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The effects of community safety support on COVID-19 event strength perception, risk perception, and health tourism intention: The moderating role of risk communication

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The community is crucial in preventing COVID-19 pandemic. By employing 313 online surveys, it is found that the community safety support enhances risk perception, disruption recognition, and criticality recognition but it negatively impacts on novelty recognition. Additionally, risk communication could moderate the relationship between risk perception and health tourism intention. These findings reveal that people would pay more attention to the risk information and they could join health tourism in the post-pandemic period to enhance their personal physical and mental health. Therefore, health tourism enterprises should appropriately strengthen risk communication and improve people's health awareness to further promote healthy tourism consumption.

1 | INTRODUCTION

Due to the human-to-human transmission characteristic, coronavirus disease (COVID-19) has spread rapidly (Bourdin et al., 2021; Doyle et al., 2021) and become a global public health event. Until April 13, 2021, 135,057,587 coronavirus cases (COVID-19) and 2,919,932 deaths have been reported from World Health Organization (WHO). As a major public health emergency with the fastest spreading speed, COVID-19 had serious impacts on agriculture (Jami, 2021), tourism (Im et al., 2021; Salem et al., 2021; Zheng et al., 2021), economy (Aduhene & Osei-Assibey, 2021; Pham et al., 2021), and public health (Pu et al., 2020).

In order to prevent the spread of the COVID-19 pandemic, villages and communities have adopted various methods such as blocking roads and gates (Miao et al., 2020; Pan et al., 2020; Xuan Tran et al., 2020), and community pandemic prevention is regarded as an effective measurement under the COVID-19 pandemic (Tambo et al., 2021). Therefore, the scholars began to discuss the issue of community pandemic prevention. The impact of the COVID-19 pandemic has brought attention to many researches in the community, such as community volunteers (Miao et al., 2020) and community hospital (Ahmed et al., 2020), community resilience (Yip et al., 2021), and community support (Chan et al., 2021; Jia et al., 2021). It is noticed that people's mental health is affected by community lockdowns (Bueno-Notivol et al., 2020). Addressing mental health during and after this global health crisis should be placed into the international and national public health agenda.

Health tourism not only focuses on physical health but also improves mental and spiritual well-being and increases the capacity of individuals to satisfy their own needs and function better in their environment and society (Salehi-Esfahani et al., 2020). Due to its benefits for personal physical and psychological health, it has attracted the attention of academia and industry (Dryglas & Salamaga, 2018; Ridderstaat et al., 2019). Under the impacts of COVID-19 pandemic, people stay at home with few recreations, which would influence their mental health (Lange, 2021). Thus, considering the benefits of health tourism, whether the outbreak of COVID-19 pandemic will affect the willingness of health tourism intention? And are the community residents willing to adopt health tourism to relieve their pressure? On the other side, Samadipour et al. (2020) argued that people's risk perception of COVID-19 pandemic is not optimal. Then, does community pandemic prevention will decrease the risk perception with creating a closed safe community? Or dose community pandemic prevention will increase the risk perception? Besides, whether the people's risk perception will stimulate their willingness to health tourism? This study tries to find the answers to these questions.

This study could contribute to the existing literature as follows. First, this study could be the first attempt to combine community safety support and health tourism, and it would enrich the research of both community management and health tourism. Second, the study uses the even system theory and Pressure-State-Response (PSR) model, and it would be a crucial supplement in these theories to tourism filed, especially under the pandemic environment. Third, the study tests the moderating effect of risk communication between risk perception and health tourism, and it could benefit the literature of tourism risk management. Last, the results of the study would be a useful reference for the tourism recovery research in the post-pandemic period.

2 | LITERATURE REVIEW AND HYPOTHESES

2.1 | Event system theory and event strength

Event system theory mainly concerns the effects of events on objects, which means that events would influence objects through their interaction with the external environment (Zhao & Ren, 2018). According to event system theory (F.P. Morgeson, Mitchell, Liu, et al., 2015), organizations and individuals are vulnerable to events. In detail, organizations and individuals would be affected by event strength,[1] event space,[2] and event time.[3] In recent years, many studies employed the event system theory or event strength to reveal the impacts of events on either organization including team knowledge absorption (Zellmer-Bruhn, 2003) and leadership (F.P. Morgeson, 2005; F.P. Morgeson & DeRue, 2006) or individuals including emotions (Bacharach & Bamberger, 2007) and happiness (Koopmann et al., 2016). Besides, the degree of influence might depend on event strength which consists of novelty, disruption, and criticality (Zhao & Ren, 2018).

Novelty reflects the degree to which an event is different from the current and past and thus represents a new or unexpected phenomenon (F.P. Morgeson, 2005). In fact, different from other diseases, COVID-19 is a new disease since neither organizations nor individuals have experienced it before in decades (Rana et al., 2021). Disruption concerns the degree to which the event changes the organizations and individuals (F.P. Morgeson & DeRue, 2006). In reality, the world seems to have been put "on hold" by COVID-19 pandemic (Gssling et al., 2020), because it not only disrupted the normal operating of numerous enterprises (Dai et al., 2021) but also changed the lifestyle of many individuals (Rawat et al., 2021). Criticality reflects the degree to which an event is important or a priority for organizations or individuals (F.P. Morgeson & DeRue, 2006; F.P. Morgeson, Mitchell, Liu, et al., 2015). As the COVID-19 pandemic spreads widely around the world, effective control of the negative impact of the COVID-19 pandemic has become very important for organizations and individuals (Servidio et al., 2021). To sum up, this study employs the concept of event strength including novelty, disruption, and criticality to measure the influence degree of COVID-19 pandemic.

2.2 | Pressure-state-response model

Pressure-State-Response (PSR) model is widely used in environment field (Huang et al., 2019). PSR model effectively embodies the dynamic evolution and internal logic between things. Specifically, it presents that human beings exert pressure on the outside world in production and living activities (P), and in a certain period of time, people show corresponding changes under the action of pressure (S), so that the outside world can take corresponding measures to relieve the pressure and change the state (R). Thus, this is a conceptual framework associated with the causality of what has occurred (pressure), the current status (state), and what action should be taken (response; F. Sun et al., 2020).

In this study, community safety support refers to the pandemic prevention behavior and community management, which represents the COVID-19 pandemic prevention pressure of the social environment (P). Generally, the higher level of community safety support indicates the more COVID-19 pandemic prevention pressure. In PSR model, state reflects the cognitive state and psychological state of the objects. In this study, it refers to people's risk perception and COVID-19 event strength (S). The response is mainly the behavioral response of the objects, and this study regards the health tourism intention as a behavioral response of the pandemic (R). Therefore, based on the PSR model, this research proposes a conceptual framework to establish the relationship among community safety support, COVID-19 pandemic even strength perception, risk perception, and health tourism intentions (shown in Figure 1).

2.3 | Community safety support and risk perception

"Supervisor support for safety" refers to subordinates' perception that the superior attaches importance to safety during the communication, motivation, and actions to support safety with subordinates (Christian et al., 2009). According to conservation of resource theory, supervisor support for safety can effectively relieve the physical and mental pressure and tension of the individual, so that the individual can adapt to the organization better (Guo et al., 2019). In addition, relevant studies also have shown that safety support can improve individual safety perception. For example, Y. Li et al. (2011) found that safety support from superiors and colleagues can increase the sense of team identity for staff, so that they will contribute their own resources to the team and increase the security guarantee; Guo et al. (2019) offered an evidence from China high-speed railway that safety support from superiors and colleagues can reduce the perception of drivers' job insecurity.

Social support theory addresses that "social support" generally comes from superiors, colleagues, and organizations. Thus, the concept of "supervisor support for safety" is applied to safety support for public provided by the community and its organizational managers, and it can be named as "community safety support." In addition, the
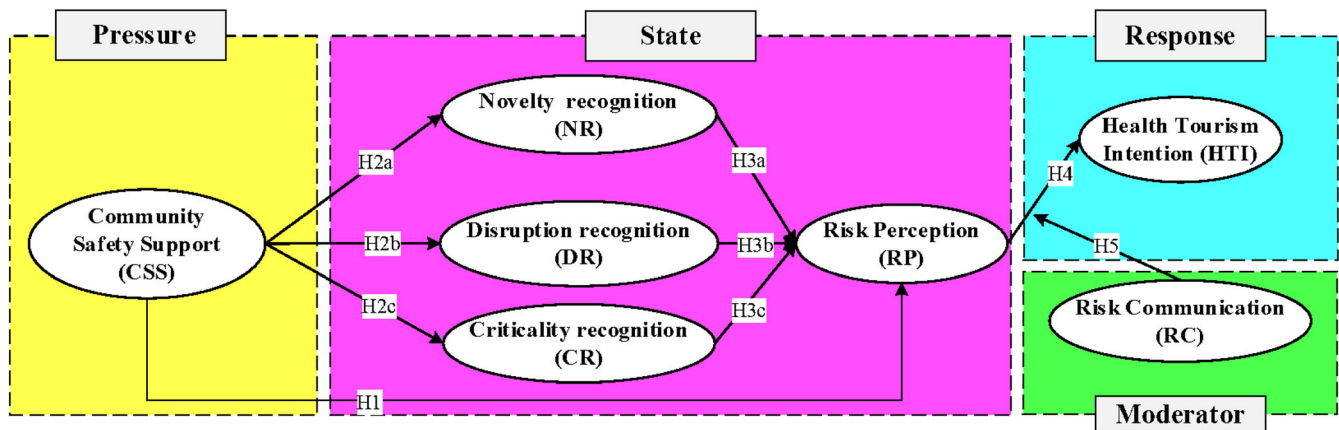
FIGURE 1 Research conceptual model [Colour figure can be viewed at wileyonlinelibrary.com]

PSR model emphasized that external pressure could give rise to change of state individual. That is, in the context of this study, the public will have a certain risk perception of the COVID-19 pandemic, while community safety support may relieve the physical and mental pressure and tension and reduce their risk perception. Therefore, this study proposes the following:

> **H1.** Community safety support negatively affects people's risk perception.

2.4 | Community safety support and COVID-19 event strength recognition

Organization emphasizes safety that can make people feel the importance of safety. To some extent, community safety support can be an important way to broadcast risk information. In terms of the event novelty, the new coronary pneumonia is originally a new virus, which is different from previous viruses such as SARS or Middle East Respiratory Syndrome (MERS). Therefore, community safety support enables the public to understand the risks of COVID-19 and thus reduces people's novelty recognition. For the event disruption, the COVID-19 pandemic will deepen disruption recognition for the public. And from the perspective of event criticality, the prevention and control of the pandemic have become the primary task of the whole world. Community and its organizational managers support the safety by taking a large number of measures (Chan et al., 2021; Jia et al., 2021), such as encourage residents to report unexpected incidents and hold meetings to communicate safety issues, which can enhance criticality recognition of COVID-19 pandemic. Besides, the PSR model presents that human will exert pressure in production and living activities, and in a certain period of time, people show corresponding changes under the action of pressure. In this study, community safety support can be viewed as the action of pressure, while the event strength recognition of COVID-19 pandemic is a kind of state. Thus, it can be proposed as follows:

> **H2 a.** Community safety support positively reduces novelty recognition of COVID-19 pandemic.

> **H2 b.** Community safety support positively enhances disruption recognition of COVID-19 pandemic.

> **H2 c.** Community safety support positively enhances criticality recognition of COVID-19 pandemic.

2.5 | Event strength recognition and risk perception

Risk perception is an individual's cognition and subjective feeling (Slovic, 1987), which is affected by many factors such as psychology, society, and culture (J. Li et al., 2015). Recently, risk perception has been used in different types of crisis events such as pandemics (D. Sun, 2006), earthquakes (H. Li et al., 2009), food safety (Fan et al., 2012), and financial crises (Burns et al., 2012). Numerous studies have shown that crisis events can stimulate tourists' risk perception; for example, Slovic (1987) believes that the unpredictability and terror of crisis events are the main factors causing tourists' insecure; Daniel et al. (2008) reveal that environmental crisis events will affect the people's emotional cognition and risk perception, which in turn will produce negative emotions; and after surveying 1,304 international tourists, Law (2006) finds that the probability and destructive magnitude of a crisis event can affect tourists' risk perception, and the greater the probability and destructiveness of a crisis, the higher the risk perception of tourists. The COVID-19 pandemic as a major public health emergency has negatively affected people's physical and mental health, and people's risk awareness has generally increased. In addition, depending on dual-system theory, there are two types of cognitive processes: one is fast and intuitive, and the other type is slow and deliberative. In our study, event strength recognition belongs to a thinking which is fast and intuitive, and risk perception is a thought with slow and deliberative characteristic. In short, there is

a progressive relationship between event strength recognition and risk perception. Therefore, the following assumptions are made:

H3 a. The novelty recognition of COVID-19 event strength has a significant positive impact on risk perception.

H3 b. The disruption recognition of COVID-19 event strength has a significant positive impact on risk perception.

H3 c. The criticality recognition of COVID-19 event strength has a significant positive impact on risk perception.

2.6 | Risk perception and health tourism intention

Depending on PSR model, the system presents corresponding changes under pressure in a certain period, and then corresponding measures will be taken to relieve the pressure and change the state. Therefore, risk perception as an individual's cognition and subjective sensation (Slovic, 1987) will cause physical response (N. Chen et al., 2009). Previous studies have shown that people will relieve their inner anxiety through traveling after feeling crisis and risk (S. Wang, Wang, et al., 2020). Moreover, N. Chen et al. (2009) points out that public health incidents, terrorist attack, and the danger of war will cause people to pursue tourism behaviors in pursuit of exotic culture. According to PSR model, pressure may result in responding behavior. Under the influence of COVID-19 pandemic, people's risk perception has increased, and they may choose health tourism to adjust their body and emotion. Thus, the study proposes the following:

H4. Risk perception has a positive effect on health tourism intention.

2.7 | Moderating role of risk communication

The concept of "risk communication" first appeared in 1984, McComas (2006) defined it as the process of information exchange among individuals, institutions, and organizations about the description and evaluation of risks. Specifically, individuals, institutions, and organizations generate and transmit information through mass communication channels. Then, social amplification theory believes that each receiver also acts as a "magnification station" and they participate in the process of social information enhancement (A. Chen et al., 2020). Risk communication is to some extent equivalent to risk education; that is, individuals, institutions, and other "amplification stations" inform the public where are risks, how they are, and how to view risks (William, 1996). Moreover, risk cognition theory assumes that high-risk cognition will make the public pay more

attention to the collection and research of risk information and take necessary measures to avoid risks. Once the degree of risk perception exceeds the acceptable range, people will feel anxiety and panic. The risk communication behavior will also be very active. People will inform their relatives and friends of the risk information, and at the same time, they will take various risk avoidance measures (Chatterjee et al., 2020). Under the impact of COVID-19 pandemic, it is easily to cause people's risk perception (Alqahtani et al., 2021; Rana et al., 2021), and they tend to avoid the negative impact through health tourism (Wang, Wang, et al., 2020). However, under high-risk communication conditions, a high degree of information enhancement led to a high-risk perception, which will initiate a stronger health tourism intention under the influence of COVID-19 pandemic. On the contrary, under low-risk communication conditions, people's risk perception is weak, and their willingness to health tourism will also be reduced. Thus, the study assumes the following:

H5. Risk communication will moderate the relationship between risk perception and health tourism intention.

Based on the proposed hypotheses and PSR theory, the conceptual framework of this study is shown in Figure 1.

3 | METHODOLOGY

3.1 | Measurement

Considering the participants of this study are Chinese, then double-blind translation method was used for the questionnaires. A psychological professor and an English professor were invited to translate the first draft of the scale, and then, a tourism professor made some revisions to ensure the accuracy and professionalism of the scale translation. The 7-point Likert scale was used in this study, requiring participants of the questionnaire to score each item from 1 (*extremely disagree*) to 7 (*extremely agree*).

The measurement of event strength recognition refers to F.P. Morgeson, Mitchell, Dong, et al. (2015)), a total of 11 items in the scale, for instance, "The response to this new coronary pneumonia pandemic is clear," "The procedural steps of dealing with the new coronary pneumonia pandemic are easy to understand," and "Measures and procedures have been established to respond to the new coronary pneumonia pandemic." The scale involves three dimensions, including event novelty (four items), event disruption (three items), and event criticality (four items).

For the measurement of community, safety support reference is made to the relevant scales about supervisor support for safety by Tucker et al. (2016). There are 10 items in this scale, such as "the community encourages us to raise safety issues," "the community encourages us to report any unexpected incidents," and "the community safety manager has set a good example of safety for us."

The measurement of risk perception draws on the scale of Terpstra (2011) on the public perception of flood crisis. There are five items in this scale, such as "I am very scared of the outbreak of the new coronary pneumonia," "I am very worried about the outbreak of the new coronary pneumonia," and "I am very upset about the outbreak of the new coronary pneumonia."

For the measurement of risk communication, reference is made to the relevant scales about risk information communication by Y. Li et al. (2019) and Keery et al. (2004) with five items. "Friends around me think it is dangerous to get the new coronary pneumonia pandemic," "The media often reports news about the risk of the new coronary pneumonia pandemic," "The risk information of the new coronary pneumonia pandemic is usually disseminated in the community (or WeChat group)," etc.

The health tourism intention refers to the scale of Kim and Boo (2015) on marine health tourism and Lee et al. (2012) on medical tourism destination visit intention. Three items are included in this scale, which are "After the pandemic passes, I am willing to participant a health tourism tour"; "After the pandemic passes, I plan to go to health tourism"; and "After the pandemic passes, I will do my best to go to a health tourism tour." Please see Table 1 for the details of measurement items.

3.2 | Data collecting and sample

Due to the impact of the COVID-19 pandemic, this study used an online questionnaire to collect data. *Wenjuanxing* is a survey website dedicated to self-service online design questionnaires and related services in China (K. Zhang & Zhang, 2011), and it is equipped with a large number of questionnaire style templates; on this basis, editors can perform autonomous operations (M. Zhang et al., 2015). As of August 2020, its paid users cover 30,000 companies and 90% of Chinese universities, and more than 88.95 million users have collected 707.2 billion questionnaires.

In this study, with the help of Wenjuanxing, an anonymous survey of 337 online users was conducted by snowballing method. Questionnaires with the same IP can only be answered once, and data colleting period was from June 12 to 18, 2020. In order to ensure the validity of the data, questionnaires with less than 60 s to fill out and with all same answers were deleted. Finally, 313 valid questionnaires were obtained, and the effective rate was 92.9%.

Descriptive statistics of the sample show that there are more women than men, among which 204 are women, accounting for 65.2%, and 109 are men, accounting for 34.8%; in terms of age, it is mainly dominated by youth groups, of which 254 persons are 20–29 years old, accounting for 81.2%; low and middle income levels are major sample groups, and 141 participants income are below 2,000 Chinese yuan, 90 from 2,001 to 5,000 Chinese yuan, 59 from Chinese 5,001–10,000 yuan, 23 from 10,000 yuan and above, accounting for 45.9%, 28.8%, 18.8%, 7.3%, respectively; for the professions of the sample, 48.2% of the participants is students, 22.4% participants work for the government, freelancers account for 7.7%, and other

professions account for 11.5%; the majority participants have a bachelor's degree (72.5%), 18.8% participants have a master degree or above, and 8.7% participants are below bachelor's degree.

4 | RESULTS

4.1 | Common method biases

Common method variance is a systematic error variance among variables (Williams & Brown, 1994) and refers to a type of deviation that is caused by similarity in methods used to collect data (Hsiao et al., 2020). As per Podsakoff et al. (2003), we carried out exploratory factor analysis (EFA) for all the items using a rotation-free principal component analysis method. The results showed that the rate of explanation of single-factor model was 34.352%, which was less than 50% of the observed variance, indicating that common method bias was within the acceptable range and would not influence the conclusions drawn from the study.

4.2 | Reliability and validity

In this study, Mplus 8.0 was hired to analyze the reliability and validity of the scale. First, we conducted confirmatory factor analysis (CFA) to ensure the convergence validity of all scale dimensions. The factor loadings of D1, C4, CSS1, CSS3, CSS4, CSS5, RC4, and RC5 are lower than 0.5, so these items are deleted. Table 2 shows that the factor loading of all remaining items is within the recommended range (the factor loading of novelty recognition is between 0.831 and 0.881, the factor loading of disruption recognition is between 0.883 and 0.923, criticality recognition is between 0.558 and 0.894, the factor loading of community safety support is between 0.631 and 0.887, the factor loading of risk perception is between 0.554 and 0.929, the factor loading of risk communication is between 0.791 and 0.941, and the factor loading of health tourism intention is between 0.817 and 0.983). Second, average variance extraction (AVE) and composition reliability of each variable are shown in Table 2, and the convergence validity (AVE) of all dimensions is greater than 0.5, and the value of the composition reliability (CR) is greater than 0.7, which is acceptable (Fornell & Larcker, 1981; Hair et al., 2010). Therefore, it shows that the data have good construction validity and consistency. Moreover, $\chi^2 = 500.363$ ($df = 278$, $P < 0.001$, $\chi^2/df = 1.80$), RMSEA = 0.055 < 0.08, SRMR = 0.045 < 0.08, CFI = 0.961 > 0.9, TLI = 0.954 > 0.9, which shows that the model is well matched and meets the model fitting requirements (Baumgartner & Homburg, 1996; Hu & Bentler, 1999).

4.3 | Descriptive statistic

The mean, standard deviation, and correlation coefficient of the research variables are shown in Table 3. Novelty recognition is

TABLE 1 measurements items

Variables	Items	Source
Novelty recognition (NR)	N1. The response to this new coronary pneumonia pandemic is clear	F.P. Morgeson, Mitchell, Liu, et al. (2015)
	N2. The procedural steps of dealing with the new coronary pneumonia pandemic are easy to understand	
	N3. Measures and procedures have been established to respond to the new coronary pneumonia pandemic	
	N4. When the new coronary pneumonia broke out, the community adopted effective procedures and guidelines to respond	
Disruption recognition (DR)	D1. The outbreak of the new coronary pneumonia affected my work/life	
	D2. I think it's crucial to deal with the new coronary pneumonia pandemic	
	D3. I think the response to the new coronary pneumonia is important	
Criticality recognition (CR)	C1. The new coronary pneumonia outbreak prevented my work from being completed	
	C2. The outbreak of the new coronary pneumonia made me think about how to respond	
	C3. The outbreak of the new coronary pneumonia pandemic changed my routine response	
	C4. The outbreak of the new coronary pneumonia outbreak requires me to change my previous work/lifestyle	
Community safety support (CSS)	CSS1. The community encourages us to raise safety issues	Tucker et al. (2016)
	CSS2. The community encourages us to report any unexpected incidents	
	CSS3. The community safety manager has set a good example of safety for us	
	CSS4. The community safety manager matches their words with deeds	
	CSS5. The community meetings are held regularly to discuss safety issues	
	CSS6. The community takes safety into account when developing working methods and procedures	
	CSS7. The community has implemented safety management measures and procedures	
	CSS8. The community does not ignore safety issues when work falls behind	
	CSS9. The community safety managers insist on good personal safety protection	
	CSS10. The community will provide safe facilities to ensure that we can do our work safely	

(Continues)

TABLE 1 (Continued)

Variables	Items	Source
Risk perception (RP)	RP1. I am very scared of the outbreak of the new coronary pneumonia	Terpstra (2011)
	RP2. I am very worried about the outbreak of the new coronary pneumonia	
	RP3. I am very upset about the outbreak of the new coronary pneumonia	
	RP4. The outbreak of a new coronary pneumonia outbreak has had a huge impact on me	
	RP5. I think once you get the new coronary pneumonia, it can be deadly	
Risk communication (RC)	RC1. Friends around me think it is dangerous to get the new coronary pneumonia pandemic	Y. Li et al. (2019); Keery et al. (2004)
	RC2. The media often reports news about the risk of the new coronary pneumonia pandemic	
	RC3. The risk information of the new coronary pneumonia pandemic is usually disseminated in the community (or WeChat group)	
	RC4. There are many people in the community (or WeChat group) discussing the risk information of the new coronary pneumonia pandemic	
	RC5. The risk problems of the new coronary pneumonia pandemic are discussed more often in the community (or WeChat group)	
Health tourism intention (HTI)	HTI1. After the pandemic passes, I am willing to participant a health tourism tour	Kim and Boo (2015); Lee et al. (2012)
	HTI2. After the pandemic passes, I plan to go to health tourism	
	HTI3. After the pandemic passes, I will do my best to go to a health tourism tour	

negatively correlated with community safety support ($\gamma = -0.729$, $p < 0.01$), and novelty recognition is positively correlated with risk perception ($\gamma = -0.206$, $p < 0.01$); disruption recognition is positively correlated with community safety support ($\gamma = 0.302$, $p < 0.01$) and risk perception ($\gamma = 0.268$, $p < 0.01$); criticality recognition is positively correlated with community safety support ($\gamma = 0.386$, $p < 0.01$) and risk perception ($\gamma = 0.340$, $p < 0.01$); risk perception is positively correlated with community safety support ($\gamma = 0.348$, $p < 0.01$) and health tourism intention($\gamma = 0.338$, $p < 0.01$); risk communication is positively correlated with health tourism intention ($\gamma = 0.200$, $p < 0.01$). The existence of the correlation among all variables provides preliminary support for the relevant assumptions of this study.

4.4 | Hypotheses testing

4.4.1 | Main effect test

The study uses Process Models 4 and 1 to further examine the relationship among related variables (as shown in Table 4 and Figure 3). Table 4 shows that most of R^2 are greater than 0.1, which means the conclusion is one of general confidence in inference. First, community safety support has a positive effect on risk perception ($\beta = .2467$, $SE = 0.0678$, $P < 0.05$); then, H1 is not supported. Second, community safety support has a negative effect on novelty recognition ($\beta = -0.6121$, $SE = 0.0448$, $P < 0.001$); that is, H2a is not supported; community safety support has a positive effect on disruption

TABLE 2 Reliability and validity test

Dimensions	Items	Parameters of significant test				Reliability	Validity	
		Estimate	S.E.	Est./S.E.	P value	SMC	CR	AVE
Novelty recognition (NR)	NR1	0.881	0.018	49.900	***	0.776	0.918	0.736
	NR2	0.848	0.02	42.247	***	0.719		
	NR3	0.870	0.019	46.659	***	0.757		
	NR4	0.831	0.022	38.037	***	0.691		
Disruption recognition (DR)	DR2	0.923	0.038	24.408	***	0.852	0.899	0.816
	DR3	0.883	0.037	23.590	***	0.780		
Criticality recognition (CR)	CR1	0.748	0.038	19.614	***	0.560	0.786	0.558
	CR2	0.897	0.036	24.797	***	0.805		
	CR3	0.558	0.044	12.571	***	0.311		
Community safety support (CSS)	CSS2	0.631	0.036	17.499	***	0.398	0.924	0.673
	CSS6	0.887	0.015	59.7	***	0.787		
	CSS7	0.874	0.016	54.344	***	0.764		
	CSS8	0.813	0.021	37.851	***	0.661		
	CSS9	0.825	0.02	40.248	***	0.681		
	CSS10	0.863	0.017	50.832	***	0.745		
Risk perception (RP)	RP1	0.929	0.011	85.948	***	0.863	0.896	0.643
	RP2	0.912	0.012	75.194	***	0.832		
	RP3	0.917	0.012	77.704	***	0.841		
	RP4	0.554	0.041	13.570	***	0.307		
	RP5	0.610	0.037	16.393	***	0.372		
Risk communication (RC)	RC1	0.809	0.025	32.377	***	0.654	0.886	0.722
	RC2	0.941	0.019	49.010	***	0.885		
	RC3	0.791	0.026	30.419	***	0.626		
Health tourism intention (HTI)	HTI1	0.817	0.021	38.241	***	0.667	0.921	0.796
	HTI2	0.983	0.012	79.69	***	0.966		
	HTI3	0.868	0.018	49.400	***	0.753		

Note: *** $p < 0.001$

Abbreviations: S.E., standard error; Est/S.E., estimate / standard error; SMC, squared multiple correlations AVE, average variance extracted; CR, composite reliability.

TABLE 3 Discriminant validity test

Dimensions	M	SD	NR	Discriminant validity					
				DR	CR	CSS	RP	RC	HTI
NR	2.177	0.959	0.858						
DR	6.400	0.862	−0.368[**]	0.903					
CR	5.543	0.938	−0.296[**]	0.372[**]	0.747				
CSS	5.594	1.061	−0.729[**]	0.302[**]	0.386[**]	0.820			
RP	5.232	1.068	−0.206[**]	0.268[**]	0.340[**]	0.348[**]	0.802		
RC	5.500	1.209	−0.422[**]	0.516[**]	0.438[**]	0.499[**]	0.528[**]	0.850	
HTI	4.844	1.339	−0.264[**]	−0.002	0.351[**]	0.338[**]	0.323[**]	0.200[**]	0.892

Note: The value on the diagonal is the square root of AVE.
[*] $p < 0.05$.
[**] $p < 0.01$.

TABLE 4 Hypothesis testing

|	Path	Coeff.	S.E	t value	P value	PBCI 95%	Hypotheses	
Step 1 (NR)	CSS → NR	−0.6121***	0.0448	−13.6500	0.0000	[−0.7003, −0.5239]	H2a: Not supported	$R^2 = 0.3747$, $F = 186.3227$ ($P = 0.0000$)
Step 2 (DR)	CSS → DR	0.2627***	0.0547	4.8007	0.0000	[0.1550, 0.3703]	H2b: Supported	$R^2 = 0.0690$, $F = 23.0469$ ($P = 0.0000$)
Step 3 (CR)	CSS → CR	0.3583***	0.0529	6.7690	0.0000	[0.2542, 0.4625]	H2c: Supported	$R^2 = 0.1284$, $F = 45.8192$ ($P = 0.0000$)
Step 4 (RP)	CSS → RP	0.2467***	0.0678	3.6353	0.0003	[0.1131, 0.3802]	H1: Not supported	$R^2 = 0.1641$, $F = 15.1156$ ($P = 0.0000$)
	NR → RP	0.0551	0.0677	0.8147	0.4159	[−0.0780, 0.1883]	H3a: Not supported	
	DR → RP	0.1077*	0.0569	1.8927	0.0593	[−0.0043, 0.2197]	H3b: Supported	
	CR → RP	0.2202***	0.0576	3.8231	0.0002	[0.1069, 0.3335]	H3c: Supported	
Step 5 (HTI)	PR → HTI	0.2868***	0.0575	2.8644	0.0000	[0.0529, 0.2849]	H4: Supported	$R^2 = 0.1435$, $F = 17.2509$ ($P = 0.0000$)
	RP*RC → HTI	0.0951**	0.0450	2.1145	0.0353	[0.0066, 0.1837]	H5: Supported	

*$P<0.10$.
**$P<0.05$.
***$P<0.001$.
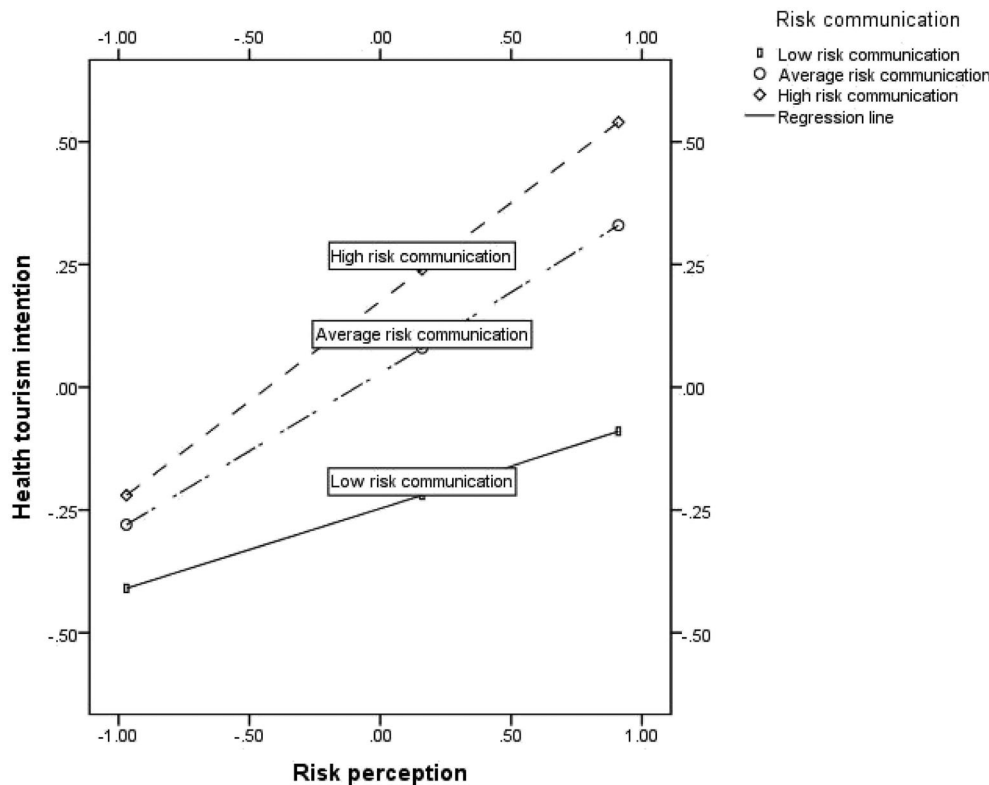
FIGURE 2 Moderated effect of risk communication

recognition (β = 0.2627, SE = 0.0547, P < 0.001); then, H2b is supported; community safety support also has a positive effect on criticality recognition (β = 0.1077, SE = 0.0569, P < 0.1); meaning, H2c is supported. Novelty recognition has an unimportant effect on

risk perception (β = −0.0551, SE = 0.0677, P > 0.1); then, H3a is rejected; disruption recognition has a positive effect on risk perception (β = 0.1077, SE = 0.0569, P < 0.1); then, H3b is supported; criticality recognition also has a positive effect on risk perception
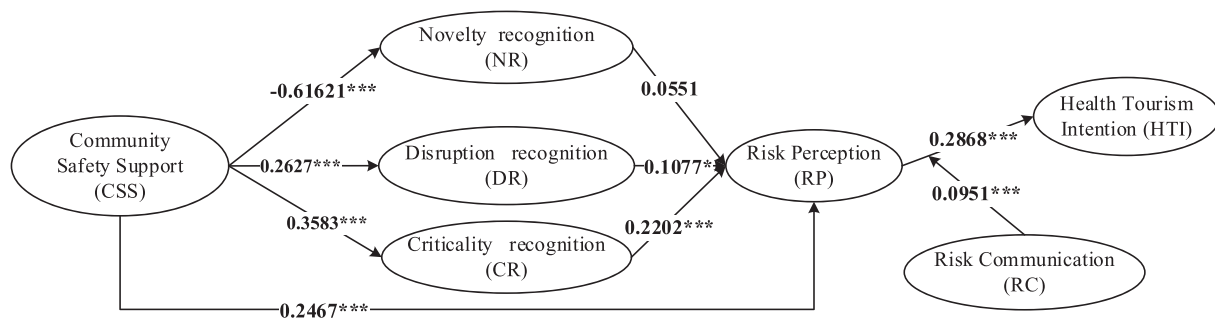
FIGURE 3 Final model

($\beta = 0.2202$, SE $= 0.0576$, $P < 0.001$); then, H3c is supported. Finally, based on the analysis of Model 1, risk perception has a positive effect on health tourism intention ($\beta = 0.2868$, SE $= 0.0575$, $P < 0.001$); that is, H4 is supported.

4.4.2 | Moderating effect

According to Model 1 (Table 4), the interactive items of risk perception and risk communication have a significant positive effect on health tourism intention ($\beta = 0.0951$, SE $= 0.0450$, $P < 0.05$), meaning that H5 is supported. Furthermore, in order to better present the moderating effect of risk communication, the study borrowed from the research of Aiken and West (1991) and divided risk communication into high grouping (M + SD, mean + 1 standard deviation) and low grouping (M − SD, mean − 1 standard deviation), drawn a simple slope test chart of risk communication between risk perception and health tourism intention. As shown in Figure 2, the effect of risk perception on health tourism intention is stronger under high-risk communication conditions and weaker under low-risk communication conditions.

Combining the above hypotheses results, this study draws a graph of the effect of community safety support on people's risk perception and willingness to health tourism, as shown in Figure 3.

5 | CONCLUSION

5.1 | Conclusion and discussion

With the help of the PSR model, this study focused on the impact mechanism of community safety support on people's event strength recognition, risk perception, and the influence mechanism of health tourism intention and reached the following conclusions.

First, some researches emphasized the active role of communities in COVID-19 pandemic (Chan et al., 2021; Yip et al., 2021), but our research suggests that community safety support is not always the best way to the public during the pandemic. After examining the impact of community safety support on risk perception, it shows that community safety support has a positive effect

on risk perception. Previous studies have pointed out that support for safety can effectively improve individual's safety perception (Guo et al., 2019; Y. Li et al., 2011), but the results of our research are inconsistent with those studies, which may be due to different environments and different types of events. The COVID-19 pandemic, as a serious public health emergency with the fastest spread, the widest range of infection, and the most difficult to control, has a serious impact on numerous industries (Dai et al., 2021; Gssling et al., 2020; Pham et al., 2021) and causes emotional tension and psychological panic to the public (Joo et al., 2021). Jia et al. (2021) suggested that the COVID-19 pandemic and lockdown policies of community negatively affect people's psychological well-being. Indeed, community and its organizational managers provide support for safety by addressing safety issues, which turns out to be another way of spreading the risk of the pandemic (Wang, Lin, et al., 2020) and may further result in people's risk perception (Tambo et al., 2021).

Second, community safety support has a negative effect on novelty recognition, while it has a positive effect on disruption recognition and criticality recognition. This is consistent with our research hypotheses. In terms of the novelty recognition of the COVID-19 pandemic, community safety support enables to make the public to have knowledge of risk information of COVID-19 pandemic to reduce people's recognition of novelty (Tambo et al., 2021). Then, for the disruption recognition and criticality recognition, we found that community safety support is not always a good thing for the residents, which can be seen a way of risk communication; that is, community supports the safety by taking a large number of measures to increase people's recognition of disruption and criticality about the COVID-19 pandemic.

Third, disruption and criticality have a positive impact on risk perception, which basically consistent with the previous research (Law, 2006; Västfjäll et al., 2008). Han et al. (2021) also addressed that it seriously aroused risk perception and made people feel threatened with the emergence of the COVID-19 pandemic. However, novelty recognition has not a positive influence on risk perception. Although COVID-19 pandemic is the most serious pandemic in decades, compared with SARS and MERS, its death rate is not high. In addition, the death of COVID-19 is mainly happening in elderly people (Wang, Wang, et al., 2020), and the majority of our sample is young people

(20–29 years old accounting for 81.2%); then, it may be the reason that they did not perceive a high risk.

Risk perception has a positive effect on health tourism intention, and it supports the literature (Yan & Wen, 2020). In order to avoid the spread of the pandemic, it is strongly recommended that everybody should stay at home. However, people want their lives back to normal, and they want to have tourism activities after a longtime staying at home. Moreover, after experiencing the pandemic, people would pay more attention about their health. Besides, Smeral (2009) suggested that domestic and short-haul tourism could rapidly recover in tourism markets after crisis. H. Zhang et al. (2021) also argued that tourists have a strong desire to travel to relieve the depression and epidemic fatigue. Thus, tourism, especially health tourism, could be people's first choice after they perceived the risk of COVID-19.

Result has shown that risk communication moderates the effect of risk perception on health tourism intention; that is, the effect of risk perception on the willingness to health tourism is stronger under high-risk communication conditions and weaker under low-risk communication conditions. The risk cognition theory points out that under high-risk communication conditions, stronger risk perception will make people pay more attention to risk information, and it will often take corresponding measures to avoid the negative effects caused by the pandemic (Y. Zhang et al., 2020). And this result verifies the social amplification theory under COVID-19 pandemic in tourism filed, meaning that to avoid the psychological depression and panic caused by the COVID-19 pandemic, people could choose to join health tourism in the post-pandemic period (H. Zhang et al., 2021).

5.2 | Managerial implications

The research findings have managerial suggestions for community management and health tourism. First, from the perspective of community management, community is a very important channel for resident's safety support, especially in the pandemic environment (Chan et al., 2021). Our findings reveal that community safety support could let the residents to realize disruption and criticality of COVID-19 pandemic to a certain extent, but it may become a crucial channel to increase people's risk perception. Therefore, community should use proper method to support safety, such as ask privately about the safety information of the pandemic and appease personal psychological though private visiting to community houses. And this could alleviate the tension and risk perception of the community residents.

Second, from the perspective of health tourism, risk perception can stimulate health tourism intention; therefore, relevant enterprises should seize the opportunity of the development of health tourism under the impact of the pandemic. As an important way to relieve pressure and relax the body and mind, health tourism is particularly important for dealing with the negative effects caused by the pandemic. Although the pandemic period is a relatively stagnation period for tourism, related health tourism enterprises can seize the important opportunity for the development of health tourism, deploy health tourism and related products in advance, and make preparations and plans for health tourism post-COVID-19 period. Meanwhile, the problem of safety cannot be ignored in health tourism in the post-COVID-19 period. Therefore, some measures should be taken to manage safety problem of health tourism; for example, it is necessary to increase safety investment in creating health tourism products to provide potential tourists with a healthy and hygienic tourism environment. Besides, it also needs to pay attention to safety precautions in the process of tourism and risk prevention, including control the flow of people in the closed tourism space. And tourism space should be disinfected and cleaned in time after a tour.

Last but not least, this study shows that risk communication can drive the relationship between risk perception and health tourism intention; that is, the effect of risk perception on the willingness of health tourism is stronger under high-risk communication conditions. Risk perception of the dissemination of health tourism information can better inform the public about the development of the COVID-19 pandemic, thereby increasing the focus on personal physical and mental health. Therefore, health tourism enterprises should moderately strengthen risk communication to enhance public risk perception and health awareness to further promote health tourism consumption.

5.3 | Theoretical implications

From a theoretical perspective, this research provides some useful references for the future study. First, to our knowledge, community safety support has been first proposed in this study. And it has been the first time to link community safety management and health tourism. Second, it tests the moderate role of risk communication between risk perception and health tourism that previous research has few been verified. The empirical finding could benefit both risk management and tourism field. Third, the study could be one of the first try to employ even strength theory into tourism study. And it can add strong reference PSR model. Fourth, the study enriches the health tourism literature. Risk perception would become one of the health tourism motivations, which can be a useful reference for future health tourism study, especially under the pandemic environment.

5.4 | Limitations and future studies

The sample of this study is mainly about young people; it may influence the results. Then, community subjects generally include the government, community organizations, and community residents. This study only considers community organizations and residents. Therefore, future studies could focus more about the governments' support for community safety and its influence effect. In addition, we only address people's health tourism intention. Therefore, future research can pay more attention to the expectations and motivations of health tourism, which can lay a solid foundation for exploring potential opportunities and the development of health tourism in the post-pandemic period.

ENDNOTES

[1] Event strength includes the event's novelty, disruption, and criticality.

[2] Event space means where an event originates and how its effects spread through an organization.

[3] Event time refers to that, when an event occurs, how long the event remains impactful with concerning the evolution of the event strength.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request

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