandalism and rapid rapid retail outlet and infrastructure development during the pre-pandemic tourism era. For these reasons, the post pandemic tourism era should account for both social and environment preservation, commencing with adherence toward health and safety protocols from the domestic tourists. However, studies related to Indonesian tourists' behavior in the context of post pandemic tourism remain scarce.

To date, studies related to Indonesian tourists' behavior to travel during the post pandemic situation remain scarce, with the exception of studies conducted by Wachyuni and Kusumaningrum (2020) and Yuni (2020). Using the theory of planned behavior (TPB), both studies revealed that Indonesian domestic tourists have strong motivation to travel post pandemic, and demand for the tourism service providers to accommodate health and safety protocols to ensure the mitigation of the virus spread and to maintain hygiene condition of the premises. Interestingly, the studies also found that Indonesian domestic tourists have low level of travel anxiety in terms their planning for future travel during the post pandemic situation. In line with this, Adiyoso and Wilopo (2021) also found that both female and male Indonesians are prepared to perform social distancing as regulated by the government. Extensive media usage become the main factor that decrease their perceived risk and, in turn, increase their confidence to perform the social distancing. Nevertheless, these studies only documented how the Indonesian tourists would plan for their subsequent travel post pandemic, along with their state of perceived risk in conducting the future travel using TPB as the underpinning theory. Moreover, study conducted by Adiyoso and Wilopo (2021) is not within the tourism context. This indicates that studies related to tourists' intention to perform health engagement behavior are yet to be conducted within the Indonesian context. Accordingly, studies related to health behavior would reveal the tourists' motivation to deal with rough situations (i.e., pandemic), while at the same time, adhering to the official health and safety protocol that is imposed the government. As such, studies related with tourists' health-engagement behavior would provide insights as part of Indonesian tourism sector recovery initiatives.

Drawing upon the discussion, this study aims to fill the literature gap by utilizing the protective motivation theory (PMT) as the underpinning theory. PMT would serve as the theoretical basis to a comprehensive understanding of travelers' decision-making process when they encounter risks on their travel (Wang et al., 2019). Apart from perceived risk that become focal on tourism in pandemic context (Chew and Jahari, 2014; Rather, 2021; Sánchez-Cañizares et al., 2021), PMT add another risk-related construct originating from the academic disciplines of health behavior and psychology (Yasami, 2021). Therefore, by using PMT as the theoretical underpinning, this study would offer novel contribution related to tourists' behavior when they are under threat from the COVID 19 pandemic.

## LITERATURE REVIEW

### ***Protection Motivation Theory (PMT)***

As an important topic in public health, a wide variety of models and theories have been developed and applied to assess people's health behavior. Several models and theories commonly used are health belief model (HBM), social cognition theory, and the theory of planned behavior (TPB) (Wang et al., 2019). Amongst these models, protection motivation theory (PMT) appears to be one of the most comprehensive models that supported by empirical results (Ruan et al., 2020). The theory is adapted from expectancy-value theory and the components of rewards and self-efficacy, and thus, able to explain the people's motive to participate in health protective behaviors (Prasetyo et al., 2020). PMT postulates that under the influence of both external and intra-personal factors, people will undergo one of the two mediating processes. These processes are threat appraisals and coping appraisals. Afterwards, the result of such process would appear in people's ability to cope with the current situation (i.e., coping modes), either adaptive coping or mal-adaptive coping (Liu and Jiao, 2018).

### **Coping modes**

Adaptive coping is the people's ability to engage and/or engage continuously in a corresponding health behaviors (Ruan et al., 2020). On the other hand, mal-adaptive coping reflects people's decisions to impede the corresponding health protective behavior. Factors that are involved in the PMT, in which influence the coping modes are severity, susceptibility or vulnerability (i.e., threat appraisal), response efficacy and self-efficacy (i.e., coping appraisals). Together, these variables would explain the probability of people's adapting responses with a particular situation (i.e., either adaptive coping or mal-adaptive coping) (Wang et al., 2019).

In this regard, the decrease of threat appraisals would increase the probability of adaptive coping as a response to a particular situation. Additionally, variables in coping appraisals are likely to have stronger influence toward the outcome variables, such as intentions and actual behaviors, than those of threat appraisals variables (Qiao et al., 2021). Accordingly, variables within the threat appraisals are poorly linked to the outcome variables, indicating the lack of motivation to engage in health protection behaviors. Such condition is coined as maladaptive perception and referred as the people's attempt to reduce their level of fear without engaging in behaviors to reduce the risk or danger (Prasetyo et al., 2020). Thus, maladaptive responses would explain why the most vulnerable group of people would not be willing and relatively difficult to be convinced to appropriately reduce risk behaviors.

### ***PMT constructs***

Threat appraisals or perceived threat is the process by which an individual cognitively assesses a certain risk (Liu and Jiao, 2018). Such assessment of threat involves two processes, they are perceived vulnerability and perceived severity. Perceived vulnerability refers to the people's tendency of experiencing a particular disease. The construct reflects how susceptible and the probability an individual might be infected by a disease and would assess several factors, such as how easy to be infected, importance of health and safety protocol, dreadful feeling towards a disease, threat to family, and daily activities disruption (Ruan et al., 2020). Meanwhile, perceived severity captures how serious the consequences to be involved to a particular threat. The construct reflects people's assessment of several factors such as, the contagious level of a disease, the dispersion of a disease, how dangerous is a disease, and how a disease might impact people's life quality.

On the other hand, coping appraisal is the process where people cognitively evaluate how to manage a threat (Qiao et al., 2021). Coping appraisal involves two processes: response efficacy and self-efficacy. Response efficacy is defined as the effectiveness level of how people protect themselves against a risk or threat. It also captures people's perceived capability to behave in certain manners to reduce or eliminate a threat. The construct reflects people's assessment in terms of their capability to implement safety measures, knowledge of accessible health services, and adhering to health protective protocols (Wang et al., 2019). Self-efficacy is people's degree of confidence in protecting themselves against a particular risk or threat. Additionally, the construct also refers to people's confidence level on their ability to endorse suggested behavior. Self-efficacy reflects people's assessment in terms of their confidence to obtain threat-related information, prepare the required instrumentations to anticipate risks, and able to reach health services (Ruan et al., 2020).

Both appraisals would influence people's intention to perform health protective behavior. It is defined as the extent of people's consent to behaving in manners to protect themselves from risks or

threat. The construct also assesses peoples' willingness to perform health-related protective behavior in the near future. Therefore, intention to perform health protective behavior would capture the people's degree of motivation to protect themselves and their level of adherence to comply with the official health and safety protocol.

### ***Hypotheses Development and Research Framework.***

As part of threat appraisal, perceived severity reflects the people's cognitive ability to assess how serious the consequences to be involved to a particular threat. It also explains people's evaluation of the extent of severity of threats that they may encounter. Previous studies found that perceived severity has a significant influence towards intention. For example, tourists' intention to mitigate climate change would increase as a result of their perceived severity assessment (Chen et al., 2020). Meanwhile, the perceived severity regarding the lost opportunity to earn prestigious jobs abroad have driven the Malaysian foreign university students to participate on educational tourism (Seow and Choong, 2021). Another evidence showed that perceived severity would encourage tourists to adhere with preventive measures that issued by the authorities (Prasetyo et al., 2020; Zheng et al., 2021). Drawing from the discussion, the hypothesis is stated as follows:

**H1: Perceived severity has a positive and significant effect towards Protective Intention.**

Another cognitive ability from threat appraisal is perceived vulnerability, where people would assess both the susceptibility and probability they might be exposed by threats, such as disease and pollution during their travel. The effect of perceived vulnerability on behavioral intention is documented on previous studies. For instance, South Korean tourists perceived vulnerability toward the corona virus has increased their intention to engage with protective behaviors when traveling to China (Qiao et al., 2021). Similarly, international tourists' perceived susceptibility level to be exposed by smog pollution in China would increase their intention to protect themselves (Ruan et al., 2020). Lastly, Australian tourists' perceived vulnerability to be infected by rabies when visiting South East Asian countries had increased their intention to take preventive measures, such as enrolling for vaccine shot and document accessible medical facilities on the destination (Wang et al., 2019). Following the discussion, the hypothesis is stated as follows:

**H2: Perceived vulnerability has a positive and significant effect towards Protective Intention.**

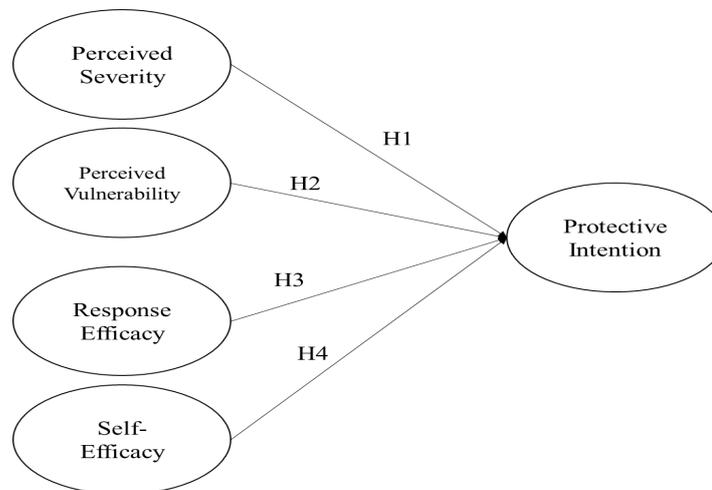
Response efficacy is one of the cognitive evaluation the people perform within the coping appraisal. This would enable people assess the effectiveness level of protection they take against a risk or threat. As a result, people would behave in certain manners to reduce or eliminate threats. The relationship between response efficacy and intention has received a considerable support from past studies. International tourists' level of response efficacy significantly influence their intention to perform protective behavior in terms of affordable medical treatment obtained through health tourism in Malaysia (Seow et al., 2021). Residents' response efficacy toward information related to fire accidents had increased their intention to mitigate fire-related accidents (Liu and Jiao, 2018). Finally, response efficacy also increases people's level of compliance with the official preventive measures (Prasetyo et al., 2020). Following the discussion, the hypothesis is stated as follows:

**H3: Response efficacy has a positive and significant effect towards Protective Intention.**

Self-efficacy is part of coping appraisal which reflect people's degree of confidence in protecting themselves against a particular risk or threat. Subsequently, the construct also explains people's confidence level on their ability to endorse suggested behavior to protect themselves. The influence of self-efficacy towards intention is well documented on previous studies. The level of Bangkok residents' self-efficacy to prevent waste significantly increase their intention to avoid waste, purchase green products, reuse and recycle, and waste disposal behaviors (Janmaimool, 2017). In another instant, tourists' level of self-efficacy would increase their intention to mitigate climate change (Chen et al., 2020). Lastly, internation students' self-efficacy to enroll and embark to study on universities abroad had increase their intention to perform education tourism in Malaysia to prepare themselves on global career enhancement (Seow and Choong, 2021). Following the discussion, the hypothesis is stated as follows:

**H4: Self-efficacy has a positive and significant effect towards Protective Intention.**

The above hypotheses development has enabled to draw the research framework for this study. Figure 1. illustrates the research framework.



**Figure 1. Research Framework**

## METHODS

Based on the study's problem characteristic, the explanation between identified variables are the concern of the study (Sekaran and Bougie 2016). Following this reasoning, the quantitative methodology would be used to address the problem of this study. This study would adopt the correlational study to investigate the problem. The first reason is that the current study would examine if the relationship between the variables do exist. Secondly, the existing variables are considered to be associated with the problem, which would not lead to a causal relationship (Sekaran and Bougie 2016). Finally, the variables would not be manipulated as the study is aimed to observe them in a normal condition. Therefore, the correlational study is the most appropriate type of investigation in this study. Table 1. Depicts the measurement scales used in this study.

**Table 1. Measurement Scales**

| Variable  | Indicator   |
|---|---|
| <b>Perceived Severity</b><br>(Prasetyo <i>et al.</i> , 2020)      | COVID-19 is highly contagious   |
|   | COVID-19 has widespread community transmission  |
|   | COVID-19 is a serious threat to human life.   |
|   | Very expensive to pay the medical expenses for COVID -19.   |
|   | COVID-19 outbreak in my country is more severe than in other countries.                             |
| <b>Perceived Vulnerability</b><br>(Prasetyo <i>et al.</i> , 2020) | very vulnerable to COVID -19.   |
|   | my neighborhood is very vulnerable to COVID -19   |
|   | likely to get sick when my friends are sick.  |
|   | I have a history of susceptibility to infectious diseases.  |
|   | there is a chance that my family will be infected by COVID -19                                      |
| <b>Response Efficacy</b><br>(Qiao <i>et al.</i> , 2021)           | Taking appropriate safety precautions can effectively prevent the risk of COVID-19 while travelling |
|   | Reducing time spent outdoors can effectively prevent the risk of COVID-19 while travelling.         |
|   | Reducing public transportation usage can effectively prevent COVID-19 during travelling.            |
|   | Knowledge of designated hospitals and health services while travelling                              |

|  |   |
|--|---|
| <b>Self-Efficacy</b><br>(Qiao <i>et al.</i> , 2021)            | Confidence to obtain health related information of COVID-19 about my destination in advance   |
|  | Confidence to prepare sufficient personal protective equipment prior to travelling.   |
|  | Confidence to obtain information about hospitals in advance in case I need help.  |
|  | Confidence to implement COVID 19 reduction measures   |
|  | Confidence to protect myself from COVID 19  |
| <b>Protective Intention</b><br>(Prasetyo <i>et al.</i> , 2020) | Prefer to visit places with fewer visitors, if I travel   |
|  | Willing to procure sufficient personal protective equipment (e.g. mask, gloves, disinfectant, personal cutlery) prior to my travels |
|  | Avoid travelling if travel restrictions are lifted  |
|  | Willing to follow every rule made by my government during the COVID-19 outbreak.  |
|  | Willing to follow the recommended precautions until the end of the COVID-19 outbreak.   |
|  | Willing to reschedule my travel plans   |

This study would collect data from Indonesian residents that consider to travel within the next 3 months. Further, the questionnaire would be distributed to the citizens on Java Island and its respective province's Capital Cities (i.e. Jakarta, Bandung, Semarang, and Surabaya), where internet usage are also the highest (APJII, 2018). Thus, a snowball sampling was employed where 5 representatives from each capital cities were approached by the researchers to pass on the questionnaire to their closest friends and relatives (Sekaran and Bougie, 2016) (Sekaran and Bougie, 2016). Additionally, a non-probability purposive sampling was employed to ensure that the respondents have considered to travel within the next three months. Accordingly, the following screening question would be asked: "Have you considered travelling to domestic destinations within the next three months?"

The data would be collected through questionnaire distribution with 7-point Likert scale. Data would be collected through an online questionnaire, in order to reach the targeted population on a wider scale. For this purpose, the questionnaire would be distributed through online platform using Google Form and social networking sites, such as WhatsApp and Instagram. The online distribution through online platform also conducted as a compliance of Covid-19 social protocol. In addition, questionnaire is a sufficient tool for data collection in this study to evaluate the psychological response from the respondents (Sekaran and Bougie, 2016). The sample size is calculated using G Power 3 software to meet 80% of predictive accuracy with the following parameters: effect size=0.15;  $\alpha$  error=5%; power=0.95%; and 4 predictors (Faul *et al.*, 2009; Hair Jr *et al.*, 2017). Based on the calculation, the minimum amount of sample required are 129, thus, 200 questionnaires would be distributed.

The collected data would be analyzed with SmartPLS version 3.3.2. It is a structural equation modeling (SEM) software which is intended to analyze the significance on each relationship. Due to the variance based on its statistical algorithm, the fit indices is not necessary to be conducted (Hair Jr *et al.*, 2017). Data analysis would be conducted on two steps: (1) outer model, which includes the testing of composite reliability (CR), discriminant and convergent validity, outer loading, and collinearity assessment; (2) structural model, which includes the evaluation of t-value for hypotheses testing, coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ).

## RESULTS and DISCUSSION

### **Respondents' Profile**

The majority of the respondents are female (55,1%), with the range of age between 25-35 years old (34,8%). The respondents' occupation are mostly within the private sector (38,5%), with monthly income of Rp. 5.000.000 – 10.000.000 (25,1%). Lastly, the majority of the respondents are bachelor graduates (46,5%). Table 2 summarizes the respondents' profile.

**Table 2. Respondents' Profile**

| Demographic Profile   |                                 | Frequency         | Percentage (%) |
|-----------------------|---------------------------------|-------------------|----------------|
| <b>Gender</b>         | Male                            | 83                | 44,4           |
|                       | Female                          | 103               | 55,1           |
| <b>Age</b>            | Less than 25                    | 24                | 12,8           |
|                       | 25 – 35                         | 65                | 34,8           |
|                       | 36 – 45                         | 52                | 27,8           |
|                       | 46 – 60                         | 35                | 18,7           |
|                       | More than 60                    | 11                | 5,9            |
| <b>Occupation</b>     | Students                        | 18                | 9,6            |
|                       | Government Sector               | 40                | 21,4           |
|                       | Private Sector                  | 72                | 38,5           |
|                       | Self-Employed                   | 25                | 13,4           |
|                       | Housewife                       | 32                | 17,1           |
| <b>Monthly Income</b> | Below Rp. 2.500.000             | 24                | 12,8           |
|                       | Rp. 2.500.000 – Rp. 5.000.000   | 44                | 23,5           |
|                       | Rp. 5.000.000 – Rp. 10.000.000  | 47                | 25,1           |
|                       | Rp. 10.000.000 – Rp. 15.000.000 | 29                | 15,5           |
|                       | Above Rp. 15.000.000            | 43                | 23,0           |
|                       | <b>Education Level</b>          | Elementary School | 29             |
|                       | Diploma                         | 21                | 11,2           |
|                       | Bachelor Degree                 | 87                | 46,5           |
|                       | Master Degree                   | 48                | 25,7           |
|                       | Doctoral Degree                 | 2                 | 1,1            |

### **Measurement Model Assessment (Outer Model)**

On this stage of analysis, the reliability and validity of the constructs would be evaluated. It was conducted by using the Partial Least Square (PLS) algorithm procedure with 300 iterations. The result revealed that the outer loading values for PerSev constructs ranged between 0.851– 0.892; PerVul construct ranged between 0.770 – 0.909; ResEff construct ranged between 0.707– 0.973; SelfEff construct ranged between 0.886– 0.923; and ProInt ranged between 0.825–0.873. All loading values met the cut-off values as specified by Hair et al. (2016), hence there are no items deleted during the assessment. Meanwhile, the reliability analysis showed that all constructs have met the cut-off values. Both Cronbach's Alpha (lower bound reliability) and composite reliability (upper bound reliability) values are above the cut-off values of 0.7 (Hair et al., 2016): PerSev ( $\alpha = 0.924$ , CR = 0.943); PerVul ( $\alpha = 0.908$ ; CR = 0.931); ResEff ( $\alpha = 0.859$ ; CR = 0.900); SelfEff ( $\alpha = 0.942$ ; CR = 0.956); and ProInt ( $\alpha = 0.904$ ; CR = 0.929).

Finally, the convergent validity is assessed by looking at the average variance extracted (AVE) value, which should be greater than 0.5 (Hair et al., 2016). The AVE value of greater than 0.5 indicates that a construct contains its own meaning. The AVE value of PerSev construct is 0.767; PerVul construct is 0.732; ResEff construct is 0.645; SelfEff construct is 0.812; and ProInt construct is 0.723. Based on this output, the AVE values for all constructs have met the cut-off value, and thus, possess the adequate level of convergent validity. Overall, the outer (factor) loading, Cronbach's Alpha, CR, and AVE values are within the acceptable cut-off values. Therefore, deletion of indicators is not necessary to be performed. Table 3. summarizes the measurement model evaluation for first-order model.

**Table 3. The measurement model evaluation for first-order model.**

| Constructs     | Items    | Loadings | Cronbach's Alpha | CR    | AVE   |
|----------------|----------|----------|------------------|-------|-------|
| <b>PerSev</b>  | PerSev1  | 0.866    | 0.924            | 0.943 | 0.767 |
|                | PerSev2  | 0.892    |                  |       |       |
|                | PerSev3  | 0.882    |                  |       |       |
|                | PerSev4  | 0.887    |                  |       |       |
|                | PerSev5  | 0.851    |                  |       |       |
| <b>PerVul</b>  | PerVul1  | 0.789    | 0.908            | 0.931 | 0.732 |
|                | PerVul2  | 0.770    |                  |       |       |
|                | PerVul3  | 0.900    |                  |       |       |
|                | PerVul4  | 0.898    |                  |       |       |
|                | PerVul5  | 0.909    |                  |       |       |
| <b>ResEff</b>  | ResEff1  | 0.846    | 0.859            | 0.900 | 0.645 |
|                | ResEff2  | 0.713    |                  |       |       |
|                | ResEff3  | 0.873    |                  |       |       |
|                | ResEff4  | 0.859    |                  |       |       |
|                | ResEff5  | 0.707    |                  |       |       |
| <b>SelfEff</b> | SelfEff1 | 0.886    | 0.942            | 0.956 | 0.812 |
|                | SelfEff2 | 0.923    |                  |       |       |
|                | SelfEff3 | 0.907    |                  |       |       |
|                | SelfEff4 | 0.902    |                  |       |       |
|                | SelfEff5 | 0.886    |                  |       |       |
| <b>ProInt</b>  | ProInt1  | 0.835    | 0.904            | 0.929 | 0.723 |
|                | ProInt2  | 0.825    |                  |       |       |
|                | ProInt3  | 0.873    |                  |       |       |
|                | ProInt4  | 0.872    |                  |       |       |
|                | ProInt5  | 0.845    |                  |       |       |

**Discriminant Validity**

The next analysis would be conducted to evaluate the discriminant validity for all constructs. Discriminant validity analysis is performed to assess whether each construct carry its own conceptual meaning and different from the other constructs (Hair et al., 2016). Failure to establish the discriminant validity would result to error on further analysis, as redundancy would occur. In this study, discriminant validity is performed through two analyses. First, the Fornell-Larcker criterion is conducted to assess the square root of AVE value on each construct. This analysis requires that all square root of AVE value on each construct that greater than its adjacent values. The Fornell-Larcker criterion analysis revealed that the requirement is met, and all square root of AVE values of each construct that greater than its adjacent values are indicated with bold fonts. Table 4 summarizes the result.

**Table 4. Discriminant Validity: Fornell-Larcker Criterion**

| Constructs     | PerSev       | PerVul       | ProInt       | ResEff       | SelfEff      |
|----------------|--------------|--------------|--------------|--------------|--------------|
| <b>PerSev</b>  | <b>0.876</b> |              |              |              |              |
| <b>PerVul</b>  | 0.576        | <b>0.856</b> |              |              |              |
| <b>ProInt</b>  | 0.636        | 0.702        | <b>0.850</b> |              |              |
| <b>ResEff</b>  | 0.583        | 0.783        | 0.767        | <b>0.803</b> |              |
| <b>SelfEff</b> | 0.532        | 0.709        | 0.707        | 0.729        | <b>0.901</b> |

Second, the discriminant validity is evaluated by using the Heterotrait – Monotrait (HTMT) Ratio (Henseler et al., 2015). HTMT computes the ratio between correlations of items measuring different constructs and correlations of items measuring the same constructs. In addition, HTMT requires that all correlations ratio for all constructs should be below the value of 0.90 (Henseler et al., 2015; Hair et al., 2016). The result of HTMT ratio evaluation revealed that all ratio correlation values are below 0.90, which indicated that discriminant validity for all constructs have met the required value. Table 5 summarizes the result.

**Table 5. Discriminant Validity: HTMT Ratio**

| Constructs     | PerSev | PerVul | ProInt | ResEff | SelfEff |
|----------------|--------|--------|--------|--------|---------|
| <b>PerSev</b>  |        |        |        |        |         |
| <b>PerVul</b>  | 0.633  |        |        |        |         |
| <b>ProInt</b>  | 0.692  | 0.759  |        |        |         |
| <b>ResEff</b>  | 0.664  | 0.886  | 0.868  |        |         |
| <b>SelfEff</b> | 0.566  | 0.755  | 0.764  | 0.812  |         |

Following the result of both Fornell - Larcker criterion and HTMT Ratio, discriminant validity has been established in this study. This indicates that all constructs carry its own meaning and different from each other.

Furthermore, there are no indicators necessary to be deleted during the analysis. Therefore, the PLS analysis would proceed to the next stage of analysis: the structural model or the inner model. Figure 1. depicts the measurement model performed by the PLS algorithm.

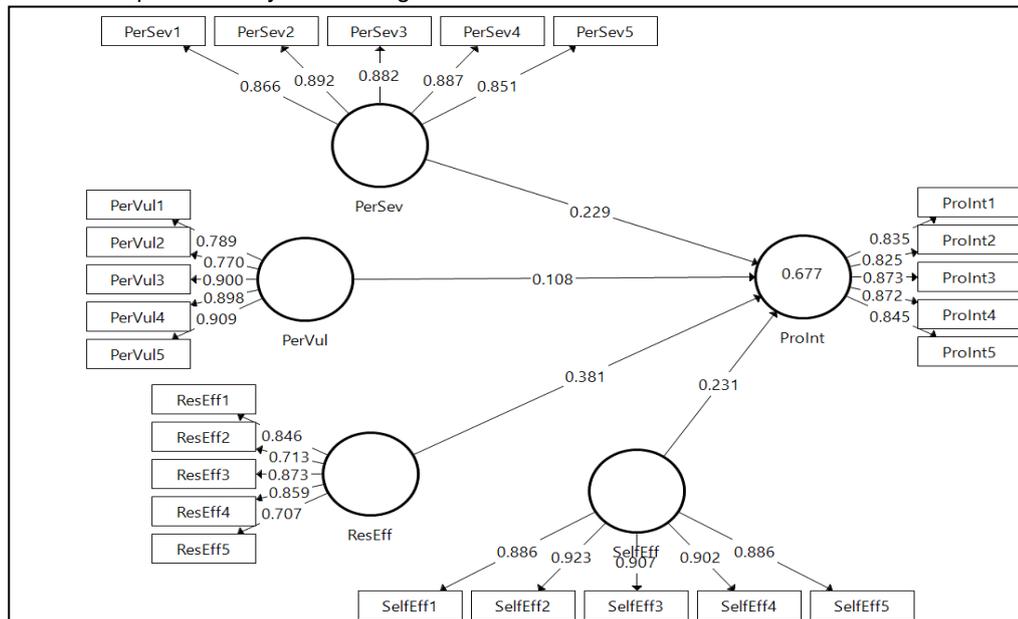


Figure 1. Measurement Model Output

### Collinearity assessment

Prior to perform the structural model analysis, the collinearity assessment should be conducted (Hair et al., 2016). Collinearity assessment is conducted to ensure to eliminate redundancy on the observed relationships. To this end, the value of variance inflated factors (VIF) on the observed relationships should be below 3.3. VIF analysis is conducted through the PLS algorithm, and showed that the inner VIF values on the observed relationships are below 3.3. Therefore, redundancy would not occur on the later stage of the analysis. Table 6 summarizes the result.

Table 6. Collinearity Assessment

| Relationships   | VIF   |
|-----------------|-------|
| PerSev->ProInt  | 1.631 |
| PerVul->ProInt  | 2.994 |
| ResEff->ProInt  | 3.189 |
| SelfEff->ProInt | 2.423 |

### Structural Model Assessment (Inner Model)

The structural model assessment would analyze the predictive accuracy of the model developed in this study. Specifically,  $R^2$ ,  $f^2$ , and  $Q^2$  would be evaluated as the parameters of the model predictive accuracy. In this regard, the structural model assessment is performed by using the bootstrapping procedure with 5000 iterations (Hair et al., 2016).

### Predictive model assessment

The predictive model assessment begins with assessing  $R^2$ , as it represents the overall variance that is caused by the independent variables toward the dependent variable. The values of  $R^2$  are within the range of 0.19, 0.33, and 0.67, which represent weak, moderate, and strong, respectively. In this study, the  $R^2$  is 0.677, which indicates that the coefficient of determination value is strong. In other words, the independent variables in this study are able to explain 67.7% of variance on the dependent variable. Meanwhile, effect size ( $f^2$ ) represents the effect value of a particular independent variable towards a dependent variable (Hair et al., 2016). The range of  $f^2$  values are 0.02, 0.15, and 0.35, which represent weak, medium, and strong effect, respectively.  $f^2$  values in this study

is found to be ranged between no effect to medium effects of the observed relationships. Specifically, PerSev->ProInt ( $f^2= 0.100$ ); PerVul->ProInt ( $f^2= 0.012$ ); ResEff->ProInt ( $f^2= 0.141$ ); and SelfEff->ProInt ( $f^2= 0.068$ ). Finally, the predictive model analysis would be analyzed through the value of  $Q^2$ . Predictive relevance is conducted to assess the predictive ability of the model with the omission of several data. The assessment is performed using the blindfolding procedure to determine the data omission. The blindfolding procedure in the SmartPLS provide the range of data omission (D), with the range between 5 – 12 (Hair et al., 2016). This study applied the omission value of 8 since the blindfolding procedure does not allow an integer from the dataset (N=210). The  $Q^2$  value should be greater than 0 in order the model to be classified to have an adequate predictive relevance. The result of the blindfolding procedure showed that the  $Q^2$  is greater than 0 ( $Q^2 = 0.484$ ). Thus, together with the value of  $R^2$ ,  $f^2$ , and  $Q^2$ , the model developed in this study has a sufficient level of predictive ability. Table 7 summarizes the result of the predictive model assessment.

**Table 7. Predictive model assessment**

| Relationships   | R-square | Q-square | f-square | Effect Size  |
|-----------------|----------|----------|----------|--------------|
| PerSev->ProInt  |          |          | 0.100    | Small        |
| PerVul->ProInt  | 0.677    | 0.484    | 0.012    | No effect    |
| ResEff->ProInt  |          |          | 0.141    | Medium       |
| SelfEff->ProInt |          |          | 0.068    | Small-Medium |

### Hypotheses testing

The hypotheses testing for direct relationships revealed that three hypotheses are supported: H1 (PerSev->ProInt;  $t = 2.860$ ,  $p=0.004$ ); H3 (ResEff->ProInt,  $t = 5.335$ ,  $p = 0.000$ ); and H4 (SelfEff->ProInt;  $t = 3.630$ ,  $p = 0.000$ ). Meanwhile, there is one hypothesis that is rejected: H2 (PerVul->ProInt,  $t = 1.327$ ,  $p = 0.185$ ). Table 8 summarizes the result of hypotheses testing.

**Table 8. Hypotheses for direct relationships**

| Hypotheses | Relationships     | Path Coefficient | Standard Deviation | T Statistics | P Values | Supported |
|------------|-------------------|------------------|--------------------|--------------|----------|-----------|
| H1         | PerSev -> ProInt  | 0.229            | 0.080              | 2.860        | 0.004    | Yes       |
| H2         | PerVul -> ProInt  | 0.108            | 0.081              | 1.327        | 0.185    | No        |
| H3         | ResEff -> ProInt  | 0.381            | 0.071              | 5.335        | 0.000    | Yes       |
| H4         | SelfEff -> ProInt | 0.231            | 0.064              | 3.630        | 0.000    | Yes       |

### CONCLUSION

In general, the Indonesian tourists realized the danger of the spread of Covid 19 virus that may endanger their health, and even their lives. The spread of the Covid 19 virus infected ten of thousand people in Indonesia which had weakened many industries, especially tourism. Consequently, the Indonesian government imposed the health and safety protocols on the national level as a precautionary measure to prevent the spread of the virus. Nevertheless, most of Indonesian tourists do not perceive that they are vulnerable to the virus.

It is plausible that the constant coverage of the Covid 19 virus and its precaution measures on various media have become their learning ground which allow them to adapt with severe situation. In this regard, although many have been infected with the virus, the Indonesian tourists tend to be capable and willing to protect themselves to be infected and to perform the health and safety protocols as imposed by the government.

Such tendency is apparent since the Indonesian tourists show high capability in terms of their response to prevent from the Covid 19 infection. For instance, they are willing to perform the health and safety protocols, reduce the time spent outdoors, reduce the use of public transport during their travel, and prepare personal health and safety equipment. Moreover, they also would seek the information related to hospitals and health services of the destination in advance. Further, they also show high level of efficacy to perform the above behaviors which lead to the confidence to protect themselves from the Covid 19 virus.

Following the discussion, the Indonesian tourists have high likelihood to perform the health and safety protocols, which become the prerequisite to conduct travel to various destinations. The Indonesian tourists do aware of the dangerous situation that they about to encounter, which drives them to educate and prepare themselves with health and safety protocols as a measure of protection from the spread of Covid 19 virus to travel during the post pandemic period.

Referring to the findings of this study, there are several suggestions for managerial implications. Firstly, the Indonesian domestic tourism industry should expect inbound tourists toward their destinations in the near future. In this case, the tourism operators should apply the health and safety protocols as imposed by the government. This would include the provision of hygiene equipment, reducing outdoor activities, constraining the use of public transport, vaccine requirement, and provide access to health centers or hospitals. Such safety measures are likely to increase the domestic tourists' visit during the post pandemic period. Additionally, the tourists have high confidence level to protect themselves from the Covid 19 virus infection. This indicates that the tourists are willing to perform their travel under the new regulation that require a stringent requirement related to health and safety precautions.

Secondly, the findings of this study showed that the tourists are more likely to perform their travel during the post pandemic period. In this regard, tourism operators should provide relevant information that may facilitate the tourists to protect themselves from the Covid 19 virus. For instance, the tourism operators could collaborate with local hospitals and health services related to their Covid 19 prevention protocols, and broadcast the information online through various social media. This may accelerate the dispersion of relevant information that ensures the tourists on the safety of a particular destination.

Thirdly, although the tourists seem to have high level of confidence to protect themselves from Covid 19, the tourism operators should not be negligent when responding to this situation. The Covid 19 still could infect the tourists during their stay, and might risk a destination's image. Consequently, the tourism operators should also consider a visitor management system to direct the tourists' movement in a destination. The main purpose of such visitor management system, especially during the post pandemic, is to maintain the social distancing regulation as part of the health and safety protocols.

Finally, the tourists' high level of confidence to protect themselves from Covid 19 virus reflect the behavior shift of traveling. The tourists tend to compensate their motivation to travel and to comply with the Covid 19-related regulations as imposed by the government. As a result, they are likely to seek a healthier and hygienic environment for their destination. They also seek for an exclusive treatment during their stay, which entails service customization to facilitate the tourists' needs. For this reason, the tourism operators should adjust their offerings during the post pandemic, i.e., by obtaining the CHSE (clean, health, safety, and environment) certification from the Indonesian Tourism Ministry. Although this study was able to fill the gap in the literature, several limitations remain apparent and thus, open up an area of research for future studies. Firstly, this study focuses on domestic destinations, where future studies may broaden the scope by involving international destinations. Secondly, study related to the international inbound tourists' perception to visit Indonesia could also be an interesting topic for research. Thirdly, the model in this study could be expanded by utilizing relevant theories, such as theory of planned behavior and health belief model, in order to strengthen the predictive accuracy in terms of tourists' protective behavior during the post pandemic. Finally, future studies are strongly recommended to assess the differences of tourists' protective behavior that may include demographic variables, such as age, gender, education level, or even religious affiliation. Such study would enrich the literature, particularly related to the application of protection motivation theory on tourism studies, and to further segment the tourists' profile that may have distinct perception that led to various responses toward the threat of Covid 19 virus.

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