ABSTRACT  COVID-19 pandemic has triggered a fundamental challenge to tourism, that is mobility. While research on tourism intention have been growing since the beginning of the pandemic, there was a lack of attention on discussion about people who face less opportunity for tourism due to their vulnerable physical conditions or people at-risk to COVID-19. Therefore, this research purported to reveal the influence of tourism constraints on tourism intention of people categorized as physically vulnerable to COVID-19 in the new normal era. Data collection was conducted through an online survey to citizens of Jakarta belonging to middle age and elderly group from end of June to September 2021. Multiple regression analysis with SPSS is used to test the relationship between tourism constraints and tourism intention, and analyze data of 337 respondents. The study showed that tourism intention of people at-risk from COVID-19 can be classified as high with intrapersonal constraints being the only significant constraints. This implies that the significant effect of intrapersonal constraints is not powerful enough to reduce the tourism intention of people susceptible to COVID-19.

KEYWORDS  Tourism; Constraint; Intention; Risk; COVID-19

INTRODUCTION  Tourism is one of the ways to attain well-being, especially in the context of achieving a well-balanced life. Tourism which is a break from the ordinary allows people to make improvements or restoration in various areas of life needing it, whether it is social, educational and cultural, or psychological (Newmeyer, 2004). In addition to improving well-being, traveling has also been considered as a basic need and right as it is also acknowledged that everyone is entitled to the same rights of leisure, rest, and freedom, without distinction of any kind (United Nations, 1948).

Tourism and pandemics are closely related in the global era (Gossling et al, 2020). This is partly because the mobile population is growing rapidly and the development of transportation which is a potential means of disease transmission. With the prolonged pandemic, WHO warned the world that people have to learn to live with the virus (WHO, 2020). It means that after the pandemic, the possibility of being exposed to the virus when people travel still exist.

As of November 23, 2021, Indonesia recorded a death rate of 83.2% for the age group 46 years and above (KPCPEN, 2021). Thus, it can be said that the age group of 46 years and above is the age group susceptible to COVID–19. Epidemiologists state that at the age of 45 years and above, the immune system functioning as a body shield as well as the speed of cell regeneration and organ function in human body are not as good as when an individual was young, consequently...
Health crises due to pandemics have been triggers for crises in various sectors of life, as well as being a driving factor for changes in individual and organizational behavior since a long time ago (Mas’udi and Winata, 2020). Changes in behavior and normal tourism trends caused by disruption, uncertainty, and risk occur at the post-crisis stage where feelings of fear, uncertainty, and anxiety can affect the desire of tourists to travel or even refusal to travel (Senbeto and Hon, 2002). Taking the disruption, uncertainties, risks, and constraints caused by pandemic into account, this study view tourism constraints as the appropriate framework to apply for the research.

Most of the literature on participation in travel is discussed with reference to the constraint model, especially leisure constraints, where constraints are seen as factors that limit the formation of leisure preferences and hinder participation and enjoyment in leisure (Jackson, 2000; Shaw et al., 1991). Leisure can be seen from the sociological, psychological, as well as anthropological aspects. The sociological aspect of leisure is related to free time, the psychological aspect is related to the state of mind, and the anthropological aspect is leisure viewed as an activity, namely the time used by individuals to follow their own desires (Darajat & Kusworo, 2018).

Tourism is also an activity that is carried out voluntarily. Thus, tourism has something in common with leisure in terms of activities carried out to fill spare time based on their own wishes. Therefore, it can be said that tourism is part of leisure. The essence of tourism is getting out-of-the-ordinary, or the process of self-reconstruction resulting in the body is more susceptible to disease (CNN Indonesia Online, 2020)

The age group above 46 years is classified by WHO (Widiyastuti, 2017) and the Ministry of Health of the Republic of Indonesia (Ministry of Health, 2016) as the older people group. WHO divides the older people age into the following levels: middle age (45 to 59 years); elderly (60 to 74 years); old age (75 to 90 years); and very old age (above 90 years), while the Ministry of Health of R.I. broadly divides the category of older people as follows: middle age (45 to 59 years) and the elderly (60 years and over); Based on those references, and the age range on the national COVID-19 transmission rate report, the age group in this study will be divided into two: the middle-aged group, namely the age of 46 to 59 years; and the elderly group, namely those aged 60 years and over.

The ability and desire to travel, including travel, is the key to fully participate in the economic and sociocultural sectors of modern society (Shove in Siraut, 2009), but tourism has not been enjoyed by all members of society, especially with the presence of the COVID-19 pandemic. People aged 46 years and over had high potential for traveling in the pre-pandemic era, however, their physical condition tends to be vulnerable to COVID-19 and thus they have limited choices of safe spaces outside the home compared to other age groups. This may become an obstacle in traveling affecting the fulfillment of their needs in an effort to achieve well-being. The age group of 46 and over also has an important role in the tourism industry as they contribute the highest average length of stay and travel expenditure (Statistics Indonesia, 2019).
from movement related to a place, namely a
destination, which separates the individual
from his daily routine (Urry, 1990). Thus,
the journey or movement that reconstructs
oneself as well as elements of activities
carried out outside of one's habits and
routines are the differences between leisure
and tourism.

Leisure constraints emphasize three
hierarchical dimensions, namely intrapersonal
barriers, interpersonal barriers, and structural
barriers as obstacles that can occur in carrying out leisure activities as a whole, while tourism constraints are seen as obstacles that hinder individuals from carrying out tourism activities (Darajat & Kusworo, 2018). Referring to leisure constraints, tourism constraints have three dimensions, namely intrapersonal, interpersonal, and structural (Crawford et al. in Park, 2017). First, intrapersonal constraints reflect the individual's physical, psychological, and cognitive conditions, such as physical illness, stress, anxiety, depression, beliefs, and subjective evaluation (Kono et al., 2020; Gassiot et al., 2018; Priporas et al., 2014). Ozdemir and Yildiz (2020) also found that the COVID-19 pandemic had an effect on changing tourists' travel perspectives negatively due to the psychological condition of tourists. Second, interpersonal barriers are related to interactions and relationships between humans (Darajat & Kusworo, 2018; Gao & Kerstetter, 2016). In tourism studies, an indicator that often appears as a reflection of interpersonal barriers is travel companions (Kono et al., 2020; Tan, 2020; Darajat & Kusworo, 2018; Gassiot et al., 2018; Park et al., 2017; Kazeminia et al., 2013; Lee et al., 2012). Now, the COVID-19 pandemic can actually add new type of interpersonal constraints in the form of fear of interacting with fellow tourists, as well as fear of hurting people who are considered important if they are infected by the virus caught from the journey. Structural constraints are defined as external factors that can affect one's tourism activities (Tan, 2020; Darajat & Kusworo, 2018; Gassiot et al., 2018). These barriers can be manifested in the form of time, economic conditions, access, natural conditions, or the environment (Park et al., 2017). According to Crawford and Godbey (1991), intrapersonal barriers are the strongest barriers, while structural barriers are the weakest barriers.

A study by Hung and Petrick (2012) shows that travel constraints have negatively influenced tourists’ travel intention. Khan et al (2019) also did a study about intention to study abroad and found that interpersonal and intrapersonal constraints have influenced intention negatively and significantly. Studies on tourism intention during the COVID-19 pandemic have been growing. Although older people and people with comorbidity were announced as those who experience barriers in doing their activities outside of home, studies on their tourism behavior is a bit overlooked. Andreani and Njo (2021) studied the effect of travel constraints towards travel intention and found that intrapersonal as well as structural constraints have significant influence towards travel intention, however, their study did not group respondents nor address pandemic issue specifically.

Based on the previous findings, the hypotheses proposed in this study are:
• **Hypothesis 1**: Intrapersonal constraints significantly influence travel intention;

• **Hypothesis 2**: Interpersonal constraints significantly influence travel intention; and

• **Hypothesis 3**: Structural constraints significantly influence travel intention on the national COVID-19 transmission rate report, as Jakarta also has many entry gates (Kompas TV Online, 2020), where mobile people meet to do their activities. Last, Jakarta is also an area that experienced relatively frequent high mobility restrictions as a result of high transmission rates; thus, people often experience anxiety and fear perceiving that the area they live in is not safe.

The sample size in this study was taken based on the following guidelines. First the appropriate sample size for research in general is 30 to 500 samples; a minimum size of 30 for each category (if divided into subsamples) (Roscoe in Sekaran and Bougie, 2016). Next, Tabachnik and Fidell (in Kyriazos, 2018) recommend minimum sample of 300 for statistical data analysis. Thus, the researchers set the sample to be a minimum of 300 respondents.

Data was collected using a survey method with online questionnaires (Google Form) distributed via WhatsApp messages. During the COVID-19 pandemic, online questionnaires are an effective data collection tool because they can still support physical distancing so that they will not endanger respondents who have vulnerable physical conditions. The online questionnaire also makes it possible to collect a lot of data in a short time and can be filled in according to the respondent’s free time (Wachyuni and Kusumaningrum, 2020)

The instrument in this study was a questionnaire with three tourism constraints constructs and one tourism intention construct, namely: intrapersonal constraints, interpersonal constraints, structural constraints, and travel intention.
The questionnaire was designed to collect information about internal barriers of individuals who were susceptible to COVID-19 towards tourism activities during the new normal (intrapersonal constraints), relational factors that may inhibit in deciding to travel during the new normal (interpersonal constraints), external barriers such as resources and opportunities faced by individuals (structural constraints), as well as tourism plans during the new normal (tourism intention).

The questionnaire consisted of two parts. The first part was the respondent’s profile. The second part contained multiple choice questions regarding the tourism constraints and tourism intention construct. A pilot study filled by 30 respondents was undertaken in mid-June 2021, and all indicators were verified to be valid and reliable to be used in the study.

a. Part I
The first part of the questionnaire contained questions regarding the respondents’ profile, such as: age, gender, education, occupation, and perceptions of comorbidities.

b. Part II: Tourism Constraints
Tourism constraints constructs were measured using a four-point Likert scale (strongly disagree = 1, disagree = 2, agree = 3, strongly agree = 4). Research in Indonesia is recommended to use an even Likert scale because Indonesian tend to take the neutral side (Pujihastuti, 2013).

1) Intrapersonal constraints
Intrapersonal constraints are internal barriers of individuals who are physically susceptible to COVID-19 towards tourism activities during the new normal, for example: I am worried that I may get infected by COVID-19 while traveling during the new normal.

2) Interpersonal constraints
Interpersonal constraints are social or relational constraints in planning to travel during the new normal, for example: I am afraid that I may transmit COVID-19 to my family if I travel during the new normal.

3) Structural Constraints
Structural constraints are the external barriers felt by individuals who are vulnerable to COVID-19 to travel during the new normal, for example: I am not sure about the feasibility of public facilities in tourist destinations in supporting tourism activities during the new normal.

4) Tourism Intention
Intention for tourism during the new normal period is an indication of how hard individuals who are physically vulnerable to COVID-19 are willing to try, and how much effort they plan to put forth, in order to travel during the new normal period, for example: I feel excited to travel during the new normal.

Multiple regression analysis is used to test hypotheses, while to see the intensity of each variable, the study calculated level of respondent achievement (LRA) with the score interpretation criteria in table 1.

\[
LRA = \frac{\text{Score per item}}{\text{Ideal score per item}} \times 100\%
\]
Score per item was counted by adding the multiplication results of the sum of respondents choosing each option and its scale value. Hence, as the study applied four-point Likert scale, score per item was attained by calculating: (frequency of respondents choosing option 1 X 1) + (frequency of respondents choosing option 2 X 2) + (frequency of respondents choosing option 3 X 3) + (frequency of respondents choosing option 4 X 4). Ideal score per item was the number of respondents choosing option 1,2,3,4 in an item multiplied by the highest point, which in this case is 4.

Table 1 Score interpretation criteria

<table>
<thead>
<tr>
<th>Average Score</th>
<th>Scale Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 20.99%</td>
<td>Very Low</td>
</tr>
<tr>
<td>21% - 40.99%</td>
<td>Low</td>
</tr>
<tr>
<td>41% - 60.99%</td>
<td>Moderate</td>
</tr>
<tr>
<td>61% - 80.99%</td>
<td>High</td>
</tr>
<tr>
<td>81% - 100%</td>
<td>Very High</td>
</tr>
</tbody>
</table>

Source: Sugiyono (2017)

DISCUSSION

The questionnaire resulted in 337 responses, which is more than the minimum sample adopted. Despite the persistent effort to collect the data, there were some obstacles in the data collecting period. First, due to the data collection mechanism, the issue of digital divide and device incompatibility arose, mainly for elderly respondents. Second, due to the pandemic, offline visit to respondents was strongly discouraged. Thus, the data collection and communication extremely relied on the online mechanism. Furthermore, the questionnaire was distributed starting from the end of June up to September 2021, which coincided with the coming of COVID-19’s second wave in Indonesia. A lot of potential respondents and their relative got infected or in mourning because of the outbreak, with relatively various duration of recovery, so asking for their support for the study was rather challenging.

People from the middle-aged category is extremely the larger number of the respondents in this study. There are also imbalance portion between male and female respondents, as female persons make the most of the respondent. A large number of the respondents of this study are university alumni; and more than 80% of the respondents still work.

The validity test was completed by using bivariate correlation showing that all indicators’ Pearson correlation values were above .005, validating them to be used in the study. Furthermore, the reliability test also disclosed that the Cronbach’s Alpha for all variables was above 0.6, proving them reliable to be used in the research.

Next, the classical assumption test included the multicollinearity, heteroskedasticity, and normality studies were done. The multicollinearity test was done by identifying the collinearity statistics i.e., tolerance and VIF, which fulfilled the requirement. The heteroskedasticity test by using Gleijser test revealed that the significance value of each variable was higher than .05, thus it does not have any heteroskedastic issue. The last was normality study done through Smirnov-Kolmogorov method, resulting on the Monte Carlo significance value which was higher than .05, therefore, it can be concluded that the variables were normally distributed.
Table 3 shows that in general respondents’ perception towards the construct of tourism constraints and tourism intention used in this study is high, which is interesting as constraints usually deters an activity. In terms of intrapersonal constraints, respondents’ answers reflect their psychological barriers, deriving from their personality trait and physical conditions. For interpersonal constraints variable, the table shows that X2.3 has the highest LRA score of all indicators in the model. This shows that meeting new people is the biggest constraints from them to travel in the new normal. Next, LRA on structural constraints mainly demonstrate that people at-risk has doubts about the implementation of health protocols by tourism industry as well as local host.

**Middle-aged People**

Further for a deeper understanding on the effect of vulnerability towards travel intention, a crosstabulation was done between the variables of middle-aged respondents, health condition, and the TPB constructs. The result is shown in table 4. The crosstabulation between middle age without comorbidity and travel intention shows an unvarying result, that middle-aged without comorbidity have a high level of LRA. Middle age group with comorbidity also yield a high LRA for tourism intention. Despite the similar range of LRA found in most variables, interpersonal constraints show an LRA of ‘very high’ range.

**Elderly People**

Table 5 shows the LRA between the variables of elderly respondents and health condition. In general, elderly without comorbidity shows a high level of LRA. Despite the fact that elderly with comorbidity have higher risk to COVID-19, this demographic group was found to have high level of tourism intention, but also very high interpersonal as well interpersonal constraints.

### Table 2 Respondents’ perception towards tourism constraints constructs

<table>
<thead>
<tr>
<th>Variables &amp; Indicators</th>
<th>Average Score</th>
<th>LRA (%)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1  Intrapersonal Constraints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1.1: I am worried that I may get infected by COVID-19 while traveling during the new normal.</td>
<td>3,10</td>
<td>77,60</td>
<td>High</td>
</tr>
<tr>
<td>X1.2: I am not a risk-taking person.</td>
<td>3,05</td>
<td>76,26</td>
<td>High</td>
</tr>
<tr>
<td>X1.3: At my age, I do not feel safe traveling during the new normal.</td>
<td>2,99</td>
<td>74,02</td>
<td>High</td>
</tr>
<tr>
<td>X1.4: I am worried that I will experience physical exhaustion after traveling during the new normal, which could lower my body’s immunity.</td>
<td>2,89</td>
<td>72,26</td>
<td>High</td>
</tr>
<tr>
<td>X1.5: In the new normal, I feel worried to go outside the area where I live.</td>
<td>2,95</td>
<td>73,66</td>
<td>High</td>
</tr>
</tbody>
</table>
### Table 4 Middle-aged group’s LRA towards tourism constraints constructs

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Intra (%)</th>
<th>Inter (%)</th>
<th>STR (%)</th>
<th>TI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without comorbidity N = 210</td>
<td>72.14 (high)</td>
<td>77.82 (high)</td>
<td>72.26 (high)</td>
<td>69.44 (high)</td>
</tr>
<tr>
<td>With comorbidity N = 59</td>
<td>77.88 (high)</td>
<td>82.20 (very high)</td>
<td>75.71 (high)</td>
<td>65.96 (high)</td>
</tr>
</tbody>
</table>

Source: Primary data analysis (2021)

### Table 5 Elderly group’s LRA towards theory of planned behavior constructs

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Intra (%)</th>
<th>Inter (%)</th>
<th>STR (%)</th>
<th>TI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without comorbidity N = 30</td>
<td>73.40 (high)</td>
<td>77.50 (high)</td>
<td>75.00 (high)</td>
<td>67.22 (high)</td>
</tr>
<tr>
<td>With comorbidity N = 38</td>
<td>82.89 (very high)</td>
<td>81.80 (very high)</td>
<td>77.85 (high)</td>
<td>61.40 (high)</td>
</tr>
</tbody>
</table>

Source: Primary data analysis (2021)
Multiple Linear Regression

A multiple linear regression was used to analyze the relationship between the three independent variables, namely intrapersonal constraints, interpersonal constraints, and structural constraints with travel intention. Tabel 6, 7, and 8 show the results of the regression.

The $f$ value, shown in table 6, which is less than .05 exhibits that this model is a feasible model to be applied in this study. Therefore, the model can be used to explain the influence of intrapersonal constraints on people at high risk from COVID-19 towards their travel intention during the new normal.

Apart from the high LRAs, the $t$ value in table 7 actually shows that intrapersonal constraint is the only significant determinants in predicting travel intention of people at high risk from COVID-19 during the new normal. The minus sign of the coefficient correlation show that the constraints exert negative influence towards tourism intention. This implies that the higher the internal barriers, the lower the influence on their intention. This finding supports he study by Senbeto and Hon (2020).

Table 6 The $f$ value

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3</td>
<td>111.173</td>
<td>27.669</td>
<td>.000b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>333</td>
<td>4.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1671.513</td>
<td>336</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data analysis (2021) with SPSS

Table 7 The $t$ value

<table>
<thead>
<tr>
<th>Model B</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>11.654</td>
<td>.560</td>
<td>20.808</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>-.296</td>
<td>.041</td>
<td>-.501</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.137</td>
<td>.089</td>
<td>.120</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>-.045</td>
<td>.072</td>
<td>-.042</td>
</tr>
</tbody>
</table>

Source: Primary data analysis (2021) with SPSS
Table 8 The determination coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.447</td>
<td>.200</td>
<td>.192</td>
<td>2.004</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X1, X2, X3

Source: Primary data analysis (2021) with SPSS

This finding is in line with the study done by Andreani and Njo (2021), Aziz et al (2021), Nguyen et al (2021), as well as Wong and Kuo (2021). In addition, in line with previous studies (Crawford and Godbey, 1991). The finding in this study also found that intrapersonal constraint is the most powerful constraints among the three constraints. However, in this study it is found that the constraint does not considerably lead to low tourism intention. Next, findings that interpersonal constraints were not significant is also in line with previous research (Andreani and Njo, 2021). Thus it can be concluded that interpersonal constraint is not a dominant constraint during the health crisis. However, bearing in mind that COVID-19 pandemic is much related to interaction restriction, as well as the high scores for interpersonal constraints’ LRA, the study of interpersonal constraints’ effect in the pandemic time may still need to be explored. Finally, the study also did not find significant effect of structural constraints towards tourism intention. This is supported by the research done by Aziz et al (2021), but in contrast with the research by Andreani and Njo (2021) which found structural constraints as the biggest constraints. The study supported the research done by Aziz et al (2021) may be caused by the large number of the respondents, similar to the ones got by them, still earn their living. On the other side, the result of the study differs from the one done by Andreani and Njo, which may be caused by the different respondent group and research context done by them. In addition, that intrapersonal constraints and structural constraints did not affect tourism may be caused by the fact that a large number of the respondents were middle-aged, still earn a living, and university alumni. Then, it can be assumed that they are independent people. Therefore, it seems that issues such as lack of companion does not much affect their decision to travel. In addition, they also seem to have a high confidence in their capacity to do safe travel despite challenges such as virus transmission and bad public facilities. Aside from that, considering that intrapersonal constraint is the most powerful constraint as it determines the motivation for participation (Cai, 2019), and becomes the most effective constraint in precontemplation stage (Nazir et al, 2021), it is also possible that the strengths of interpersonal and structural constraints are veiled by the intrapersonal constraints.

In table 8, the coefficient determination score of .200 shows that the three constraints affect as much as 20% in influencing travel intention is. It means that other factors excluded in this study have a share of 80%
influence towards travel intention. This result is almost similar to the result of the study done by Andreani and Njo (2021).

CONCLUSION

Despite the high level of tourism constraints, the tourism intention of people at high risk from COVID-19 was also found to be high. Next, with intrapersonal constraints as the only significant predictors in the model, this study also empirically proved that intrapersonal constraint is the most powerful constraints among the three tourism constraints. The high travel intention despite the high constraints may also show that in general, respondents view tourism as an important activity to fulfill their needs and improve their quality of life. The high tourism intention of people with physical conditions vulnerable to COVID-19 should go hand in hand with the safety enhancement in travel services, in order to create a safe travel experience. For this reason, the Government needs to encourage consistency in the implementation of Cleanliness, Health, Safety, and Environmental Sustainability (CHSE) program as well as responsible tourism behavior from the tourism industry and also tourists. Finally, considering the determination coefficient value, it seems opportunities to explore other factors influencing tourism intention is still widely open.

BIBLIOGRAPHY


Gassiot Melian, A., Prats Planagumà, L., & Coromina Soler, L. (2018). Tourism con-


Travel & Tourism Marketing, 34(1), 113-131.


