Perceptions of Risks amidst COVID-19 on the Youth's Domestic Travel Intentions in Ghana

Clare Teroviel Tergu¹, Jinkai Li¹, Hind Azougagh¹, Anthony Webster Tenya², Reginald Jeff Maddy³, Reinhard Acquah-Sampson⁴, Jin Zhang⁵*

¹Department of Tourism Management, Zhengzhou University, Zhengzhou, China
²Department of Developmental Psychology and Counselling, Ternopil National Pedagogical University, Ternopil, Ukraine
³Department of Surgery, Cape Coast Teaching Hospital, Cape Coast, Ghana
⁴Faculty of Applied Information Technologies and Electrical Engineering, Ternopil National Technical University, Ternopil, Ukraine
⁵Centre of Energy, Environmental and Economy Research, Zhengzhou University, Zhengzhou, China

Email: *echozhang0817@foxmail.com

Abstract
Domestic tourism serves as a “mainstay” of the tourism sectors in many parts of the world, particularly in developed countries, such as China and India. With an increase in the growth of the youth globally, young travelers have unique travel intentions other than the general population. There is the need to probe on young travelers since recent findings reveal that the youth has not been affected by the crises. The aim is to examine the risks perceptions of the youth regarding domestic travel amidst the pandemic and tourist characteristics were also explored. The study integrates Roger’s protection motivation theory to address the aim of the study. Based on stratified sampling, 300 completed questionnaires were used for analyses. Findings revealed that sources of information and number of past travel experiences influence perceptions of risks amidst the COVID-19 crises. The results of this study show that physical risk does affect participants travel intentions during the pandemic. Results of this research may aid in developing interventions for promoting domestic tourism and modelling domestic travel demands; add up to the status quo of domestic travel research on COVID-19 pandemic in Ghana and for future marketing campaigns.

Keywords
Perceptions of Risk, Domestic Travel, Youth, COVID-19, Ghana

1. Introduction
Since the existence of humanity, the major reasons underlying decisions to travel
are curiosity, survival and socio-economic. The difference from era to era has been modifications in these same underlying reasons. Tourism has therefore been known to be the major survival factor for economies of some countries with domestic travel being the major factor amidst pandemics (Morrison, 2013).

The losses from COVID-19 on industries continue to be difficult to curb as of today (OECD, 2020). There have been serious effects on economic and social issues globally (Bapuji et al., 2020). The tourism industry has been affected due to its vulnerability to health and safety problems, political instability, economic crises, natural disasters (Cakar, 2020) and epidemics (Chuo, 2014).

Previous research has affirmed that domestic tourism is a new concept for most African developing countries with the exception of South Africa (Morrison, 2013). An explanation to this is probably because the motivation for domestic travel is blinded largely to the fact that most people travel for purposes other than leisure (Boakye & Mintah, 2008).

In 2020, the Ministry of Tourism, Ghana revealed that Ghana, in many years successfully initiated an international tourism initiative (i.e., the Year of Return-2019 initiative), which serves as the doorway to revitalizing its tourism industry. Based on statistics provided by the Ministry of Finance in Ghana, the initiative recorded the highest number of tourist arrivals of 1 million tourists and USD 1.9 billion tourism receipts of revenue (CEIC, World Bank). The expectations to promote the initiative in 2020 were high; however, expectations were not met due to COVID-19 pandemic, which cost the nation 2.5% loss on its Gross Domestic Product (Ministry of Finance Ghana, 2020).

Data from Ghana Health Service (2022) records that 160,925 people, have been infected by COVID-19 with 159,409 recoveries and recording 1445 deaths since the emergence of the public health crises in March 2020 in the country. A lot of industries such as trade, retail, service etc. have been greatly affected and presently, hoping to bounce back (Ministry of Finance Ghana, 2020).

Tourism in Ghana is mostly survived by inbound tourism and due to lock-downs and travel bans; there has been a major struggle in sustaining the tourism industry. However, for the United Nations World Tourism Organization (UNWTO, 2020) by assessing the impact of COVID-19 on international tourism, it was revealed that Africa’s domestic demand is expected to grow. This is because domestic tourism is known to create demands for destinations amidst shocks from disasters (Hamilton & Tol, 2007; Bigano et al., 2006). Amidst the pandemic, there have numerous researches on international travel (Falahuddin et al., 2020; Cahyanto et al., 2016; Lee et al., 2012). However, there have been little studies on domestic travel amidst the crises, how the crises affect young travelers’ risk perceptions to travel. Meanwhile, literature has proven that domestic tourism will revamp the tourism industry amidst the crises (UNWTO, 2020) and domestic tourism is predicted to grow in the future (Song, 2010).

Research has affirmed that the youth are not greatly affected by crises (WYSE Travel Confederation, 2010). The youth in Ghana are classified between the ages
of 15 and 35 years (National Youth Policy of Ghana, 2010). With a shoot up in numbers of young people and the expanding availability of travel experiences, there will be growth in the youth travel market (Carr, 2003). This is supported by a report released by the Ghana Statistical Service (2021), whereby Ghana’s youthful population keeps growing. The intent to ravel by the youth is known to be different from the general people. The youth have higher incomes and more education than the general population. On a sociocultural perspective, young people are a creative force, and their choices can develop new attitudes and approaches to the general public towards tourism as well (Cavagnaro et al., 2018; Leask et al., 2013; Fermani et al., 2011). Young people have the tendency to save on costs of travel and accommodation, and rather spend on attractions. They have the tendency to develop a harmonious relationship with host community, prioritize cheaper accommodation, which make them to prolong their stay and have a lot more of social opportunities (Widjojo & Yudianto, 2015). This purchasing power of the youth extensively creates economic opportunities for destinations of their choice (Barton et al., 2013). It is therefore important to note that the importance of youth travel as a niche is not only related to its number but rather, its market in the future (Vukic et al., 2015). To address this gap, this study targeted the Ghanaian youth, and explored their risk perceptions (health or safety, physical, financial, psychological, and performance risks) on domestic travel amidst the pandemic. This is because whether real or imagined, it is necessary to comprehend travelers feeling on risk, because it influences their travel decision-making (Qi et al., 2009).

2. Theories and Hypothesis Testing

**Roger’s Protection Motivation Theory**

Travel intentions can be affected significantly by individual’s perceptions of risk. An expectancy-value theories highlighted on risk perceptions, change in intention or attitude (Qi et al., 2009). These theories proposed factors such as magnitude of the danger of the environment, the chances of the happenings of the event and the potency of a protective response (Rogers, 1975). Rogers (1975) further adds up that the protection motivation theory is created from three substituents of fear appeal. The substituents of fear initiate associating “cognitive appraisal processes”, which influence the change in attitude. The severity and likelihood of the environment is then comprehensively evaluated by the individuals and how they can manage it. At this moment, the protection motivation will be triggered, and one’s behavioral intents and attitudes will be changed. Hashim et al. (2018) reveal that in the tourism context, perceived risk is often studied to understand the processes of how potential tourists decide or select a tourism product or service to utilize. He also added that risk influences the behavior of tourists and due to the intangibility of tourism products, which possibly leads to traveler’s exposition to threats and risks. Therefore, a slight threaten event can trigger one’s perceived risk related to a destination, which minimizes the
number of tourists’ arrival (Khan et al., 2019; Chew & Jahari, 2014). Several studies affirm that in making travel decisions, perceptions of risks are important because tourists can delay the decision to buy or completely desert them (Wulandari et al., 2018; Yazid et al., 2018; Artuğer, 2015).

**Relationship between perception of risks and traveler’s intentions to travel.**

In tourism, there have been several studies on risk perceptions (Matiza, 2020) especially in the 1990’s, risk perceptions were extensively studied (Yang & Nair, 2014). In this paper, these perceived risk dimensions will be investigated such as physical risk perception, which mean that an individual might be physically hurt during a trip (Cho et al., 2018). Pertaining to travel, there have been several discussions on physical risk by scholars in the context of terrorism and natural disasters (Artuğer, 2015) but in terms of diseases such as COVID-19, Ebola and SARS, there have been little studies as to how physical risk affects travel intentions (Falahuddin et al., 2020; Wen et al., 2020). Psychological risk perception is the possibility that an individual’s peace of mind could be distorted due to the utilization of a product or service (Lenggogeni, 2015). Qi et al. (2009) studied socio-psychological risk on intentions to travel, which is the combination of social and psychological risks. However, there have been studies on psychological risk on its relationship to travel by researchers (such as Hasan et al., 2017). Performance risk perception is the possibility that an individual may not be satisfied with the use of a service or product purchased. This can be evaluated in a comprehensive way, such as travel value, environment, landscape, attraction, entertainment, infrastructure, accessibility, and relaxation (Cho et al., 2018). Destination Marketing Organizations (DMOs) might need to revamp the situation and rebuild the destinations such as better road constructions, easy access to internet and electricity, construction of accommodation facilities etc. (Falahuddin et al., 2020). In the travel and tourism context, financial risk perceptions involve the fear of not having the value of money spent on a tourism product or service (Cho et al., 2018). Many scholars (such as Khan et al., 2019; Wulandari et al., 2018) have affirmed the effects of financial risk perceptions on travel intentions. Health/safety risk perception is the possibility that a traveler may be infected by a disease during a trip and, since the outbreak of COVID-19, the idea is clear that the potential tourists would fear to contract the disease while traveling (Falahuddin et al., 2020). Therefore, we propose these hypotheses:

**H1.** Physical risk perceptions affect travel intentions of Ghanaian youth amidst the pandemic.

**H2.** Psychological risk perceptions affect travel intentions of Ghanaian youth amidst the pandemic.

**H3.** Performance risk perceptions affect travel intentions of Ghanaian youth amidst the pandemic.

**H4.** Financial risk perceptions affect travel intentions of Ghanaian youth amidst the pandemic.
H5. Safety/health risk perceptions affect travel intentions of Ghanaian youth amidst the pandemic.

**Relationship between perceptions of risk and tourist characteristics.**

Perceptions of risk is formed by traveler’s past experiences, demographics, psychographics and knowledge gained, which influences travel intentions (Pennington-Gray et al., 2011). Previous studies add up that traveler’s trip characteristics also influence the variation in risk perceptions and there is the need to understand these variations in perceptions of risk, which can help in specifically communicating to bridge these risks perceived (Deng & Ritchie, 2018). The standardized influence to the variations in risk perceptions is based on one’s stage in life, class in the society, and level of education on the decisions to visit (Lepp & Gibson, 2003). Age, occupation, income and education are socio-demographics, which have been found to be associated with domestic travel. Risk perceptions can change travel demand patterns, and significantly affect the decision-making process and future travel behavior (Coshall, 2003).

H6. Tourist characteristics (such as age, education, income, gender and past experiences) and sources of information influence perceptions of risks (Figure 1).

### 3. Methods and Materials

**Construct measures**

The research employed a quantitative research approach to empirically test the hypothesized model. It adopted the cross-sectional research design and then, samples were stratified based on the controlled variables of the study (socio-demographics). The questionnaire used was a modified questionnaire from Qi et al. (2009). The questionnaire undergoes a reliability test with a Cronbach alpha of 0.87. This means that the items used for the study is accepted.

![Figure 1. Hypotheses for the research model.](image-url)
**Data collection**

Respondents were reached through a formal electronic invitation requesting them to participate in the survey. For those participants who were contacted electronically, their contacts were obtained through WhatsApp contacts and pages, WeChat contacts and pages, Facebook groups, posts and also on Instagram posts. Upon accepting the invitation, the electronic questionnaire was sent to them for completion. Overall, 400 respondents were initially invited to participate in this survey. Out of these, 325 agreed to the invitation. Three hundred (300) respondents out of the 325 were completed and used for the analyses.

**Data Analysis**

SPSS version 22 was selected as the statistical tool for the data analysis. Descriptive statistics was used to represent the socio-demographics of respondents. In addition, a multiple regression model was used to estimate whether perceptions of risks affect the intentions to travel domestically. One-way ANOVA was used to analyze whether traveler’s characteristics and sources of information influence participants’ perceived risks amidst the pandemic.

4. Results

**Respondent’s background profile**

Findings revealed that 50.7% are males and 49.3% are females. Out of 300 respondents, 89% are single and 11% are married. Pertaining to respondents’ level of education, majority are undergraduates (56%), 38% are postgraduates and 6% are in the senior high schools. In addition, 1.3% of respondents fall within the age cohort of 15 - 20 years, 29.3% fall within the age cohort of 21 - 25 years, 26 - 30 years (52.7%), and 16.7% fall within the age range of 31 - 35 years. Regarding the annual household income of respondents, majority (80.7%) earn below 50,000 cedis, 12.7% earn within 50,001 - 100,000 cedis, 4.3% earn between 100,001 - 300,000 cedis and 2.3% earn above 300,001 cedis. Majority of the respondents (33.7%) are government employees, 31.3% are students, 19.7% are private sector employees, 9.3% are self-employed and 6% are unemployed. When asked of the type of travel participants will prefer amidst the pandemic, majority (73%) preferred to travel independently (solo travel) and the minority (27%) answered to prefer mass travel (Table 1).

**Risk perceptions and travel intentions amidst the pandemic.**

A multiple regression analysis was employed. Five perceived risk dimensions were utilized to understand participants risk perceptions (physical, psychological, performance, financial and safety risk perceptions). The analysis summary is showed in Table 2. The R² for this model is 0.070 (Adjusted R² = 0.054), indicating that the perceived risks variables explained 7% of the variation in determining tourists’ travel intentions in Ghana amidst the pandemic.

“Physical risk perceptions” (β = 0.310, p = 0.003) significantly affect respondents’ travel intentions in Ghana amidst the pandemic.

However, “Psychological risk perceptions” (β = 0.134, p = 0.199), “Performance risk perceptions” (β = 0.045, p = 0.708), “Financial risk perceptions” (β =
Table 1. Respondent’s background profile.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female</td>
<td>148</td>
<td>49.3</td>
<td>49.3</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>152</td>
<td>50.7</td>
<td>100</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>267</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>33</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Senior High</td>
<td>18</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>168</td>
<td>56</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>114</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td>15 - 20 years</td>
<td>4</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>21 - 25 years</td>
<td>88</td>
<td>29.3</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>26 - 30 years</td>
<td>158</td>
<td>52.7</td>
<td>83.3</td>
</tr>
<tr>
<td></td>
<td>31 - 35 years</td>
<td>50</td>
<td>16.7</td>
<td>100</td>
</tr>
<tr>
<td>Annual Household Income</td>
<td>Below 50,000 cedis</td>
<td>242</td>
<td>80.7</td>
<td>80.7</td>
</tr>
<tr>
<td></td>
<td>50,001 - 100,000 cedis</td>
<td>38</td>
<td>12.7</td>
<td>93.3</td>
</tr>
<tr>
<td></td>
<td>100,001 - 300,000 cedis</td>
<td>13</td>
<td>4.3</td>
<td>97.7</td>
</tr>
<tr>
<td></td>
<td>Above 300,001 cedis</td>
<td>7</td>
<td>2.3</td>
<td>100</td>
</tr>
<tr>
<td>What type of travel do you prefer amid COVID-19?</td>
<td>Solo</td>
<td>219</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Mass</td>
<td>81</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2. Results of multiple regression analysis on the perceived risks and the tourist’s intentions to travel to Ghana amidst the pandemic.

<table>
<thead>
<tr>
<th>Perceived Risks</th>
<th>B</th>
<th>Std. Error</th>
<th>Standardized β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.112</td>
<td>0.233</td>
<td>-</td>
<td>13.335</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Physical Risk</td>
<td>0.310</td>
<td>0.105</td>
<td>0.197</td>
<td>2.953</td>
<td>0.003*</td>
</tr>
<tr>
<td>Psychological Risk</td>
<td>0.134</td>
<td>0.104</td>
<td>0.089</td>
<td>1.287</td>
<td>0.199</td>
</tr>
<tr>
<td>Performance Risk</td>
<td>0.045</td>
<td>0.121</td>
<td>0.026</td>
<td>0.375</td>
<td>0.708</td>
</tr>
<tr>
<td>Financial Risk</td>
<td>0.080</td>
<td>0.141</td>
<td>0.041</td>
<td>0.570</td>
<td>0.569</td>
</tr>
<tr>
<td>Safety Risk</td>
<td>-0.067</td>
<td>0.111</td>
<td>-0.041</td>
<td>-0.608</td>
<td>0.543</td>
</tr>
</tbody>
</table>

R² = 0.070, Adjusted R² = 0.054
F = 4.415, Significance F = 0.001

0.080, p = 0.569) and “Health/safety risk perceptions” (β = −0.067, p = 0.543) do not significantly affect tourists’ intentions to travel amidst the pandemic (p > 0.05). Hence, we accept H1 and reject H2, H3, H4 and H5.
Tourist characteristics (such as gender, age and level of education, and their past travel experiences) and sources of information influence on perceptions of risks amidst COVID-19!

For the perceived risks, a 1 - 5 score based on the answers on the Likert scale (strongly agree, agree, neutral, disagree and strongly disagree) was used. Thereafter, a three-score range was computed from the sum of all the questions on each of the risk and a three-risk perception level was generated (low perceived risk, moderate perceived risk and high perceived risk) for each risk.

One-way ANOVA was used to analyze whether traveler’s characteristics and sources of information influence participants’ perceived risks amidst the pandemic. In Table 3, the results show that participants’ past travel experience in terms of the number of travel and the sources of information do influence their perceived risks ($p < 0.05$) whilst participants’ characteristics (such as gender, educational level, income and age) do not ($p > 0.05$).

5. Discussions

Relationship between risk perceptions is sometimes inconsistent with the intentions to visit a destination (Khan et al., 2019). In this regard, it was revealed in this study that respondents are more concerned about the physical risk perceptions such as the fear of being injured during their travel in Ghana. Findings correspond to recent studies, which affirm that, the usual health risks faced by tourists tend not to be life threatening (Huang et al., 2020). This is because perceived health risk is ranked low among travelers (Wang et al., 2019; Lammert et al., 2016; Frew et al., 2016). However, it contradicts with Page (2009) which indicates that health risk has become a major concern among travelers, affecting their travel decisions and choices. A possible explanation to this contradiction is

Table 3. One-way ANOVA results of perceived risks by tourist’s characteristics.

<table>
<thead>
<tr>
<th>Tourist’s characteristics</th>
<th>Perceived risks amidst COVID-19</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Gender</td>
<td>1.49</td>
<td>1.52</td>
<td>1.59</td>
</tr>
<tr>
<td>Educational level</td>
<td>3.32</td>
<td>3.33</td>
<td>3.27</td>
</tr>
<tr>
<td>Age</td>
<td>2.82</td>
<td>2.88</td>
<td>2.91</td>
</tr>
<tr>
<td>Income</td>
<td>1.27</td>
<td>1.30</td>
<td>1.27</td>
</tr>
<tr>
<td>Sources of information</td>
<td>4.54</td>
<td>5.24</td>
<td>4.45</td>
</tr>
<tr>
<td>Past Travel Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of times of travel</td>
<td>3.34</td>
<td>3.71</td>
<td>3.41</td>
</tr>
<tr>
<td>Place of travel</td>
<td>3.50</td>
<td>3.78</td>
<td>3.64</td>
</tr>
<tr>
<td>Purpose of travel</td>
<td>2.25</td>
<td>2.36</td>
<td>2.36</td>
</tr>
<tr>
<td>Type of travel</td>
<td>1.49</td>
<td>1.45</td>
<td>1.59</td>
</tr>
</tbody>
</table>
perhaps it highlighted the complex relationship between impact assessment and disease risk assessment, which are rarely examined in the context of a disease outbreak (Lee et al., 2012) and in this study, it highlighted on perceptions of risks, which affect travel.

This research revealed that respondents’ ages have no influence on their perceived risks and this is in accordance with Sönmez & Graefe (1998a), which found that age did not influence an individual’s perception of risk. Educational level was not an indicator, which influences participants’ perceived risks and this contradicts with Sönmez & Graefe (1998b), which depicts that education affects one’s perception of risk. It was found that the number of past travel experiences and sources of information influence perceived risks amidst the COVID-19 pandemic. This result is in accordance with a study conducted by Lepp & Gibson (2003), which argues that experienced tourists perceive less risk. Findings are consistent with past studies, which found that perceived risks are affected by sources of information (Kozak et al., 2007; Pizam et al., 2004). The role of information broadcasted by mass media, social media WoM or EWoM is fundamental in influencing public opinion (Zarezadeh et al., 2019) and perceived safety of destinations (Marine-Roig & Huertas, 2020). For decades now, social media has been one of the major digital platforms whereby destinations marketing campaigns have been conducted. In this regard, an individual’s source of information is essential especially in this digital age, tourists travel intentions and behavior are greatly influence by travel information found online (Buhalis & Law, 2015).

6. Conclusion

There is a need for the government, DMOs and tourism businesses to provide the necessary safety precautions, policies and other measures in order to limit or prevent physical injuries during domestic travel in Ghana in order to address the current evolving youth perceptions, which is mostly of physical risk perceptions during the COVID-19 pandemic.

In addition, as attested by this research, sources of information affect the risks perceived by young travelers, who even have prior experience of the destination. Therefore, sources of information such as social media, television, newspapers should be utilized positively in areas like promotion, marketing, communication and branding of tourism packages in order to minimize the perceptions of risks amid the pandemic. Moreover, solo traveling which is affirmed by results of this paper to be the most preferred amid COVID-19 can be added to travel packages organized by DMOs and tour agents.

Also, there is the need for government officials, policy makers and DMOs to make use of branding initiatives to attract young people. This is because most organizations have started to distinguish their products by creating a brand personality. It refers to a set of human characteristics that are attributed to that brand name (Kumar, 2016).
Generally, if these factors are taken into consideration, domestic travel will be one of the niche markets to revamp the economy of Ghana amidst the COVID-19 crises by focusing on the youth.

Limitations and Future Directions

First, this study was conducted from May 2021 when the COVID-19 crisis has somewhat been accepted and most people probably have moved on with their daily activities. This may have affected respondents perceived risks associated with travel, which were examined in this study. It would have been interesting to find out people’s risks and intentions during the onset of COVID-19 in March 2020.

Second, participants in this study are the youth from 15 to 35 years. Their responses could be influenced by their educational level and age as past researches confirm that tourist characteristics influence the awareness of a destination and preferences (Court & Lupton, 1997). Researchers should conduct future research by expanding the research targets to other age cohorts.

The general goal for this study was to explore the domestic travel intentions and how it is affected by perceived risks. Research focus can be on constraints to travel in future studies since perceived risks and tourist characteristics are not the only factors influencing the intent to travel.

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Declarations

All authors listed have significantly contributed to the development and writing of this paper.

Conflicts of Interest

The authors declare no conflict of interest.

Additional Information

No additional information is available for this paper.

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