

HOW TO INFLUENCE AIR TRAVEL INTENTION BY TOURISM AND AIR TRAVEL RISK KNOWLEDGE IN CONTEXT OF AIR DISASTERS--A STUDY BASED ON KNOWLEDGE-ATTITUDE-BEHAVIOR (KAB) MODEL

Baoyi Song

Macau University of Science and Technology, Macao SAR

Huiying Lin

Macau University of Science and Technology, Macao SAR

Yixuan Wang

Macau University of Science and Technology, Macao SAR

Xinyu Liu

Xiaofang Li

City University of Macau, Macao SAR

INTRODUCTION

Tourism plays a significant role in the growth of numerous economies. And the air transport industry contributes up to 3.4% of global GDP (Oxford Economics and Air Transport Action Group, 2014). However, air-related disasters can have a devastating effect on the aviation industry and, in turn, have a negative impact on economies. In recent years, there have been many major air accidents around the world. On March 8, 2014, Malaysian Airlines Flight MH370 went missing. On July 17, Malaysian Airlines Flight MH17 was shot down over Ukraine. More recently, in 2022, China Eastern Airlines MU5735 crashed; and in 2023, there were no survivors from a passenger plane crash in Nepal in January.

In every news item about aircraft crashes, the comment from viewers is a fearful, sad, negative view of aviation. However, in an objective view, the probability of an air crash is much lower than the car accident, and relatively speaking, it is relatively safe. Therefore, some other people have a different voice. They think that the probability of air crash is low, will not affect the choice of travel mode. This is a very interesting phenomenon. While it is intuitive that perceptions of people with different degrees of knowledge about events have different views on disaster events. But no research has yet shown that knowledge of air travel influences how people travel

in the shadow of a crash. Therefore, the purpose of this paper is to find the negative effects of restraining people's attitude from an academic perspective.

Past studies on changes in tourists' attitudes and behaviors triggered by disaster events usually use perceived risk or distrust to explain (Beck, Rose & Merkert, 2018; Zhu & Deng, 2020). And studies in different fields have shown that the more individuals are aware of the risks associated with nuclear power, the more likely they are to accept them and the less likely they are to avoid them (Kuklinski, Metlay & Kay, 1982; Deng, Zheng & Zhou, 2016). Zhao (2012) discovered that social interaction-based general risk knowledge can increase the willingness to take risks; in other words, the more knowledge one has, the more likely they are to take risks.

There are three innovations in this paper. First of all, considering the impact of air accidents on people, it is more convincing to study travel mode choice from the rational perspective of relevant knowledge than the perceived risk. Secondly, this paper introduced the knowledge - attitude - behavior (KAB) model to explain traveler behavior. Third, considering the negative effects of air accident reports on people, rumination is introduced as a moderating variable to explain the difference between people affected by negative events to different degrees.

LITERATURE REVIEW

Knowledge-Attitude-Behavior (KAB) theory

The "Knowledge-attitude-behavior" (KAB) theory is a valuable framework for examining the interplay between consumer knowledge, attitudes, and behaviors. This theory proposes that people's behavior changes occur through three continuous processes: knowledge acquisition, belief generation, and behavior formation (Zhu & Deng, 2020). Scholars have conducted empirical research in various fields, such as clinical medicine (Zeng et al., 2017); environmental protection (Kuklinski et al., 1982), and education (Zhang et al., 2012), to establish the relationship between knowledge, attitude, and behavior. Furthermore, the KAB theory has firstly gained attention in the tourism industry in recently years. Zhu and Deng (2020) conducted a study on the effects of tourists' risk knowledge on their intention to engage in rural tourism during the COVID-19 pandemic. The findings showed that tourists' perception of risk and their attitudes towards it influenced their willingness to participate in rural tourism. Overall, the KAB theory provides a valuable framework for understanding how knowledge, attitudes, and behavior interact and shape various aspects of human life.

The increasing prevalence of air crashes in recent years has significantly affected people's perception and understanding of air travel. With the growing accessibility of information through various channels and the increasing capacity to spread news globally, people's grasp of information knowledge has changed dramatically. However, the relationship between people's knowledge, attitude, and behavior in this crisis has not been effectively proven by empirical evidence. As a result, it is important to investigate how tourists' knowledge of air tourism and its associated risks can influence their attitudes and behavioral intentions, particularly in the aftermath of air disasters. In response to this issue, the paper focuses on exploring the impact of tourists' knowledge of air tourism and its risks on their attitudes and behavioral intentions. Thus, the KAB theory is chosen as the theoretical basis for the conceptual model in this study.

Knowledge and attitude

Knowledge is typically divided into three

categories: general knowledge, social information, and major-oriented knowledge. General knowledge pertains to the information that people acquire and accumulate, and is not limited to any specific fields of study. Social information, on the other hand, is obtained through interaction with the outside world, such as through personal experiences, conversations with others, and media sources. Major-oriented knowledge, meanwhile, is focused on a specific field and is often obtained through specialized courses and training programs (Zhu & Deng, 2020). When it comes to air travel risk knowledge, most ordinary tourists tend to rely on general information and social information. For instance, they may have heard about airplane accidents on the news or through conversations with friends and family. They may also have learned about safety measures and procedures from airline websites, social media, or travel blogs. Especially under air disaster panic, from the perspective of crisis public relations, airlines and all kinds of media will report the relevant situation of the air crash in order to alleviate public panic, so as to let the public understand the relevant knowledge of air travel (such as high safety rate, strict security procedures, etc.).

Schroeder, Tonsor, and Pennings (2007) have provided a definition of risk attitude that describes consumers' willingness to accept risks and their choice tendencies in the face of different risk levels. In the context of tourism, safety and health are the most fundamental concerns of tourists, and they tend to pay close attention to the associated risks (Zhan et al., 2014). Pennings (2002) discovered that individuals' personal acceptance of risk varies significantly. For individuals who are highly risk-averse, even a slight increase in risk may result in a change in behavior, whereas for those who are risk-takers, a high level of risk perception may have little to no effect on their behavior (Zhu & Deng, 2020). As a result, risk-aversion attitude is an essential factor that influences individuals' behavioral intentions.

Numerous prior studies have demonstrated a negative association between risk knowledge and risk aversion attitude. A study conducted by Deng, Zheng, and Zhou (2016) in the field of nuclear power has revealed that with regard to the dissemination of knowledge related to nuclear power, a higher level of subjective knowledge

among respondents corresponds to an increased acceptance of nuclear power risks and a decreased willingness to avoid them. Similarly, research by Zhu and Deng (2020) on tourism areas indicates that during the COVID-19 pandemic, tourists' risk knowledge has a negative impact on their risk aversion attitude towards rural tourism. According to Zhao (2012), the acquisition of general risk knowledge through social interaction can lead to an increased inclination to take risks, implying that as individuals gain access to more information, they may become more likely to engage in risky behavior. This suggests that in study as individuals gain greater knowledge and understanding of the air travel risks involved in a particular activity or industry, tourists may become more willing to tolerate risk. Thus we proposed following hypothesis :

H1 Knowledge of air travel risk(KT) negatively affects Risk aversion attitude(RAT)

Fishbein (1963) defines attitude as an individual's evaluation or opinion on a particular behavior, which is an essential component of many technology adoption theories. For instance, the Technology Acceptance Model (TAM) postulates that the relationship between a user's attitude towards using technology and their intention to use it is at the core of technology adoption (Davis, 1989). In the context of this paper's research, air travel attitude refers to the stance that tourists hold towards air travel behavior.

In the context of some special events, the relationship of knowledge and attitude is verified. For example, the study from Morosan (2012) showed that governments releasing public information in emergency situations (COVID-19 pandemic) could effectively communicate risks to the public (for example, the governments of China and the United Kingdom), thus preventing the spread of the virus. Such effective information about the outbreak includes the publication of expertise such as the number of cases, travel history of patients and treatment methods to reduce panic attitudes. Zhu and Deng(2020) showed that risk knowledge can strengthen behavioral intention through attitude. Thus, in this study, we purposed the following hypothesis:

H2 Knowledge of air travel risk positively affects Attitude toward air travel(ATT).

Attitude and intention to travel by air

The difference in risk aversion attitude can directly affect decision-making cognition (Lopes & Oden, 1999). Risk avoiders (people with high risk aversion attitude) pay more attention to negative outcomes, while risk seekers (people with low risk aversion attitude) focus on positive outcomes. In the financial sector, investors with high risk aversion are less involved in risky investment decisions. In the field of tourism, Zhang and Yu's (2017) research found that tourists who perceive smog as a health threat are less likely to travel to Beijing. In rural tourism scenarios, risk avoiders pay more attention to the risk consequences of travel, while risk avoiders are less willing to travel. The relationship between risk aversion attitude and rural tourism intention should be negative (Zhu & Deng, 2020). Thus in this study we purposed the hypothesis:

H3 Risk aversion attitude negatively affects Intention to travel by air(INT).

Past research has demonstrated the effect of attitude on choice behavior. In a pan-European study of more than 16,000 respondents, some of these attitudes were found to be important in choosing rail travel (Beck et al., 2018), while Morosan (2012) research shows that air travellers' willingness to use registered passenger biometric systems is influenced by their attitudes towards these systems. Most of these studies on travel mode choice behavior refer to the acceptance attitude towards a particular means of transportation. Therefore, based on the research background, people's acceptance attitude towards aircraft (as a kind of transport) may positively impact on their choice behavior. Thus, we purposed the hypothesis:

H4 Attitude toward air travel positively affects Intention to travel by air.

Rumination as moderator

According to Skinner et al. (2003), rumination involves repetitive and backward-looking thoughts on negative content. This type of cognitive process may perpetuate negative emotions, rather than allowing them to be transient and short-lived, as noted by Wang et al. (2013). Smith and Alloy (2009) mentioned that this is a maladaptive response with negative effects. From Kim and Byon (2020), spectator dysfunctional behavior in the stadium affecting other participants' intention to revisit. This

negative reaction can affect people's behavioral tendencies. Catastrophic events, which often accompany media coverage and provoke people to rumination, should be considered a focus of research into post-crash tourist behaviour.

Nolen-Hoeksema (1991) posits three explanations for the detrimental effects of rumination. Firstly, rumination is a self-perpetuating cycle, where dwelling on a negative memory increases its accessibility, leading to more depression. Secondly, individuals who ruminate on anger-provoking events may avoid engaging in activities that previously provided them with positive reinforcement. This is because rumination inhibits the ability to shake off repetitive negative moods, even in the presence of activities that were previously enjoyable. Lastly, rumination impairs problem-solving abilities by hampering the ability to engage in positive behaviors, thereby fostering pessimism and depression. Similarly, according to McCullough (2007), over past transgressions can have a negative impact by transferring negative emotions from the past to the present, and even intensifying negative emotions like anger.

Rumination promote anger of individual because ruminative content can fuel emotions. It also affects consumers' behavioral intentions, so rumination over negative experiences may stimulate desire for revenge by engaging in negative word-of-mouth and behavioral intentions (Strizhakova et al., 2012).

In a word, rumination, as a long-term negative reaction caused by negative events, will have a negative impact on behavioral intention and so on. In this paper, the air crash causes people to have negative reactions to varying degrees, and this reaction will have a negative impact on people's attitudes and behaviors, and strengthen the negative relationship between knowledge attitude and intention. Thus, we purposed the following hypothesis:

H5a Rumination promotes a negative relationship between KT and RAT.

H5b Rumination buffers the positive relationship between KT and ATT.

H5c Rumination promotes a negative relationship between RAT and INT.

H5d Rumination buffers the positive relationship between ATT and INT.

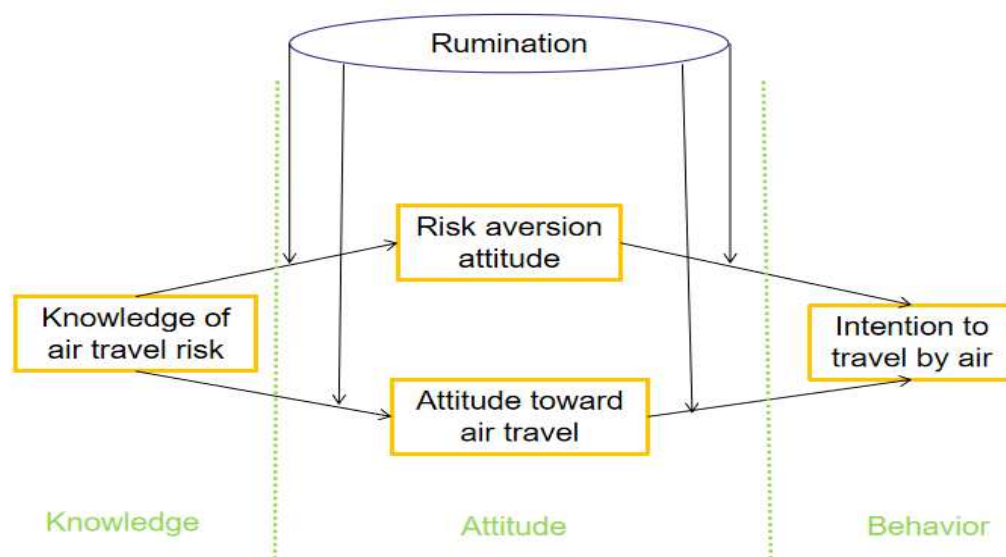


Figure 1. Research model

METHOD

Measures

This questionnaire had divided into two main sections. The first section dealt with the major five constructs of this study: knowledge of air travel risk,

risk aversion attitude, attitude toward air travel and intention to travel by air. Based on existing literature, the questionnaire was measured by 7-point Likert scale from 1 to 7 represent an increase in conformity, 1 stands for “totally disagree”, 2 for “very disagree”, 3 for “relatively disagree”, 4 for

“uncertain”, 5 for “more agree”, 6 for “very agree”, 7 for “fully agree”. The higher the score, the more obvious the respondent’s tendency to this part of the question. Knowledge of air travel risk was adapted from Zhu and Deng (2020); risk aversion attitude was adapted from Zhang and Yu (2017); attitude toward air travel was adapted from Graham, Kremarik and Kruse (2020); intention to travel by air was adapted from Lai and Chen (2011); rumination was adapted from Kim and Byon (2020). Based on the context of this study, the wording of the questions has been modified slightly. The second section questions dealt with respondents’ demographic information.

Research Design and Data Collection

The questionnaire was initially pilot tested on a sample of 33 postgraduate students at three different universities where major in tourism. The results from pilot study were used to amend the research questionnaire where appropriate and proofread the items in Chinese. Convenience sampling was used in this study. And the data was collected using an electronic questionnaire administered online in March 2023 to China tourists. Since some respondents gave similar rates for most items, 15 questionnaires were removed, and retained 285 use-able questionnaires.

Data analysis

The SEM (structural equation modelling) was

employed to estimate the causal strength of knowledge of air travel risk, risk aversion attitude, attitude towards air travel and intention to travel by air. The data were analyzed by Smart PLS 3 (Ringle et al, 2014). The advantages of using PLS is the data with non-normal distribution and small sample size (Hair et al, 2016). And the moderator effects of rumination was used SPSS 24.0 process.

To evaluate internal consistency and reliability, the measurement model is analyzed using factor loading (FL) and composite reliability (CR). Additionally, convergent validity is assessed using average variance extracted (AVE) (Bagozzi & Yi, 1988). Cross-loading (Fornell & Larcker, 1981) was used to confirm discriminant validity in this study. The significance of the path coefficients in the structural model was analyzed to test the hypotheses. Inner model evaluation was conducted by analyzing R² and Q² to evaluate the model's predictive power.

FINDINGS

Profile of responds. Table 1 showed the demographic profile of the respondents. Males are 37.9% and females are 62.1%. Ages of respondents ranged mainly from 18–30 (69.8%), and the respondents’ main education level was studying for a bachelor degree (64.2%). More than half of the respondents had travel by air travel over 10 times (62.5%).

Table 1 General Profile of Respondents

Variable	Category	Frequency (N=285)	Percent% (N=285)
Gender	Male	108	37.9
	Female	177	62.1
Age	18-22	105	36.8
	23-30	94	33
	30-45	54	18.9
	Above 45	32	11.2
Education	Senior high school or below	25	8.8
	Bachelor Degree	183	64.2
	Master Degree	56	19.6
	Doctor Degree	21	7.4
Number of times travel by air	0 times	2	0.7
	1-5 times	38	13.3
	5-10 times	67	23.5
	Above 10 times	178	62.5

Assessment of measurement model. To evaluate the model's adequacy, reliability, convergent validity, and discriminant validity were measured. The measurement model exhibited good reliability, as evidenced by both Cronbach's alphas and composite reliability (CR) values above 0.7

(Fornell & Larcker, 1981). Additionally, the factor loadings exceeded 0.7, and all AVE values were above 0.5, meeting the minimum requirements (Hair, Hult, Ringle, & Sarstedt, 2017) for convergent validity. The detail in Table 2.

Table 2 Reliability analysis and Data analysis results of convergence validity indicators

Dimension	Item	Factor loading (FL)	CR	AVE	Cronbach's Alpha
Knowledge of air travel risk	KT1	0.830	0.898	0.747	0.832
	KT2	0.908			
	KT3	0.852			
Risk aversion attitude	RAT1	0.909	0.956	0.880	0.931
	RAT2	0.938			
	RAT3	0.966			
Attitude toward air travel	ATT1	0.946	0.963	0.837	0.951
	ATT2	0.853			
	ATT3	0.926			
	ATT4	0.946			
	ATT5	0.901			
Intention to travel by air	INT1	0.948	0.964	0.899	0.944
	INT2	0.934			
	INT3	0.962			
Rumination	RN1	0.900	0.923	0.644	0.895
	RN2	0.861			
	RN3	0.823			
	RN4	0.924			
	RN5	0.894			
	RN6	0.872			

Source: collated in this study

Table 3 showed that the square root of AVE on the diagonal is larger than the corresponding correlation coefficient below the diagonal, indicating the measurement model exhibits good discriminant validity. Furthermore, the load of each item on its own dimension is higher than the

cross-loadings on other dimensions, satisfying the cross-loading criterion for discriminant validity (Fornell & Larcker, 1981). The results indicate satisfactory discriminant validity between all the latent variables.

Table 3 Convergent validity

Dimension	KT	RAT	ATT	INT	RN
KT	0.805				
RAT	-0.583	0.938			
ATT	0.218	-0.171	0.916		
INT	-0.219	-0.233	0.708	0.949	
RN	0.176	0.437	-0.791	-0.68	0.815

Source: collated in this study The bold : The square root of AVE

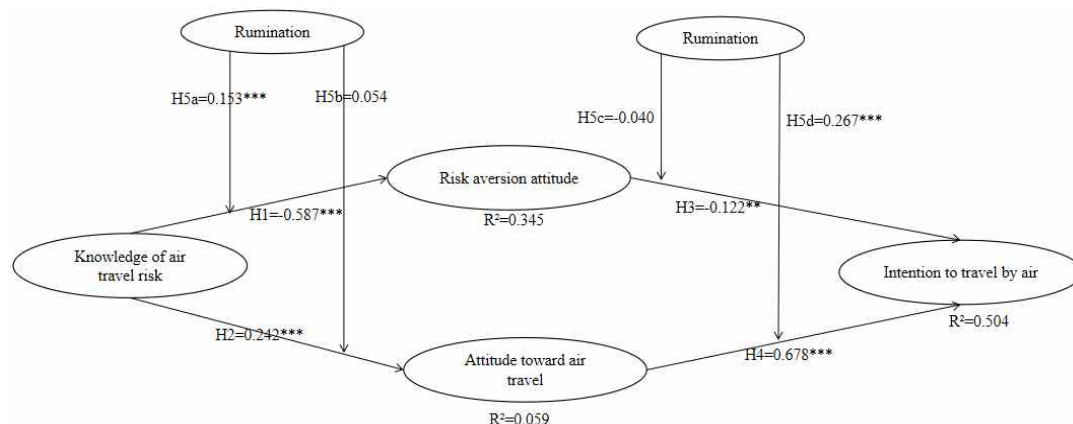
Hypothesis testing. To assess whether the path is established, bootstrapping was employed to sample 5000 times (two-tailed) from the original sample during hypothesis testing. The results of SEM are shown in Table 4. And Figure 2 also shows the results of structural equation modelling (SEM) analysis. The main effects (H1-H4) all supported

from data analysis. Results also showed moderator effects of rumination that interaction between KT and RN significantly predicted RAT (p-value= 0.000) and interaction between ATT and RN significantly predicted INT (p-value= 0.000). The result supported both H5a and H5d.

Table 4 Results of hypotheses testing

	Coefficient	P-value	Test results
H1 KT→ RAT	-0.587	0.000	Supported
H2 KT→ ATT	0.242	0.000	Supported
H3 RAT→ INT	-0.122	0.001	Supported
H4 ATT→ INT	0.678	0.000	Supported
H5a KT×RN→ RAT	0.153	0.000	Supported
H5b KT×RN→ ATT	0.054	0.063	Not Supported
H5c RAT×RN→ INT	-0.040	0.180	Not Supported
H5d ATT×RN→ INT	0.267	0.000	Supported

Note: KT=knowledge of air travel risk; RAT= risk aversion attitude; ATT= attitude toward air travel; INT= intention to travel by air; RN= rumination



Note * : $p < 0.05$ ** : $p < 0.01$ *** : $p < 0.001$

Figure 2. Structural model results

IMPLICATIONS or CONCLUSION

Discussion

This study examined the effect of knowledge and attitude for tourists on generating intention towards choose air travel. The 285 valid data obtained once again prove the suitability of KAB theory in the field of tourism. The results are consistent with the research of Zhu and Deng (2020), that is, under the influence of COVID-19 pandemic, people's intention to choose rural tourism is influenced by tourism risk knowledge and attitude. The results of this study also mean that the

more risk related knowledge air tourists have, the more likely they are not to completely avoid risks and the better tourists' attitude towards air travel will be, because they understand the low probability of air accidents, the rigor of aviation security procedures and other information. The results also show that attitude also has an impact on travel intention. Tourists with a higher risk-averse attitude are less likely to accept air travel, while tourists with a positive attitude towards air travel will choose air travel. This is because risk aversion reflects the degree of risk aversion of tourists. The more they cannot bear the consequences of risks, the more

likely they are to avoid them. Attitude towards air travel reflects tourists' acceptance towards air travel. Similar to technology adoption theory, the more people will accept technology, the more inclined they will use it. Finally, this study creatively introduces rumination as a moderator for the relationship between knowledge, attitude and behavior. And proved that rumination promotes a negative relationship between KT and RAT, rumination also buffers the positive relationship between ATT and INT. Rumination is a variable that fits well into the research context of this paper, which reflects repetitive and backward-looking thoughts on negative content, and how does this response with negative effects affect people's perceptual cognition (attitude) and rational choice behavior (intention). Air disaster make tourists have a psychological shadow of flying, the intensity of this reaction can affect a person's rational choice and emotional attitude. The results of this paper prove this point. The stronger the psychological shadow affects people's risk aversion, despite their have rational knowledge.

Theoretical implication

According to this study, it is found that the classic paradigm of "knowledge-attitude-behavior" can be combined with the content of crisis management in tourism and used to reveal tourists' behaviors and mechanisms under the influence of negative events, which will help enrich the topic of tourists' risk knowledge, attitude and behaviors. There have been many studies on the influence of tourist behavior under the background of air disaster. Compared with them, this study is different in the following aspects: first, it focuses on how tourists' risk knowledge, as a long neglected research field, influences tourists' intention through positive and negative attitudes. Rather than taking perceived risk as the main body of the previous studies. Second, our research is the first to include tourists' psychological reactions--rumination to negative events as a moderating factor. In previous studies about risk, Nanni and Ulqinaku (2020) took mortality threat and religious belief as moderating factors, while this study provides a essential factor that is more consistent with the situation of this study. Therefore, this study provides a new research idea for the study of tourism risk knowledge.

Practical implication

When there is a negative impact such as air crash, it is a crisis management process for aviation practitioners. Our research makes some practical contributions to addressing public opinion and restoring the attractiveness of air travel. We recommend that aviation practitioners display and publicize aviation safety knowledge, accident investigation results, basic aviation information updates, safety safeguards or other knowledge through social media, and highlight airlines' efforts for future aviation safety. Social media is a ideal medium of communication to disseminate information, so it is easier for the public to obtain sufficient information to reduce the risk aversion of air travel.

REFERENCES

- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>
- Beck, M. J., Rose, J. M., & Merkert, R. (2018). Exploring perceived safety, privacy, and distrust on air travel choice in the context of differing passenger screening procedures. *Journal of Travel Research*, 57(4), 495–512.
- Chen, R. J., and P. Noriega. (2004). "The Impacts of Terrorism: Perceptions of Faculty and Students on Safety and Security in Tourism." *Journal of Travel and Tourism Marketing* 2 (3): 81–97.
- Deng, L.F.; Zheng, X.Y.; Zhou, Z.C. (2016). Objective and subjective knowledge: Knowledge level of the college students on nuclear energy and its impact toward their attitudes. *Science Resource*. 6, 85–109. (In Chinese)
- Fleischer, A., A. Tchetchik, and T. Toledo. (2015). Does It Pay to Reveal Safety Information? The Effect of Safety Information on Flight Choice. *Transportation Research Part C: Emerging Technologies* 56:210–20
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Graham, Kremarik, F., & Kruse, W. (2020). Attitudes of ageing passengers to air travel since the coronavirus pandemic. *Journal of Air Transport Management*, 87, 101865–101865.

- <https://doi.org/10.1016/j.jairtraman.2020.101865>
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). London: Sage Publications
- Hair, J.F., Sarstedt, M., Matthews, L.M. and Ringle, C.M. (2016), “Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I – method”, *European Business Review*, Vol. 28 No. 1, pp. 63-76.
- Huang, J. & Jennifer, M.C.H. (2002) Earthquake devastation and recovery in tourism: The Taiwan Case. *Tourism Management*. 2, 145–154.
- Kim, K. A., & Byon, K. K. (2020). The dark side of spectator behavior: Effects of spectator dysfunctional behavior on anger, rumination, and revisit intention. *Sport Marketing Quarterly*, 29(3), 228-240.
- Kuklinski, J. H., Metlay, D. S., & Kay, W. D. (1982). Citizen knowledge and choices on the complex issue of nuclear energy. *American Journal of Political Science*, 615-642.
- Lai, & Chen, C-F. (2011). Behavioral intentions of public transit passengers—The roles of service quality, perceived value, satisfaction and involvement. *Transport Policy*, 18(2), 318–325.
<https://doi.org/10.1016/j.tranpol.2010.09.003>
- Lopes, L. L., & Oden, G. C. (1999). The role of aspiration level in risky choice: A comparison of cumulative prospect theory and SP/A theory. *Journal of mathematical psychology*, 43(2), 286-313.
- McCullough, M. E., Bono, G., & Root, L. M. (2007). Rumination, emotion, and forgiveness: Three longitudinal studies. *Journal of Personality and Social Psychology*, 92, 490–505.
- Morosan, C. (2012). Voluntary steps toward air travel security: An examination of travelers’ attitudes and intentions to use biometric systems. *Journal of Travel Research*, 51(4), 436-450.
- Nanni, A., Ulqinaku, A. (2020). Mortality threats, technology effects on tourism. *Annals of Tourism Research*. 102942, 102942.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, 100, 569–582.
- Pennings, J.M.E.; Wansink, B.; Meulenbergh, M.T.G. (2002). A note on modeling consumer reactions to a crisis: The case of the Mad Cow disease. *Int. J. Res. Mark.* 19, 91–100.
- Ringle, C.M. (2014), “Dirceu da Silva and Diógenes de Souza Bido Structural Equation Modeling with the Smartpls”, *Revista Brasileira de Marketing*, Vol. 13 No. 2, pp. 56-7.
- Schroeder, T.C.; Tonsor, G.T.; Pennings, J.M.E.(2007). Consumer food safety risk perceptions and attitudes: Impacts on beef consumption across countries. *Nephron. Clin. Pract.* 7, 1–27.
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129, 216–269
- Smith, J. M., & Alloy, L. B. (2009). A roadmap to rumination: A review of the definition, assessment, and conceptualization of this multifaceted construct. *Clinical Psychology Review*, 29(2), 116–128.
- Strizhakova, Y ., Tsarenko, Y ., & Ruth, J. A. (2012). “I’m mad and I can’t get that service failure off my mind”: Coping and rumination as mediators of anger effects on customer intentions. *Journal of Service Research*, 15, 414–429.
- Wang, M., Liu, S., Liao, H., Gong, Y ., Kammeyer-Mueller, J., & Shi, J. (2013). Can’t get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *Journal of Applied Psychology*, 98, 989–1004.
- Zeng, Z., Wang, X., Wang, Z., Guo, R., & Feng, R. (2017). Empirical research of the relationship between related knowledge, attitude and behavior of hypertension patients based on the structural equation model. *Zhong nan da xue xue bao. Yi xue ban= Journal of Central South University. Medical Sciences*, 42(2), 195-201.
- Zhan, D. S., Meng, B., Zhang, W. Z.(2014). A study on residential satisfaction and its behavioral intention in Beijing. *Geographical Research*, 33 (2) : 336-348
- Zhang, A. P., Yu, H. (2017). Risk perception and risk reduction of domestic tourists impacted by haze pollution in Beijing. *Resources Science*, 39 (6)
- Zhang, P. C., Chi, X. L., & Wu, M. X. (2012). A study of characteristics and relationship among sexual health knowledge, sexual attitude and sex-related behavior in Chinese college students. *Chin. J. Clin. Psychol*, 20, 849-853.
- Zhao, Y.N. (2012). Research on the influence of information factor on risk attitude of college students. *Education Research*. 11, 76–79. (In Chinese)

- Zhu, H., & Deng, F. (2020). How to influence rural tourism intention by risk knowledge during COVID-19 containment in China: Mediating role of risk perception and attitude. *International journal of environmental research and public health*, 17(10), 3514.