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Investigating The Determinant of Indonesian Citizens' "Mudik" Intention Post Covid-19 Pandemic

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Abstrak

The pandemic outbreak of Covid-19 made individuals and society adjusted their social activities and behavior, following the social distancing regulations to slow the spread of the virus. Over 2 years, the regulation has been followed by vaccination programs that could help citizens build better immunity against the virus. In Indonesia, the social distancing regulations restricted several activities and customs by the citizens, one of which is the "Mudik" customs. Following the social distancing regulations that have been slowly adjusted by the improvement of the individual immune system toward the virus, some of the restrictions have been lifted by the Indonesian Government which includes the adjustment of the Mudik restrictions. This opens opportunities to identify the factors that could affect Indonesian Citizens' intention to return to their old Mudik customs post the Covid-19 Pandemic. The current research follows the suggestion that perceived knowledge could become an important construct in determining individual future behavior. To prove the suggestion, we adopt the Theory of Planned (TPB) model to examine the relationship of perceived knowledge toward individual future intention, in the case of Mudik behavior by the Indonesian Citizen post the Covid-19 pandemic. 238 Indonesian citizens participated in the current research as research respondents, and we used the Partial Least Square (PLS) analysis to examine the suitability of our proposed conceptual framework to explain the relationship between perceived Covid-19 knowledge toward the main construct of the TPB Model. The research findings showed that perceived Covid-19 knowledge is one of the factors that could determine Indonesian Citizens' Mudik behavior. A comprehensive discussion of current research results and their theoretical and practical implication are presented within the article.

Keywords: Perceived Covid-19 Knowledge, Theory of Planned Behavior, Indonesian Mudik Customs.

Introduction

The Coronavirus Disease (Covid-19) has become a serious pandemic for the past two years. The regulations to prevent the spread of the pandemic have affected individual or group behavior. The most significant change is shown in how people could interact in social activities, following the social distancing regulation. Schools, offices, and other non-essential activities were pushed to be conducted online to prevent the spread of the virus. In early 2022, most countries have already prepared and implemented the vaccination program for their citizen. The program is expected to strengthen the citizens' immune systems, so they could return to their daily normal behavior.

The post-pandemic behavior is a term that is used to define citizens' behavior after the event of a pandemic outbreak. Wu et al. (2009) suggested that after the SARS endemic back in 2004, there are still people who were afraid of the impact of the virus especially people who are directly or indirectly affected by the endemic. Poletti et al. (2011) also suggested that the fear of disease, not only could affect or change how people will change their behavior, but also could affect how they react and interact with each other. There has been a new term for social interaction during the Covid-19 pandemic that is called the "new normal", where citizens try to do their daily activities normally but still follow the social distancing regulation. This behavior includes: always wearing a health mask outside or during social interaction, and avoiding the crowd whenever possible.

In mid-2022, most of the citizens acquired the second dose of the Covid-19 vaccine. The debate is now open to if the citizens will return to pre-pandemic behavior as it is now safer to conduct normal activities without the fear of Covid-19. There are suggestions that some social activities might return to the pre-pandemic basis (i.e. group shopping, going on vacation, etc.), but some activities with improved efficiency (i.e. hybrid learning, work from home, etc.) could remain the same after the pandemic outbreak. Researchers use the opportunity to investigate the determinant that might affect the post-pandemic behavior of the citizens. Maryati, (2020) suggested that the determinant that might affect changes in citizens' behavior as a consumer is the perceived usefulness of the new normal activities. For example, during the pandemic access to shopping centers is limited to prevent the virus spread to the crowd. Following the limitation, consumers have to change their shopping behavior to mainly utilize online shopping. If consumers feel online shopping offers more benefits or improves the efficiency and effectiveness of their shopping activities, they are predicted not to return to their pre-pandemic shopping behavior.

In Indonesia, there is one custom among its citizens to return to their hometown during the celebration of Eid Mubarak. The custom is called "Mudik", which is the custom to return to hometown to celebrate Eid Mubarak with families and relatives Yulianto, (2012). After the pandemic status was announced in early 2020, the Indonesian government restricted the custom and made it impossible for Indonesian citizens to return to their hometowns. The restriction is made because the Mudik custom is considered could spread Covid-19 in regions with limited healthcare support. The activities conducted on the custom, such as gathering with families, group shopping, and traveling in a large group potentially threaten the spread of Covid-19.

The restriction on Mudik continued in 2021 when the Eid Mubarak celebration is also around the same time as the third wave impact of Covid-19. Following the restriction, Indonesian citizens utilize media social to interact with their families and friends to celebrate Eid Mubarak without having to return to their hometowns. Before the Eid Mubarak celebration, the Indonesian government has been working hard to make sure the citizens could acquire their second dose of the vaccine so the Mudik restriction could be lifted. Following the situation, the current research found opportunities to apply the Theory of Planned Behavior (TPB) to examine the determinant of Indonesian Mudik behavior post the pandemic outbreak.

TPB was developed to analyze human behavior by identifying how much effort a person as an individual is willing to spend to achieve or gain something (Ajzen, 1991). The original TPB model consisted of attitude, subjective norm, and perceived behavioral control. These three constructs are considered the key determinant of predicting a person's behavior to achieve or gain something. In recent years, the application of TPB could be found in consumer behavior research to predict consumer behavior toward a particular product or service. However, suggestions have been made to improve the explanatory power of TPB, there should be other essential constructs that could be added to the application of TPB. Ajzen & Schmidt (2020) acknowledged the suggestion and were supporting the idea of adding additional constructs to the TPB model to improve its explanatory power accordingly to the topic or areas of future research.

For the current research, we proposed the construct of perceived Covid-19 knowledge as a determinant of predicting the post-pandemic Mudik behavior by Indonesian citizens. Perceived knowledge is an individual self-assessment of their understanding of any particular topic or issue. (Han & Hyun, 2017) suggested that perceived knowledge could reduce risk and uncertainty, and thus could help their decision-making process. By adding the construct to the TPB model, the current research aimed to explain the relationship between the construct on building the post-pandemic Mudik Behavior by Indonesian citizens.

The current research proposed contributions to both academic and practical perspectives. First, the current research applied the suitability of the TPB model to predict the future behavior of Indonesian citizens on their Mudik custom, post the pandemic outbreak. To add novelty to the current research, we add the perceived Covid-19 knowledge as a determinant to extend the original TPB model. After the completion of the current research, we will identify suggestions for the stakeholders related to the Mudik custom in Indonesia (i.e. government, citizens, or corporations).

Literature Review and Hypotheses Development

Perceived Covid-19 Knowledge

Perceived knowledge is defined as a cognitive aspect that could help a person assess their understanding of any particular topic or issue. Chan et al., (2014) explained that perceived knowledge is a cognitive aspect that has a role in determining individual actions toward something. (Han & Hyun, 2017) suggested that individual perceived knowledge might help a person avoid risk or uncertainty, and help them to make a better decisions. If a person acknowledges the limitations of their resources or ability to perform or support any particular action, the person might avoid conducting the action as they are uncertain that the action could be done with the current resources or ability.

Following the definition of perceived knowledge, for this current research, we adopted the construct for the variable and adjusted it accordingly to the topic of the research which is Covid-19. Prior research suggested that the Covid-19 pandemic has been around since 2020 and awareness about the origins of the virus, how it spreads, and its damage to individual health should have become knowledge among the citizens (Guerin & Toland, 2020; Han et al., 2020; Pahrudin et al., 2021). First, we defined the definition of the perceived Covid-19 knowledge for this current research as the individual assessment of a person about their understanding of Covid-19 issues and how to prevent it. Next, we build measurement items to capture the information from the respondents of the current research. The measurement items are adopted from previous research (Han et al., 2020).

The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is a model to investigate or analyze individual behavior intention (Ajzen, 1991). The model is developed from the Theory of Reasoned Action (TRA) by Ajzen and Fishbein which was introduced back in 1980. The idea for the model modification is to improve its predictive power toward individual behavior intention by adding the perceived behavioral control construct to the new model. Perceived behavioral control could be defined as an individual assessment of their abilities to perform a given behavior. TPB model was well received and has been used to predict the behavior intention of individuals from various human domains, including campaigns, advertising, and healthcare (Dobbs et al., 2019; McConnon et al., 2012; Sweitzer et al., 2011).

In addition to perceived behavioral control, the TPB model consists of two other constructs: attitude and subjective norm. Attitude is defined as the overall assessment of an individual about the positive and negative outcomes that could affect them toward any particular behavior (Perugini & Bagozzi, 2001). If a person found that the outcomes of a particular behavior could have a positive impact on themselves, they will have a positive attitude toward the behavior and vice versa. Guggenheim et al., (2020) suggested that attitude is one of the volitional factors that could affect an individual behavioral intention. According to the definition and findings from previous research, we predict that the perceived Covid-19 knowledge could improve individual attitudes, thus our first hypothesis for the current research is as follow:

H1: Perceived Covid-19 knowledge has a significant effect on attitude toward Mudik.

A subjective norm is defined as an individual assessment of behavior, considering the positive or negative reception of their social environment according to the outcome of the behavior (Ajzen, 1991). According to the definition, a person might not want to proceed to do a particular behavior if they think there will be a negative reception in their social environment toward the outcome of the behavior they will make. The subjective norm is also considered a volitional factor that could predict individual behavior intention Guggenheim et al., (2020). Previous research supported the idea that perceived Covid-19 knowledge could be considered one of the determinants of subjective norms (Guerin & Toland, 2020; Han et al., 2020; Pahrudin et al., 2021). Following the definition and findings from previous research, the second hypothesis proposed for the current research is as follows:

H2: Perceived Covid-19 knowledge has a significant effect on subjective norm

As previously discussed, perceived behavioral control is the new construct added by Ajzen (1991) to the TPB model to improve the predictive power of the TRA model that has developed earlier by Fishbein and Ajzen (1980). The construct for perceived behavioral control was originally adopted from the concept of self-

efficacy introduced by Albert Bandura in his work on the Social Cognitive Theory. The perceived behavioral control is well received among the researchers as a key determinant in determining behavioral intention in various domains. Different from the two other constructs within the TPB model perceived behavioral control is a non-volitional construct (Perugini & Bagozzi, 2001). If a person considers they could not perform a given behavior, it is most likely that the person would not push themselves on performing the behavior. However, previous research has shown that individuals' assessment of their abilities to perform a given behavior could be improved by their previous experience or their knowledge of the behavior they need to perform (Han et al., 2020). For the current research, we suggested that perceived Covid-19 knowledge could be the determinant of a person's perceived behavioral control toward Covid-19 post-pandemic behavior. Thus, the third hypothesis proposed for the current research is as follows:

H3: Perceived Covid-19 knowledge has a significant effect on perceived behavioral control

Finally, the behavior that is observed in the current research is Mudik. Mudik is a cultural custom from Indonesia, in which a mass number of people return to their hometown for the celebration of Eid Mubarak (Yulianto, 2012). The custom has been restricted since the beginning of the Covid-19 pandemic, up until 2022. The citizens have adjusted this custom accordingly to the restriction. However, the vaccination program that has been conducted by the Indonesian Government opens opportunities for the citizens to return to their old Mudik behavior. Following this situation, we suggested that the attitude toward Mudik, subjective norm, and perceived behavioral control could determine the intention toward Mudik of the Indonesian Citizen. Thus, our final three hypotheses for the current study are as follow:

H4: Attitude toward Mudik has a significant effect on intention toward Mudik

H5: Subjective norm has a significant effect on intention toward Mudik

H6: Perceived Behavioral Control has a significant effect on intention toward Mudik.

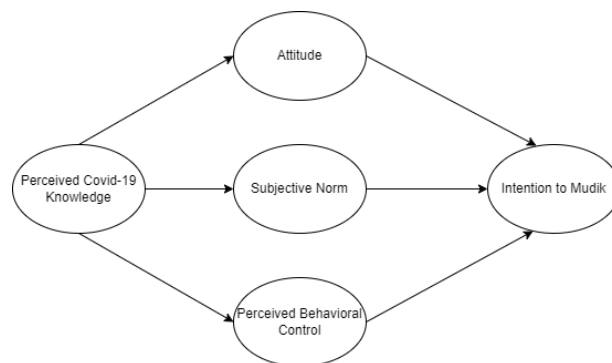


Figure 1. Proposed Conceptual Framework

Research Methodology

The current research is designed as explanatory research to achieve the research objective which is to check the suitability of the TPB model to predict the Indonesian citizens' Mudik intention post the pandemic of Covid-19. The Partial Least Square (PLS) analysis is used to assess the proposed conceptual framework for explaining the relationship between variables within it. Three steps analysis is implemented: the outer model analysis, the inner model analysis, and the hypotheses test. All of the analysis will be conducted with the help of the SmartPLS 3.2 statistical analysis software.

Data for the current research was collected from Indonesian citizens before the celebration of Eid Mubarak in Indonesia (April 2022). Because the number of total citizens that are eligible to Mudik for the 2022 Eid Mubarak is unknown, we use the non-probability sampling method to determine the number of samples used for the current research. Following the suggestion from Hair Jr et al., (2021) we aim for at least 200 data should be collected for the PLS analysis. The sampling technique that is used to select the sample from the population is purposive sampling, with two criteria. First, the sample should live outside of their hometown. Second, the sample should have not returned to their hometown during the Indonesian Government restriction on Mudik in 2020 and 2021.

Results and Discussion

A total of 250 self-administered questionnaires were sent to the potential respondent, with 238 of them returned with a complete set of data that could be used on our Partial Least Square (PLS) analysis. This yielded a 92.5% response rate for our research instruments for the data collection. In addition to data that is needed for the PLS analysis, we also collected demographic information from our respondents. The demographic information showed that the questionnaire is well distributed among both genders. But according to the age group of respondents, we could see that the sample for the current study is mostly from the young adult group of age. Table 1 showed the demographic distributions of the respondent for the current study.

Table 1. The Demographic Distributions of Respondent

Variables	Groups	Percentage (n=238)
Gender	Male	40.2%
	Female	59.8%
Age	18 to 27 years old	58.9%
	28 to 37 years old	33.5%
	38 to 47 years old	5.8%
	> 47 years old	1.8%
Education	High school	30.3%
	Diploma	8.4%
	Bachelor	47.0%
	Master	14.3%

Source: Authors, 2022

The first step in our PLS analysis is the outer model analysis. The analysis consists of three evaluations: the convergent validity evaluation, the discriminant validity evaluation, and the composite reliability evaluation. The convergent validity is evaluated from the outer loading score for all the measurement items within the proposed conceptual framework. The outer loading score should be more than 0.7 or could at least 0.5 given that the Average Variance Extract (AVE) score for each variable is more than 0.5 (Hair Jr et al., 2021). The AVE score is also could be used for the composite reliability evaluation where the expected score to meet the requirement is not below 0.6. Finally, the discriminant validity evaluation is conducted by doing cross-outer loading scores for measurement items for all of the variables within the conceptual framework. No measurement item should have more outer loading score on other variables that are not paired with them. The summary of the outer model evaluation for the current study is shown in Table 4.

Following the outer model evaluation results shown in Table 4, we could conclude that all of the measurement items and variables that are proposed for our conceptual framework passed all of the three evaluations from the outer model analysis. Each measurements items could describe its matched variable well, and no item could be used to measure variables other than the variable that the item was assigned to. The second evaluation is the inner model evaluation which will determine the predictive power of the proposed conceptual framework in explaining the relationship between each variable within it. First, we have to look at the coefficient determinant (R^2) for each dependent variable according to its Cronbach's alpha score. The Cronbach's alpha score would show the explanatory power of independent variables toward their dependent variable. Next, we will look at the predictive relevance (Q^2) score to address the effect size of the independent variables on its dependent variable. Both the coefficient determinant score and the predictive relevance score should be between zero (0) and one (1). The results of the current study's inner model evaluation are shown in Table 2.

Table 2. The Inner Model Evaluations Results

Variables	R ²	Q ²
Attitude toward Mudik	0.061	0.047
Subjective Norm	0.131	0.095
Perceived Behavioral Control	0.151	0.106
Intention to Mudik	0.635	0.431

Source: SmartPLS 3.2

According to the inner model evaluation results, the proposed conceptual model for the current study has a good fit to explain the relationship between the variables within it. The R² scores for attitude toward mudik, subjective norm, and perceived behavioral control are categorized as low, thus the results could be interpreted that the perceived Covid-19 knowledge only has a relatively low power to determine the main construct of the Theory of Planned Behavior (TPB) model. However, all of these three constructs of TPB could be considered to have a good determination score on the intention to mudik by the Indonesian citizens post the Covid-19 pandemic. The predictive relevance score for all of the dependent variables is more than 0, thus confirming that every independent variable could have predictive power toward their dependent variables (Hair Jr et al., 2021). Following the outer and inner model evaluations, we could continue to test the proposed hypotheses for the current study. The proposed hypotheses are accepted if they have a t-statistics score of more than 1.962 (confidence interval 0.5 on 251 respondents). The results of the hypotheses test for the current study are shown in Table 3.

Table 3. Hypotheses Test Results

Path	t-statistics	t-table	Decision
H1 PCK → ATM	3.337	1.962	Supported
H2 PCK → SN	5.754	1.962	Supported
H3 PCK → PBC	5.558	1.962	Supported
H4 ATM → INT	2.289	1.962	Supported
H5 SN → INT	3.103	1.962	Supported
H6 PBC → INT	5.368	1.962	Supported

Source: SmartPLS 3.2

Following the bootstrapping results on SmartPLS 3.9, all of the proposed hypotheses for the current study are accepted. The results suggested that perceived Covid-19 knowledge has an important role in determining the planned behavior of Indonesian Citizens to return to the Mudik custom post the Covid-19 pandemic outbreak. The finding supported previous research that suggested perceived knowledge could have an important effect on determining the individual intention of their future behavior (Adiba & Wulandari, 2018; Guerin & Toland, 2020; Han et al., 2020; Pahrudin et al., 2021). The current study finding strengthens the idea that individuals are more likely to act toward a behavior if they believe they have the abilities and resources to control the outcomes of the behavior. In addition, individuals are also considering their social environment opinions toward the outcomes of the individual future behavior.

There are also results for the current study that needs to be paid attention to, which is the coefficient determinant score of perceived Covid-19 knowledge toward the main constructs of the TPB model is relatively low. This suggested that for Indonesian citizens, their knowledge toward Covid-19 pandemic is not the major determinant of their Mudik intention post the Covid-19 pandemic outbreak. Thus, we suggest future research to look forward on this issue as this opens the opportunity for a study to identify other possible constructs that could have a higher determination score toward Indonesian citizens on their Mudik custom post-pandemic outbreak.

Conclusion

The pandemic outbreak of Covid-19 has pushed the government to issue social distancing regulations, due to the nature of the virus which could easily be transmitted in daily social activities. Due to the regulations, many social activities have to be adjusted to help slow the spread of the disease. Mudik is one of the Indonesian citizen customs that is restricted during the pandemic outbreak because of the risk the citizens' mobility to their

hometown could affect their families and friend in a location that have limited healthcare access. Now that the restriction has been lifted by the Indonesian Government, there is an opportunity to identify factors that might determine the Indonesian Citizens' intention to return to their Mudik customs post the pandemic outbreak.

The results of the current study supported the previous research that suggested the implementation of the Theory of Planned Behavior (TPB) model to analyze individual intention toward their future behavior. We develop a new conceptual framework by adding the construct of perceived Covid-19 knowledge to determine its effect on Indonesian Citizens' Mudik intention. Despite only having a low determination score toward the main construct of TPB, the hypotheses test results showed that perceived Covid-19 knowledge could have a significant effect on determining the Indonesian Citizens' attitude, subjective norm, and perceived behavioral control toward Mudik. Finally, all of the TPB constructs have a significant impact on determining the intention toward Mudik by the Indonesian Citizens.

In addition to theoretical implications, the current study findings should encourage the Indonesian Government to keep the socialization of Covid-19 issues on their citizens. We suggest this recommendation following the results of the current study which showed that perceived Covid-19 knowledge could improve citizens' attitudes, subjective norms, and perceived behavioral control toward future activities that have been adjusted during the social distancing regulations during the pandemic outbreak.

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