



THE MEASUREMENT OF CRISIS MANAGEMENT STRATEGIES IN TOURISM DEVELOPMENT AND VALIDATION OF A SCALE

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ABSTRACT

Crises and disasters pose significant obstacles to the socio-economic progress of any destination, especially in the tourism sector. Although travel and tourism are among the world's most prominent economic sectors, they are susceptible to various hindrances, such as natural disasters, political instability and unpredictable terrorist attacks, which can harm the destination's reputation and decrease tourist arrivals. While humans cannot control these incidents, they can implement measures, strategies and activities to mitigate their impact. This research aims to create and validate a scale for crisis management strategies in tourism using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). A 58-item questionnaire was developed based on literature reviews and interviews with destination marketing organizations (DMO's), which was then reduced to 47 items after content validation by experts and the target population. EFA was conducted on data from 346 tourism stakeholders, resulting in six discrete factors: media, promotional measures, partnering, security and awareness, innovative marketing, and finance. Finally, AMOS 21 was used to perform confirmatory factor analysis, and the crisis management strategies scale developed retained 38 items.

KEYWORDS

crisis management, crisis management strategies, scale validity, scale development

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1. INTRODUCTION

The travel and tourism industry is a prominent economic sector worldwide contributing to job creation, foreign exchange, export growth and overall prosperity (Singh & Mehraj, 2019). According to the World Travel and Tourism Council's annual report (WTTC, n.d.), the industry accounted for 10.3% of global gross domestic product (GDP) and supported 330 million jobs, representing one in ten globally in 2019. This highlights the industry's significant impact on the global economy and job market (Manhas et al., 2021; Nazki, 2018; Scholtz,

2019). However, despite its strength, the sector continues to face obstacles such as political instability, increasing incidents of terrorism and natural disasters worldwide. In recent times, the world has witnessed the severe impacts of the COVID-19 pandemic, resulting in a loss to the industry of 62 million jobs and US\$ 4.5 trillion. Domestic visitor expenditure fell by 45%, and foreign by 69.4%. Tourism and hospitality were among the sectors most affected by the virus (Sigala, 2020).

The travel and tourism industry is very susceptible to crises and the short- and long-term effects of disasters (Gani et al., 2018). Disaster or crises are unexpected

and unpredictable, whether natural or human, injuring people, damaging infrastructure and property, and threatening the survival of an organization (Pearson & Clair, 1998). Political instability tends to damage and vandalize a destination's image and shapes the perception of the tourist in a negative way towards it. This negative perception has terrible repercussions for the whole tourism industry and results in a drop in tourist arrivals worldwide. The downward inclination has a distressful and worrisome effect on the global economy, and particularly national economies, leading to a change in destination circumstances, potentially destructive, resulting in a destination crisis. From time to time, authors and researchers in the crisis management field have suggested specific measures and strategies to mitigate crises. However, these studies are qualitative, and areas lack use of a well-developed scale. Considering the above background, the present article's main endeavor is to develop and validate a scale of crisis management for tourism.

2. LITERATURE REVIEW

2.1. CRISES AND CRISIS MANAGEMENT

The Cambridge Dictionary (2004) defines a crisis as "a situation which has reached an extremely difficult or dangerous point, and a time of great disagreement, uncertainty and suffering", in the same way the Merriam-Webster Online Dictionary (2005) suggests a crisis is "an unstable or crucial time or state of affairs in which a decisive change is impending". Various authors have defined crisis similarly as an adverse incident with an unpredictable outcome (Bland, 1998; Campbell, 1999; Coombs, 1999; Coombs & Holladay, 2002; Faulkner, 2001; Moreira, 2007; Pforr, 2006; Ritchie, 2004; Ruff & Aziz, 2003). It is concluded that the literature provides no generally accepted definition of crisis and attempts to categorize types or forms of crises have been sparse (Faulkner, 2001; Glaesser, 2003; Pforr & Hosie, 2008; Pizam, 1999; Prideaux et al., 2003; Santana, 2004). The primary cause of the ambiguity comes from the varied and diverse terms usually used synonymously with crisis. For instance, terms like 'catastrophe', 'disaster', 'risk', 'chaos' and 'negative event' have all been used interchangeably with the term crisis.

Sönmez et al. (1994) classified crises into three categories: 'natural disasters', 'human-made disasters' and 'national security hazards'. Under the natural disasters category, Sönmez included floods, volcanoes, earthquakes and severe storms. Human-made disasters included building collapse, aircraft accidents, air pollution and offshore oil spills, while national security hazards included civil disorder, terrorism

and biological attacks. In 1997, Lerbinger classified crises as either 'internal' or 'external'. Natural disasters, technological failures like an oil spill or the Chernobyl accident, conflicts like labor strikes and boycotts, and hostile events like terrorist attacks all contribute to external crises. There is another approach to classifying a crisis based on its cause which is perhaps the most common. El-Khudery (2003) differentiates between naturally occurring crises and human-made crises. He includes political and economic crises, riots, conflicts, technological disasters and terrorist actions as human-made crises. Crises, whether natural, human-made or political, are unwanted and threatening events that negatively impact the tourism industry, hence requiring practical managerial activity and immediate recovery. For Rosenthal and Pijenburg (1991, p. 3) "crisis management involves efforts to prevent crises from occurring; to prepare for better protection against the impact of a crisis agent; to make for an effective response to an actual crisis; to provide plans and resources for recovery and rehabilitation in the aftermath of a crisis". According to Glaesser (2003, p. 22), crisis management is "a coordinated effort to anticipate, prepare for, respond to and recover from a crisis". Coombs (2007) defined crisis management as a strategy to protect a company, its stakeholders and the industry as a whole from the damaging effects of a crisis.

2.2. CRISIS AND IMAGE RECOVERY

Tourism products are tangible. Marketers' most significant strategic marketing tool to attract potential visitors is to strengthen the position of the destination's image. Moreover, the industry sells experiences where the destination's image plays an important role (Singh & Mehraj, 2019).

The image represents the fundamental influential factor in the travelers' decision-making process and is recognized as the main component that attracts visitors (Butler, 1990; Gartner, 1989; Goodall, 1988; Sirgy & Su, 2000; Stabler, 2013; Yüksel & Akgül, 2007). Tourism being a susceptible industry relies on an image that has been created in the minds of the tourists. The complexity of a crisis is that it has strong impact on tourism behavior (Minar, 2019) and any unwanted or uneven incident has an impact on the destination image. One of its devastating effects is that it negatively affects the destination image (Gani et al., 2021). Sönmez et al. (1994, p. 22) provided a comprehensive definition of a tourism crisis: "Any occurrence which can threaten the normal operation and conduct of tourism-related businesses; damage a tourist destination's overall reputation for safety, attractiveness and comfort by negatively affecting visitors' perceptions of that destination; and, in turn, cause a downturn in the local travel and tourism economy, and interrupt

the continuity of business operations for the local travel and tourism industry, by the reduction in tourist arrivals and expenditures". After a crisis, whether natural or human-made, it takes many years for the destination to rebuild its image (Beirman, 2002; Huang & Min, 2002). If we take the example of the Gulf war in 1991, it has been seen that it took nineteen months for Middle Eastern countries to attract tourists from America. The crisis which occurs at a destination is beyond the control of DMOs, but what lies in their hands is mitigating its impact by having sound strategies and plans. Hall and O'Sullivan (1996, p. 17–18) stated that "the only response the industry knows is just to increase marketing activities". Simultaneously, some authors laid stress on having previously prepared strategies and crisis management plans (Arbel & Bargur, 1980; Beirman, 2002; Faulkner & Vikulov, 2001; Gani et al., 2021; Glaesser, 2003; Sönmez, 1994; Wu & Shimizu, 2020). Tourism is considered as a source for destination revival, rejuvenation of business activities and employment (Boyd, 2019; Chan et al., 2020; Lee & Jan, 2022). To recover the image of a destination, there is a need for effective crisis management strategies (Gani et al., 2018; Gani & Singh, 2019; Scott et al., 2008; Singh et al., 2023). However, studies which were conducted with reference to crisis management strategies are mostly qualitative in nature and lack a proper measurement scale. The current study aims to formulate and verify a measurement scale for crisis management strategies.

3. RESEARCH METHODOLOGY

The quality of research is determined by the appropriateness of the research methodology. The present study's main endeavor is to develop and validate a scale for the crisis management strategies needed to recover a destination's image. The research design is exploratory as it investigates different constructs for crisis management strategies. Multiple modifications were made throughout the different stages until a scale achieved the appropriate model-fit indices, reliability and validity measures. The area of study was the Kashmir division of the Union territory of Jammu and Kashmir, India. The study's total population was extracted from the data provided by the directorate of tourism in Kashmir, the pioneer body that keeps a record of registered tourism stakeholders. The primary concern was the selection of an appropriate sample size. Since this was a case with a fixed population size, we used the table developed by Krejcie and Morgan (1970) to decide on a sample size of 346. In addition, probability sampling, which entails selecting samples at random, was used.

4. DATA ANALYSIS

The main aim of the current study is to develop and validate a scale for crisis management strategies. The procedure for the best practice for developing and validating a scale given by Boateng et al. (2018) was followed to accomplish the domain. The process of creating and verifying a measurement scale has been divided into three phases by Boateng et al. (2018):

1. Item development.
2. Scale development.
3. Scale evaluation.

4.1. ITEM DEVELOPMENT

4.1.1. IDENTIFICATION OF THE DOMAIN(S) AND ITEM GENERATION

According to Kline (1993), a domain or construct is an investigated concept, attribute or unobserved behavior. Therefore, the study's domain should be established and defined before any item activity is carried out (Raykov & Marcoulides, 2011). Having a clear understanding of the phenomenon being studied, as well as the boundaries of the domain, will make item creation and content validation much easier.

As described above tourism being a susceptible industry, relies on the image created in tourists; any unwanted or uneven incident impacts destination image. One of the devastating effects of a crisis is that it negatively affects the image. So, tourism stakeholders need to revive the destination's image at a time of crisis. Researchers have suggested strategies, practices and measures to mitigate the negative impact of a crisis from time to time. But these studies are mostly qualitative and lack a well-defined measurement scale. Given the importance of crisis management strategies in tourism, the present study's main domain is to develop a scale for crisis management strategies.

After defining the domain of the study, the next step is to identify an item pool. This step is known as item generation or question development (Kline, 1993). There are two ways to find the right questions to ask: deductive and inductive. By reviewing relevant literature, the deductive method can be used to identify items based on preexisting domain-specific scales and indicators. The inductive approach, on the other hand, entails coming up with ideas based on methods like focus groups and personal interviews that are used in exploratory research.

The deductive strategy relies on a review of relevant literature and an analysis of relevant scales and indicators to identify items. Classification by starting at the top is also called 'logical partitioning'. The inductive approach, also known as 'grouping' or 'classification from below', generates items based on individual responses. Domain items can be identified

using qualitative data gathered through in-depth interviews, focus groups and other forms of exploratory research. Morgado et al. (2018) highlight the importance of this strategy.

To generate items interviews were conducted to identify destination crisis management activities or strategies used by the Department of Tourism in Kashmir in managing political crises. The interview brings out the activities used by the directorate of tourism to mitigate the political crisis prevailing in Kashmir. This interview increases the horizon regarding political upheaval and its impacts on the image of Kashmir tourism. The crisis management activities/strategies extracted from the interviews became the base for setting up the questionnaire and its development.

4.1.2. CONSIDERATION OF CONTENT VALIDITY

The process of checking items for content validity came after the items themselves were created. In other words, the “adequacy with which a measure analyzes the domain of interest” (Morgado et al., 2018) is what we mean when we talk about ‘content validity’, also known as ‘theoretical analysis’ (Hinkin, 1995). Content validity is crucial in scale development as it ensures that the items included are relevant and representative of the domain being measured. Without content validity, the scale may not accurately measure the construct of interest, and the results obtained from it may not be reliable or valid. Therefore, it is important to ensure that the items included in the scale are relevant and comprehensive to accurately measure the construct being studied. Following the generation phase there were more items and some were irrelevant to the main domain. To check whether the items generated are accurate, relevant, interpretable and appropriate, content validity was undertaken. Assessment of content validity can mainly be done through expert and target population evaluation (Boateng et al., 2018).

After the item generation stage, the list generated was validated by consulting three experts from crisis management, tourism management and destination image recovery. The items which were developed earlier were shown to the experts for their reviews. In their opinion, “accurate, relevant, interpretable and appropriate” items were accepted or modified while irrelevant items were rejected.

After evaluation by experts, the next step undertaken was to undergo an assessment by the target population. The main focus of this evaluation by the target population was to check ‘face’ validity, the “degree that respondents or end-users [or lay persons] judge that the items of an assessment instrument are appropriate to the targeted construct and assessment objectives” (Haynes et al., 1995, p. 243). To check the face validity

of items, a Delphi method was employed; interviews were conducted with five tourism stakeholders, three were from travel and tour operations, and two from the hotel industry. After their opinions and views were given, some items were modified while a few were rejected. After completing the interviews, the items were progressively more accurate and relevant to the study domain.

4.2. SCALE DEVELOPMENT

4.2.1. PRE-TESTING QUESTIONS

After generating the items, the next step was to pre-test the questions before proceeding with scale development. Pre-testing had two aspects: assessing whether the questions accurately reflected the purpose and domain being studied; and evaluating whether the responses produced valid measurements for the questions being asked. Cognitive interviews were used to get the desired results. In cognitive interviewing, potential respondents are given a set of sample survey questions and then asked to describe the thought process they used to come up with their responses. Following Beatty and Willis (2007), for a cognitive interview a sample of 12 respondents was selected. Five were from the travel and tour operations business, four were from the hotel business, and three were houseboat owners. Cognitive interview results clarified and modified items that fitted with the domain of the study. Six items were deleted after the cognitive interview, and modifications and augmentation were made to specific items resulting from them. The process of pre-testing makes sure that those things which need to be asked to respondents are meaningful and precise.

4.2.2. SAMPLING AND SURVEY ADMINISTRATION

Collecting data with minimal measurement error from an appropriate sample size is crucial (Boateng et al., 2018). Once the pre-testing of questions was completed, the study moved on to collecting data from the target population. In this particular study, a simple random sampling method was used to gather data, which is a type of probability sampling. It is widely considered to be the most effective sampling method, as it provides every element in the population with an equal chance of being selected. Since the population in this study is finite and known, the researchers used Krejcie and Morgan’s formula to determine the appropriate sample size.

Keeping in view the study’s domain, non-governmental stakeholders have been taken as the sample unit. As there are many non-governmental stakeholders in the tourism industry, it was impossible to respond to every group. In the present study, only three stakeholders (hoteliers, houseboat owners and travel

agents / tour operators) were selected. Stakeholders have an essential role to play in implementing strategies to recover image during a crisis. The present study's total population was finite, the data for stakeholders (hotel, houseboat, travel agencies) was taken from the Department of Tourism Kashmir (2019), the pioneer body concerned with the registration of stakeholders. The sample for the present study was determined by Krejcie and Morgan's (1970) which suggests for the population of 3462, the appropriate sample needed is 346. For the total population, which is the combination of P1 (population of hotels registered with Department of Tourism Kashmir DTK) + P2 (population of houseboats registered with DTK) + P3 (population of travel / excursion agents and adventure tour operators registered with DTK), the sample was propositionally taken and is depicted in Table 1.

Table 1. Sample size

Stakeholder	Area	Population	Propositional sample	
Hotel (P1)	Srinagar	430	43	
	Budgam/ Yousumarg	4	1	
	Sonamarg/ Ganderbal	16	2	
	Pahalgam	99	10	
	Gulmarg	46	4	
	Total (P1)		595 (17.18%)	60
Houseboat (P2)	Nigeen / Dal Lake	910	91	
	Total (P2)		910 (26.28%)	91
Travel / excursion agents and adventure tour operators (P3)	Kashmir division (except Gulmarg, Pahalgam, LEH & Kargil)	1565	156	
	Pahalgam	237	23	
	Gulmarg	155	16	
	Total (P3)		1957 (56.44%)	195
	Total P (P1 + P2 + P3)		3462	346

Note: P1 – population of hotels registered with Department of Tourism Kashmir (DTK), P2 – population of houseboats registered with DTK, P3 – population of travel / excursion agents and adventure tour operators registered with DTK.

Source: Department of Tourism Kashmir (2019).

The Kashmir Valley was selected as the study area because current research deals with the evaluations of crisis management strategies in recovering the image of Kashmir tourism.

4.2.3. ITEM REDUCTION AND EXTRACTION OF LATENT FACTORS

Item reduction analysis is an essential step in the scale development process to ensure that the final scale consists of a set of items that are reliable, valid and relevant for the construct being measured. The analysis aims to eliminate redundant or poorly performing items, leaving only the most effective and informative ones. This helps to reduce respondent burden and enhances the accuracy of the measurement by minimizing the impact of extraneous factors such as measurement error and response bias. Various techniques can be used for item reduction, including factor analysis, item-total correlation analysis and expert judgment (Thurstone, 1947). Therefore, this phase seeks to identify items for deletion or modification that do not have or have the weakest relationship to the domain under study.

4.2.4. RESULTS OF FACTOR ANALYSIS

Principal component factor analysis and varimax rotation were utilized to determine the underlying dimensions of tourism crisis management strategies. The measurement scale comprised 38 items, and a latent root criterion (eigenvalue) value above 1.0 (shown in Figure 1) and a factor loading of 0.50 were used as inclusion criteria for items. Six variables, entitled 'security and awareness', 'innovative marketing', 'promotional measures', 'partnering', 'finance' and 'media' were extracted from the analysis and accounted for 72.07 percent of the total variance as shown in Table 2. Using Kaiser-Meyer-Olkin (KMO) and Bartlett's tests, the adequacy of the data for factor analysis was evaluated, and the results (as shown in Table 3) indicated satisfactory results.

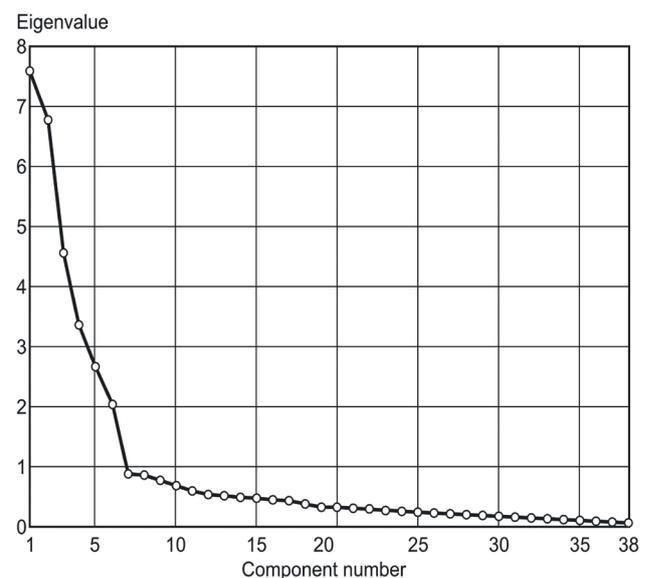


Figure 1. Scree plot
Source: authors

Table 2. Factor loading

No.	Attributes	Factor loading					
		F1	F2	F3	F4	F5	F6
Factor 1 (F1): Media							
1.	MEDI1: Media should provide positive information to target audience	0.915	–	–	–	–	–
2.	MEDI7: Encouraging travel writers to travel	0.886	–	–	–	–	–
3.	MEDI3: Threatening and blocking the media for propagating false and distorted information	0.838	–	–	–	–	–
4.	MEDI2: Spreading a feeling of safety and security	0.837	–	–	–	–	–
5.	MEDI4: Cooperation and media relations of tourism departments	0.837	–	–	–	–	–
6.	MEDI5: Highlight positive tourism activities, like zero percent crime rate against tourists	0.834	–	–	–	–	–
7.	MEDI6: Safe place for solo women travelers	0.666	–	–	–	–	–
Factor 2 (F2): Promotion							
1.	PROM2: Arranging familiarisation trips for travel agents and tour operators etc	–	0.896	–	–	–	–
2.	PROM3: Shooting high-definition videos of destinations	–	0.888	–	–	–	–
3.	PROM1: Shooting movies at destination	–	0.879	–	–	–	–
4.	PROM4: Road shows and recovery campaigns in different parts of the country as well as abroad	–	0.874	–	–	–	–
5.	PROM5: Celebrity endorsement	–	0.863	–	–	–	–
6.	PROM6: Development of good promotional materials	–	0.855	–	–	–	–
Factor 3 (F3): Partnering							
1.	PART3: Establishing a partnership between law enforcement agencies, tourism enterprises, the local community and tourists	–	–	0.928	–	–	–
2.	PART1: Working closely with the community and tourism industry representatives	–	–	0.925	–	–	–
3.	PART6: Partnering with outside tour operators and travel agents	–	–	0.884	–	–	–
4.	PART2: Partnering with embassies to improve travel advisories	–	–	0.874	–	–	–
5.	PART5: Inspire volunteerism among locals as this behavior could inspire tourists to visit	–	–	0.803	–	–	–
6.	PART4: Support the foundation of tourism federations and tourism associations	–	–	0.784	–	–	–
Factor 4 (F4): Security and awareness							
1.	SA5: Develop and implement tourist education programs aimed at reducing the risk of being victimized	–	–	–	0.842	–	–
2.	SA1: Maintaining many visible security measures	–	–	–	0.809	–	–
3.	SA2: Increase the presence of uniformed officers in tourist zones	–	–	–	0.789	–	–
4.	SA4: Easily accessible and friendly police	–	–	–	0.766	–	–
5.	SA3: Training police officers in accordance with tourism issues	–	–	–	0.765	–	–
6.	SA6: Give security advice to tourists	–	–	–	0.739	–	–
7.	SA7: Guide tourists and inform them about the situation at the destination	–	–	–	0.504	–	–

No.	Attributes	Factor loading					
		F1	F2	F3	F4	F5	F6
Factor 5 (F5): Marketing							
1.	MAR4: Undertaking intensive marketing campaigns to convince the general public that things are back to normal	-	-	-	-	0.830	-
2.	MAR5: Organising festivals like the snow festival, winter festival, spring festivals etc.	-	-	-	-	0.819	-
3.	MAR2: Bring unexplored destinations to the tourism map	-	-	-	-	0.817	-
4.	MAR3: Tracing out new potential tourism markets to enter	-	-	-	-	0.805	-
5.	MAR6: Organising sports events/activities	-	-	-	-	0.775	-
6.	MAR1: Introduce new tourism products/activities at the destination	-	-	-	-	0.720	-
7.	MAR7: Starting innovative ideas like lighting shows	-	-	-	-	0.577	-
Factor 6 (F6): Finance							
1.	FIN1: Providing governmental grants/ schemes for financing the ventures of tourism stakeholders	-	-	-	-	-	0.821
2.	FIN5: Government financial packages and greater budget allocation towards improvement of tourism destination infrastructure	-	-	-	-	-	0.816
3.	FIN4: Maintaining air fares (provide tax relaxation to airlines or subsidize air fares)	-	-	-	-	-	0.810
4.	FIN3: Reducing prices and offering incentives (e.g. package deals)	-	-	-	-	-	0.773
5.	FIN2: Government measures: tax incentives, special import provision to stimulate foreign investment, tax relief, extended credit to businesses, increased funding	-	-	-	-	-	0.689
Eigenvalue		7.60	6.76	4.55	3.36	2.66	2.03
Total variance explained (%) = 72.076%		13.63	13.06	12.19	11.66	11.63	8.82
Reliability alpha (%)		0.93	0.95	0.93	0.88	0.89	0.86
No. of items (total = 14)		7	6	6	7	7	5

Note: Extraction method: principal component analysis; rotation method: varimax with Kaiser normalization; rotation converged in 6 iterations.

Source: authors.

Table 3. Kaiser-Meyer-Olkin (KMO) and Bartlett's test

Kaiser-Meyer-Olkin (KMO) and Bartlett' test		
KMO measure of sampling adequacy		0.849
Bartlett's test of sphericity	approximately chi-square	11875.897
	<i>df</i>	703
	Sig.	0.000

Note: *df* – degree of freedom, Sig. – significance.

Source: authors.

4.3. SCALE EVALUATION

4.3.1. TESTS OF DIMENSIONALITY

The next step in developing a scale is to examine factor dimensionality through an exploratory factor analysis (EFA). Confirmatory factor analysis (CFA) is used to verify the EFA-extracted factors underlying

measurement features and concept validity. The objective of confirmatory factor analysis (CFA) is to determine whether or not an assumed factor structure adequately explains the data. Researchers can tell if their model is a good fit for the data and if the factors are valid and reliable by comparing the observed data to the hypothesised factor structure.

The Table 4 depicts the dimensions (chi-square: $\chi^2 = 2233.885$; degrees of freedom: *df* = 650; comparative fit index: CFI = 0.952; incremental fit index: IFI = 0.950; goodness-of-fit index: GFI = 0.906; adjusted goodness-of-fit index: AGFI = 0.899 and root-mean-square error of approximation RMSEA = 0.032) show that the data for the model fit and hence a measurement model (as shown in Figure 2) on crisis management strategies could be developed. Following the recommendations made by Netemeyer et al. (2003) the dimensions of crisis management strategies were tested for reliability and validity. Table 5 shows that the created model's composite reliability (CR) values for all tested

constructs are greater than the 0.60 threshold given by Koufteros (1999). In addition, all of the average variance extracted (AVE) values for the various constructs were over the 0.50 cutoff that is generally accepted as being statistically significant (Fornell & Larcker, 1981). Hence, the CR and AVE values confirmed the reliability and convergent validity of the measured constructs. In addition, the discriminant validity of the components under study was confirmed by finding that the square roots of AVE were bigger than the correlations between constructs (Fornell & Larcker, 1981).

Table 4. Goodness-of-fit indices

χ^2	df	CFI	IFI	GFI	AGFI	RMSEA
2233.885	650	0.952	0.950	0.906	0.899	0.032

Note: χ^2 – chi-square, *df* – degrees of freedom, CFI – comparative fit index, IFI – incremental fit index, GFI – goodness-of-fit index, AGFI – adjusted goodness-of-fit index, RMSEA – root-mean-square error of approximation.

Source: authors.

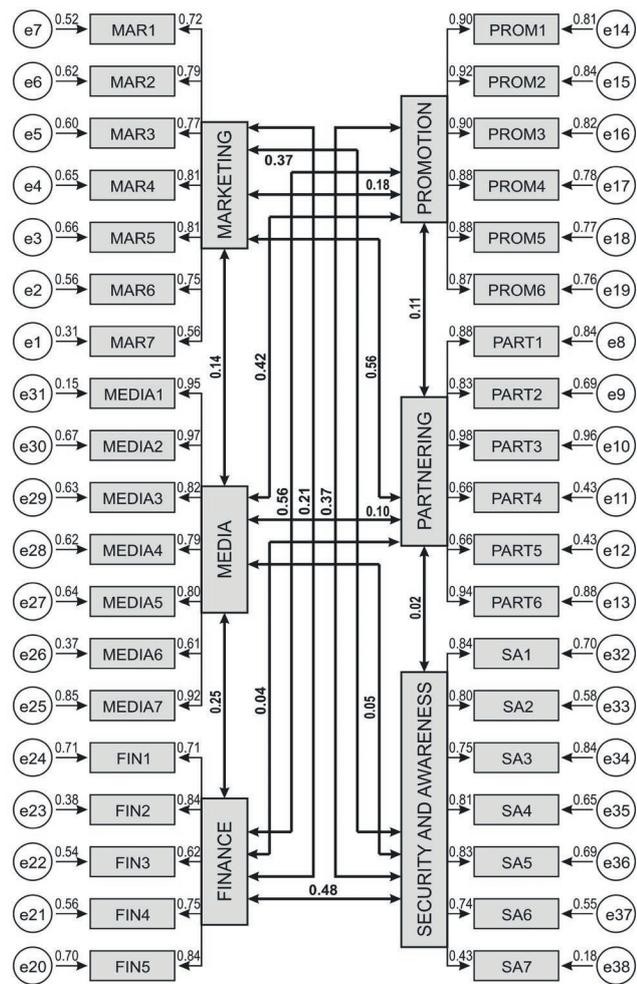


Figure 2. Measurement model

Note: MAR – innovative marketing, MEDIA – media, FIN – finance, PROM – promotional measures, PART – partnering, SA – security and awareness
Source: authors

Table 5. Composite reliability and average variance extracted

Dimensions	Items	Loadings	AVE	CR
Marketing	MAR7	0.561	0.558	0.897
	MAR6	0.745		
	MAR5	0.812		
	MAR4	0.807		
	MAR3	0.773		
	MAR2	0.786		
	MAR1	0.716		
Promotion	PROM1	0.896	0.794	0.959
	PROM2	0.916		
	PROM3	0.904		
	PROM4	0.884		
	PROM5	0.878		
	PROM6	0.869		
Partnering	PART6	0.937	0.693	0.930
	PART5	0.659		
	PART4	0.660		
	PART3	0.978		
	PART2	0.828		
	PART1	0.877		
Finance	FIN5	0.837	0.578	0.871
	FIN4	0.747		
	FIN3	0.734		
	FIN2	0.616		
	FIN1	0.844		
Media	MEDIA7	0.923	0.674	0.934
	MEDIA6	0.606		
	MEDIA5	0.798		
	MEDIA4	0.786		
	MEDIA3	0.793		
	MEDIA2	0.818		
	MEDIA1	0.972		
Security and awareness	SA1	0.836	0.562	0.897
	SA2	0.764		
	SA3	0.759		
	SA4	0.806		
	SA5	0.830		
	SA6	0.742		
	SA7	0.429		

Note: AVE – average variance extracted, CR – composite reliability.
Source: authors.

4.3.2. TESTS OF RELIABILITY

Porta (2008) defines reliability as the degree of consistency observed when a measurement is repeated under the same conditions. Several statistical measures and criteria are used to evaluate the reliability of a scale, including Cronbach's alpha, split-half estimates, ordinal alpha Spearman-Brown formula, etc. Cronbach's alpha is commonly used to determine the reliability of scales (Cronbach, 1951; Raykov & Marcoulides, 2011). In the present investigation, Cronbach's alpha was used to assess a scale's reliability. According to Nunnally (1978) and Hair et al. (1998) Cronbach's alpha for all factors exceeded 0.7, which is an acceptable threshold value. Table 6 displays the results of the reliability evaluation which reveals that Cronbach's alpha for all factors was greater than 0.7. This implies that all of the evaluated factors were reliable.

Table 6. Cronbach's alpha score

Dimension	No. of items	Cronbach's alpha
Security and awareness	7	0.883
Innovative marketing	7	0.895
Partnering	6	0.934
Promotional measures	6	0.958
Finance	5	0.867
Media	7	0.937

Source: authors.

4.3.3. TESTS OF VALIDITY

Scale validity is the extent to which an instrument accurately assesses the latent dimension or construct it was designed to assess (Raykov & Marcoulides, 2011). In this study, both convergent and discriminate validity of an instrument were evaluated. The obtained values of CR and AVE as shown in Table 7, support the constructs' reliability and convergent validity. When the square

roots of AVE and the correlations between constructs were calculated, it was found that AVE values were greater than correlations (Fornell & Larcker, 1981; Manhas et al., 2012). This verifies the distinction or discriminant validity of the studied constructs.

5. DISCUSSION AND CONCLUSIONS

During data collection and analysis, the results revealed that crisis management strategies which include: innovative marketing, promotional measures, financial, media, security and awareness and partnering, significantly impact destination image recovery. Disaster and crisis, particularly political instability and terrorism, negatively impact the image of destinations; mitigation and management is the only response. The study reveals that media strategy significantly affects destination image and has a role in mitigating a crisis which aligns with previous research by Avraham (2015) and Avraham and Ketter (2017) highlighting its importance in shaping destination image. As apparent disasters, political instability and terror attacks impact tourist flows towards destinations, this impact becomes escalated with negative media coverage and a ruined image of the destination. The research results demonstrate a strong positive association between promotional measures and the crisis-affected image of the tourism destination. This is consistent with earlier studies (Baker, 2007; Gilboa, 2006; Ketter & Avraham, 2021; Lahav et al., 2013; Singh & Nazki, 2019; Singh & Nika, 2019) emphasizing the significance of promotional measures in enhancing destination image, even in the face of crises.

While facing adverse events resulting from a crisis, the tourism industry needs the public, tourists and DMO's understanding and tolerance to mitigate the negative impacts. Although managing the crisis is not easy, it is in fact exponentially complex and cooperation between government agencies, practitioners, locals and academics is the only solution. DMOs and stakeholders

Table 7. Discriminant validity results

Dimensions	CR	AVE	Security and awareness	Marketing	Partnering	Promotion	Finance	Media
Security and awareness	0.897	0.562	0.749	-	-	-	-	-
Marketing	0.897	0.558	0.370	0.747	-	-	-	-
Partnering	0.930	0.693	-0.022	0.056	0.832	-	-	-
Promotion	0.959	0.794	-0.171	0.185	0.114	0.891	-	-
Finance	0.871	0.578	0.486	0.209	0.004	-0.056	0.760	-
Media	0.934	0.674	0.005	0.147	0.103	0.420	0.025	0.821

Note: CR – composite reliability, AVE – average variance extracted.

Source: authors.

related to tourism can promote destinations hit by the crisis by connecting local businesses and tourists through effective strategies, which is in line with prior research by Patterson et al. (2010) and Gani et al. (2018) underlining the importance of partnerships in destination management.

From the results of the study, security and awareness have a role to play in mitigating a crisis at the destination which echoes with earlier research by Peters and Pikkemaat (2006), Tsai and Chen (2010), and Park et al. (2019) that stress its role in shaping destination image at a crisis-hit destination. Besides the other factors, innovative marketing and financial strategies have significant role in mitigating a crisis and this is consistent with previous studies by Kotler et al. (1993), Stock (2009) and Walters and Mair (2012) highlighting the effectiveness of innovative marketing strategies in enhancing a destination image. So, the only tool remaining in the stakeholders' hands is to counter the negative impacts of crises by these strategies.

The present study's main impetus was to develop and validate a scale for crisis management which can be significant in image recovery. It is evident from the literature that crisis management strategies are the only solution. The present study has developed a scale with crisis management strategies formed by six discrete factors: media, promotional measures, partnering, security and awareness, innovative marketing, and finance. This scale was later confirmed by CFA where thirty-eight items were retained.

6. RESEARCH IMPLICATIONS

The current study holds substantial importance for scholars and professionals as its outcomes carry theoretical and practical significance. In terms of theoretical implications, the present study has attempted to develop and validate a crisis management strategies scale that is an addition to the current body of knowledge. As far as practical implications are concerned, the study holds significance for tourism stakeholders. Strategies based on media, promotional measures, partnering, security and awareness, innovative marketing, and finance have a significant role in recovering the Kashmir Valley's image as a tourist destination. The work has suggested several specific strategies: "Think as innovative promotional measures", "Film tourism", "Delivering a counter message", "Insta-tourism", "Inspiring volunteerism among locals", "Limiting and narrowing the scale of the crisis", "Discounted or capped airfares", etc. These could be beneficial in reviving the image of Kashmir tourism back to its former glory.

7. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The current study has identified a few limitations that provide valuable directions for future research in crisis management strategies in tourism. The study's generalizability is constrained by its focus on crisis-affected tourist destinations in the Union territory of Jammu and Kashmir, India only, indicating the need for similar investigations in other crisis affected destinations in India. Besides, the study examined the perspectives of three key stakeholders only (hoteliers, travel agencies / tour operators and houseboat owners), it is essential to incorporate the viewpoints of tourists and other relevant tourism stakeholders in future studies. Furthermore, future research could explore comparative analyses between tourists and these stakeholders. In addition, the study followed the scale development and validation procedure outlined by Boateng et al. (2018), but alternative methods for scale development may yield valuable insight into the dynamics of crisis management and destination image over time.

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