Causal, Contextual, and Intervening Factors Affecting the Crisis in Iranian Stadiums

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Original Article

Abstract

INTRODUCTION: Nowadays, government officials seek ways to monitor, control, and manage events and crises due to the concerns of the general public and social media as informative tools. Regarding this, the present study aims to identify and analyze the factors affecting the crisis incidence in Iranian stadiums.

METHODS: The present interpretive qualitative research was performed based on a grounded theory method and latent content analysis technique. The data were collected by the implementation of in-depth interviews with 19 people consisting of the Ministry of Sports and Youth experts and executives, sports management professors, and crisis management specialists. The participants were selected using non-probability and snowball sampling techniques. The interviews were continued until reaching theoretical saturation regarding the research questions and objectives. The gathered data, in form of audio recording and text, were analyzed by MAXQDA software (version 18).

FINDINGS: The interview data were analyzed based on open and process coding. Afterward, the researcher categorized the identified factors into causal, contextual, and intervening conditions. In this regard, the causal factors consisted of the following items: 1) nature of crisis, 2) technical and specialized factors, 3) infrastructure and equipment, and 4) environmental and equipment hazards. With respect to the contextual factors, they included: 1) human resources, 2) nature of sporting events, 3) security factors, 4) vandalism, 5) welfare facilities, and 5) management factors. Finally, the intervening factors were found to entail: 1) stadium atmosphere, 2) political and social crises, and 3) information and communications technology.

CONCLUSION: According to the obtained results, the officials are recommended to consider the paradigmatic model of factors leading to crisis management in stadiums in the crisis management programs adopted for sports venues, especially large stadiums. The consideration of the factors constituting the given model can lead to the improvement of crisis management in the country's sports venues.

Keywords: Causal Conditions; Contextual Conditions; Crisis; Intervening Conditions; Stadium.

Introduction

Nowadays, government officials seek for ways to monitor, control, and manage events and crises due to the concerns of the general public and social media as informative tools (1). Safety management at sports venues is a matter of critical importance since the incidence of any hazards, such as natural disasters, human-made hazards, fire, or terrorist attacks, can affect a large number of people attending an event as spectators. Disasters, such as those occurring in the Hillsborough Stadium in 1989 and the Accra Stadium in 2001 and resulting in a large number of fatalities, including five deaths, shifted the focus to crisis management in sports stadiums (2).

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A sports stadium typically consists of different sections, including spectator seats, corridors, and stairs, which enable the spectators to move around. Moreover, there are corridors that connect these sections to the inner center of the stadium and some places considered for the well-being of the spectators. This highlights the importance of an efficient evacuation plan for the stadium (1, 3). The improper exit passages and stairs of the stadiums present the crowds with difficulty when leaving the place. Accordingly, it is necessary to develop a comprehensive plan to prevent the incidence of crises in these places (4).

Ng et al. (2018) highlighted the importance of road maintenance during cycling races in order to keep the protected areas in a proper condition (5). One of the goals and missions of crisis management programs is to reduce casualties and protect the territory against all hazards, including natural disasters, terrorist attacks, and other anthropogenic hazards. These aims can be accomplished by guiding and supporting people through a comprehensive crisis management system in different stages of risk-based preparation, protection, accountability, recovery, and consequence mitigation (6).

The importance of evacuating stadiums in emergencies is so high that the United States Department of Culture, Media, and Sports enacts laws regarding the stadium evacuation to be used as a safety guide at sports venues (7). The negative psychosocial impacts of some events (e.g., disorders, security issues, noise pollution, and traffic jams) have always attracted the attention of event planners and government officials (8, 9). Moreover, international and national sports organizations have concluded that it is necessary to develop special sports equipment and research facilities, sports information network, and software applications for sports and computer information technology in stadiums (10). Accordingly, the Beijing Olympics highlighted the role of information technology in sports stadiums.

The field of information technology serves various functions in preventing crises in important sports venues (11). In critical situations, the managers of different levels need to access to necessary information for decision making. Therefore, in addition to a health care system, the existence of an information system is required to provide, maintain, retrieve, analyze, and use information properly (12).

Sports fans are regarded as another crisis inducing factor in sporting events at stadiums. In this regard, the fans attend sports events at stadiums hoping their favorite team wins. Accordingly, in case of the unfulfillment of the expected result, there is a huge potential that they turn disappointed and even furious (7, 13).

The world's leading countries seek to host sports events owing to the various benefits these events bring for countries, including cultural and social advantages. This also highlights the importance of crisis management in sports environments. In doing so, countries employ their best personnel since such events affect the future economic and social status of the country, in addition to its sports sector. In this respect, the implementation of sports events is accompanied by various social effects; therefore, it is vitally important for all countries to ensure the security of stadiums.

Iran is experiencing political, social, and even sports crises at the stadiums. The underlying causes of these crises can be related to the country's critical climatic and territorial conditions, diverse cultures and ethnicities, and unfavorable economic conditions. Various factors highlight the importance of examining crisis management at the stadiums of Iran. Some of these factors include numerous clashes between fans in Premier League matches, absence of international sports teams in important Asian Football Confederation Champions League, non-standard equipment at stadiums, ethnic clashes of fans in accordance with cultural geography, and lack of specialized committee and special organizations for stadiums crisis management.

Although new crises are arising in this field in Iran, no effective measures have been yet implemented to effectively manage the possible disasters at the stadiums. This matter highlights the significance of identifying the factors leading to crisis occurrence in these places. Therefore, the present study was conducted with the aim of identifying the crisis factors in sports stadiums in order to make a considerable contribution to sports officials and managers to apply the results of this research in preventing disasters at stadiums. Accordingly, the present study targeted the following question:

- What are the factors affecting the crisis in Iranian stadiums?

Methods

An interpretive-qualitative research was performed to identify the factors leading to crisis in Iranian stadiums, using the phenomenological research strategy, which is based on data theory. Moreover, the latent content analysis technique was applied in this exploratory research. The main data collection tools were in-depth, semi-structured interviews.

The statistical population of the study consisted of sports management experts and specialists, managers, and professionals in the Ministry of Sports, sports organizations, and universities who are aware of the crisis issue, and administrative managers and executives in the field of crisis management. The data were collected in text and audio recording formats. Afterward, the researcher performed an initial coding on the collected data to identify the categories, characteristics, and dimensions of the factors leading to crisis in Iranian stadiums. After achieving theoretical saturation, the factors affecting the crisis incidence in Iranian stadiums were identified.

The research information was gathered in two stages. The first stage involved library research, while the second one consisted of interviews with experts and specialists. The research participants consisted of 19 members of the community selected by the purposive and snowball sampling method. The interviews continued until reaching theoretical saturation regarding the research topic. Figure 1 presents the descriptive chart of the research experts.

The interviews were started with questions about demographic characteristics, followed by the main research questions. The session was terminated with an open-ended question ('Do you think there is something you have not dealt with in this area?'). The interviews lasted 30-45 min with the mean value of 32 min. The researcher analyzed (coded) the interview data collected during the field study chronologically. Based on the feedback from each interview, the subsequent interviews were modified or the direction of the research was redefined.

At the next stage, the interviews were coded and categorized in MAXQDA software (version

Table 1. Steps and structures of research process

	Item	Type
1	Research nature	Exploratory-applied
2	Methodology	Qualitative approach (interview)
3	Research paradigm	Interpretive-construction
4	Research approach	Inductive (component in general)
5	Research strategy	Exploratory (discovery of factors rather than modeling)
6	Data collection source	Existing studies and theoretical foundations / In-depth, semi-structured interviews
7	Data analysis method	Context analysis
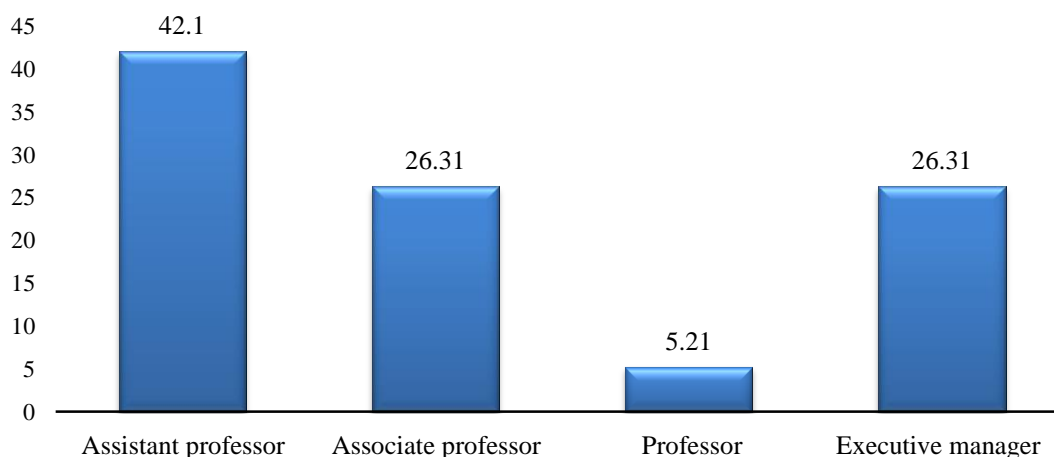
Figure 1. Academic rank and organizational positions of research participants

Table 2. Reliability of interview data by the recoding method

No.	Interview title	Total number of codes	Number of agreements	Recoding reliability (percentage)
1	P_4	14	11	78%
2	P_7	16	12	75%
3	P_{12}	12	10	83%
4	P_{15}	17	15	88%
	Total	59	48	81%

18) using the open coding (subthemes), axial coding (main category), and selective coding (concept) methods. In order to determine the validity of the obtained indicators and codes, the coding process was reviewed by some of the interviewees (i.e., professors), and their views were applied. In addition, two professors of sports management (i.e., supervisor and advisor of this research) reviewed the findings and commented on the different stages of coding.

Subsequently, the test-retest reliability method was applied in order to assess the coefficient reliability of the research. To evaluate the test-retest reliability, some interviews were selected as samples and re-coded at specified time intervals. The identified codes of the two intervals were then compared for each interview. Accordingly, 20% of the interviews and documents underwent the re-coding process by another researcher in the research team. The final data were analyzed by Scott formula, rendering an agreement coefficient of 81%. In addition, the evaluation of the recoding process was performed using the following formula:

$$agreement\ coefficient = \frac{agreed\ categories}{all\ categories} \times 100$$

$$agreement\ coefficient = \frac{48}{59} \times 100 = \%81$$

In this study, 20% (n=4) of the implemented interviews were randomly selected and coded twice at a 30-day interval by another researcher in the research team. In a study performed by Stemler (2001), the reliability level of more than 60% was considered acceptable (14). Table 2 presents the results of the recoding process.

Based on the results of Table 2, the total number of codes and agreements between the two stages with a 30-day interval were 59 and 48, respectively. Moreover, the re-coding reliability of the conducted interviews performed by Scott's formula was evaluated at 81%. Given that the obtained reliability rate is more than 60% (Stemler, 2001), it can be concluded that it is confirmed and accepted.

Findings

In the present descriptive study, 89.47% and 10.53% of samples were male and female, respectively. Regarding the academic rank and organizational position of the interviewed members, 42.10%, 26.31%, 5.21%, and 26.31% of the cases participating in the research were assistant professors, associate professors, professors, and executive managers in the field of crisis management, respectively.

The age range of the participants was 40-70 years. In this regard, 26.31%, 63.15%, and 10.42% of the subjects were with the age ranges of 40-50, 50-60, and 60-70 years, respectively. The demographic characteristics of the research participants are presented in Table 3.

Table 3. Academic and occupational information of the research participants

Post	Number	Rank or position	Field of Study
University faculty member	9	Assistant professor, Associate professor, Professor	Sports management and research experience in crisis and turmoil management in sports
General and executive managers of the Ministry of Sports	3	Manager	Sports, travel, and tourism management
Experts in the field of crisis management	3	Red Crescent experts, firefighters	Urban management, safety management, and public health
Officials of sports stadiums	4	Officials of sports stadiums	Physical education and sociology

The researcher analyzed (coded) the data qualitatively in each time interval. Eventually, although a theoretical saturation was achieved after 17 interviews, the researcher conducted two more interviews to ensure the accuracy of this claim. As a result, the saturation of the created categories was obtained. Afterward, the analysis and categorization of the meaning units led to the emergence of 68 (82%), 81 (86%), and 22 (25%) themes for causal, contextual, and intervening factors, respectively.

After the evaluation of the total initial themes based on consistent text reviewing and supervisor and advisor's advice, the repetitive, ambiguous, and irrelevant codes were removed. Finally, a total of 171 initial themes with a frequency of 193 were subjected to further categorization.

Since the employed qualitative analysis approach was based on the Strauss and Corbin model, the factors leading to the incidence of crisis in stadiums were categorized based on three characteristics related to causal, contextual, and intervening factors. After the initial coding of the research interviews and performing semantic analysis, the codes were categorized into themes and subthemes. Figure 2 depicts the frequency of the codes affecting the each of the investigated factors.

The data analysis led to the emergence of four main themes related to the causal factors affecting the crisis incidence at stadiums. These factors included the nature of the crisis, technical and specialized factors, infrastructure and equipment (i.e., crisis aggravating factors, sports equipment, construction indicators, locker rooms, gym roofing, doors, and gym flooring), and environmental hazards (i.e., natural disasters).

In addition, a total of six main themes were obtained for the contextual factors. These themes consisted of human resources (i.e., personnel and staff training), nature of sporting events (i.e., coaches and players' performance, event executives, and referees), security factors, vandalism (i.e., group, instrumental, verbal, and physical vandalism), welfare facilities (i.e., welfare equipment and services), and management factors (i.e., information management, resource management, mismanagement, decision making, event management, and crowd management).

Furthermore, considering the intervening factors leading to the crisis occurrence at stadiums, three main themes were acquired. They included the atmosphere in stadiums (i.e., feelings, emotions, and disappointment due to failure), unfavorable political and social conditions, and information and communications technology.

Based on the results, among the four causal themes affecting the crisis in Iran's stadiums, 'infrastructure and equipment' had the highest importance coefficient. This theme consisted of seven subthemes with the importance coefficient and frequency of 51. In addition, the main theme of 'technical and specialized factors' had the highest frequency with the importance coefficient of 14 based on Shannon's entropy. Table 4 represents the codes, indicators, themes, and subthemes related to the causal factors affecting the crisis incidence at stadiums.

With regard to the contextual factors affecting the crisis incidence at the stadiums, the theme of managerial factors with an importance coefficient of 34 showed the highest value in Shannon's entropy. Table 5 presents the initial codes, main themes, and subthemes related to the contextual factors leading to the incidence of crisis at the stadiums.
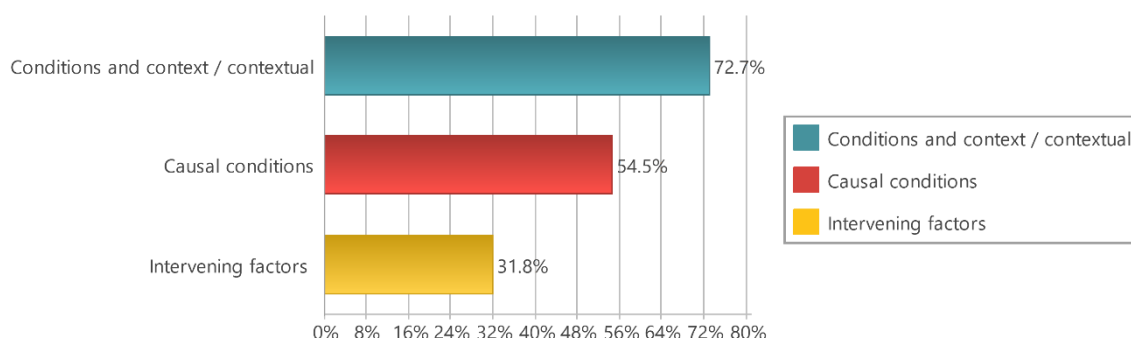
Figure 2. Frequency of the codes affecting the causal, contextual, and intervening factors leading to the occurrence of crisis in stadiums

Table 4. Primary indicators, codes, themes, and subthemes of causal factors affecting the crisis incidence at stadiums

Selective coding	Axial coding	Open coding (tokens)	
Causal conditions	Technical and specialized factors	Crisis nature	Unpreparedness for crisis, lack of resources in crisis, need creation for people, inadequate information for quick decisions, fear and stress in crisis, time constrains to make decisions, unpredictability
			Improper design of sports fields, impaired electrical system in sports venues, disrupted sports facilities and equipment, performance deficiency of designers, supervisors, executors, and owners, non-observance of technical and engineering rules and regulations, poor design and construction of sports venues and gyms, unprincipled construction and lack of relevant authorities supervision, steep slopes around the stadiums heightening the risk upon emergency exit, narrow passages at the sports venue exits, disproportion of urban population with the stadium standard capacity, non-standard installation of gas and flammable facilities, non-standard and non-resistant buildings, old and worn-out texture of sports facilities
		Crisis aggravating factors	Explosives, flammable installations, steep slopes, narrow passages, worn-out texture of building materials, large population, performance deficiency of supervisors, executors, and owners, non-resistant buildings, sports equipment
	Infrastructure and equipment	Sports equipment	Non-compliance of safety rules in using equipment in stadium, non-compliance of safety rules in constructions, non-standard places, non-standard basketball, handball, volleyball, and football poles
		Construction indicators of sports spaces	Improper wall and beam covering, lack of green spaces, lack of safety and healthcare facilities, lack of parking, lack of transportation facilities, lack of facilities in sports center, unavailability, locker rooms, non-standard passage for athletes to the locker room, installation of water dispenser in the passage
		Gym roofing	Overhead projectors without a shield, non-resistance to corrosion due to climatic conditions, non-resistance to earthquakes, lack of insulation against heat and cold
		Doors	Use of multiple and safe exit doors, non-standard doors for easy and fast passage, correct installation of doors tolerating the huge exiting crowd in case of accident, installation with protrusion and sharpness, resistance to shocks and pressure, lack of resistance to climatic conditions (e.g., rain and wind), non-observance of safety and security rules, lack of automatic handles in case of fire, non-fireproof doors and gyms flooring
		Gym flooring	Gym slippery floors, inability to maintain body ergonomics and healthcare of athletes, lack of density and proper elasticity, non-standard dentins in floor covering, lack of proper external cover to protect the body of athletes, presence of uneven surfaces
	Environmental hazards and threats	Natural hazards	Landslides at stadium construction sites, lack of flood suppression channels, tropical storms at stadiums and negligence to this phenomenon, disregard for stadium resistance to earthquakes, disregard for biological features of stadiums, climatic conditions, non-consideration of ecological conditions in the construction of stadiums

Table 5. Codes, main themes, and subthemes related to the contextual factors leading to the incidence of crisis at Iran's stadiums

| Selective coding	Axial coding	Subthemes	Open coding (tokens)
Conditions and context / contextual	Human resources	Aggressive staff	Frequent clashes between spectators and security forces, lack of complete security in stadiums and gyms during matches, beatings and injuries of spectators and players, improper behavior of stadium staff and police
		Staff training	Staff training, cooperating and training of all forces in maintaining discipline, lack of specialized and trained personnel, lack of proper training to staff on proper performance in crisis
	Nature of sports events	Coach performance	Irrational reactions of coaches and players, direct impact of attacking and defensive football on the emotional state of spectators, insensitivity of the coaches to the players' ignorance to the rules, hastiness and confusion of the stadium attendees
		Event factors	Distress in sports, money, sponsorship, doping, corruption and violence, improper performance of leaders, lack of managers' thorough preparation to hold the competition
		Judgment	Increased rate of judgmental errors, decisive effect of championship outcome on spectators, improper behavior of players and coaches with referees
	Security factors		Lack of CCTV system, uncomfortable spectator seats, easy access to the stadium, adaptation of the sports space to users' needs, complete security of stadiums and gyms during matches
	Vandalism	Group vandalism	Demolition of public properties and facilities, deliberate destruction of properties, protests and disturbances in stadiums at the beginning of a crisis, negative reflection of public opinion, swarm of curious journalists
		Instrumental vandalism	Achievement of various goals (e.g., prize, victory, honor, or admiration), use of explosives by spectators
		Physical vandalism	Physical clashes with the fans of the opposing team, throwing dangerous objects into the playing field, destruction of stadium property and spectator buses, violence between spectators and players, beatings and injuries of spectators and players, repeated clashes between spectators and security forces
		Verbal vandalism	Insult, chant of improper slogans, and use of vulgar words by spectators, players, or coaches, attack to equipment, verbal aggression as the most common form of aggressive behavior
	Welfare facilities	Welfare equipment	Lack of accident insurance for all forces, lack of convenient transportation systems, lack of high-quality shops on-site, lack of adequate parking, lack of medical facilities and first aid needed in stadiums
		Service delivery	Lack of timely medical care increasing casualties and injuries, dissatisfaction with the stadium condition and its welfare services, lack of welfare services, increased shortcomings of the stadium environment causing violence among spectators, limited services
	Management factors	Data management	Ignorance of the information received from employees, lack of access to correct information, organizational and information problems in finding a solution, record of permanent accidents and reports
		Resource management	Unskilled security forces of stadiums in face of crisis, crisis management maneuvers in stadiums by responsible organizations, development of a strong standardization management industry, non-maintenance of crisis management validity by officials, failure to employ stadium contractors and designers, actions against the organizational benefits, finances problems of clubs
		Mismanagement	Inconsistency with the police force, perception regarding the safety of organizations against crisis, lack of sense of responsibility and impiety, unpreparedness (surprise) of the officials and spectators upon crisis, improper performance of managers
		Decision-making	Wrong decision-making of officials in crisis situations, conscious intervention of managers, delay in decision-making in crisis situations, inappropriate political decisions in the field of sports, organizational and information problems to find a solution, confusion of officials during crisis
		Event management	Lack of coordination in handing over tickets, focus on spectator seats and lack of focus on the stadium, overcrowd of spectators in the stadiums, unprofessional reactions of the event agents
		Crowd management	Ignorance of crowd management, non-implementation of maneuvers for crowd management, poor coordination on the field and non-satisfaction of collective wills, intentional accidents in sports stadiums

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In the present study, the stadium atmosphere (i.e., feelings, emotions, and disappointment due to failure), political and social crises, and information and communications technology were the obtained as the main themes describing the intervening factors leading to the incidence of crisis in Iranian stadiums. Table 4 summarizes the details of these intervening factors. In addition, Table 6 presents the main themes and subthemes of intervening factors leading to the incidence of crisis in Iranian stadiums.

Figure 3 illustrates the final obtained model

Table 6. Main themes and subthemes of intervening factors affecting the crisis incidence in Iranian stadiums

Selective coding	Axial coding	Subtheme	Open coding (tokens)
Intervening factors of crisis incidence at Iranian stadiums	Stadium atmosphere	Emotions and Feelings	Increased tension between spectators in derby, misbehavior of aggressive staff, youthful enthusiasm and aggression, immaturity of juveniles, grief due to failure, blaming officials, players, police, and referees, fear of stadium atmosphere, emotional reactions to crisis in stadiums, irrationality of some spectators
		Disappointment due to failure	Failure acceptance, disbelief in results or circumstances
	Political and social crises		Political dissatisfaction and its spread to stadiums, unfavorable economic condition in society and its spread to stadiums, cultural poverty in society, unemployment
	Information and communications technology		Failure to communicate with other influential factors, media management, improper utilization of technological communication routes, inconsistency of the stadium scoreboard with reality, rumors in social media, unhealthy sports cyberspace, technological crisis due to unintentional human intervention
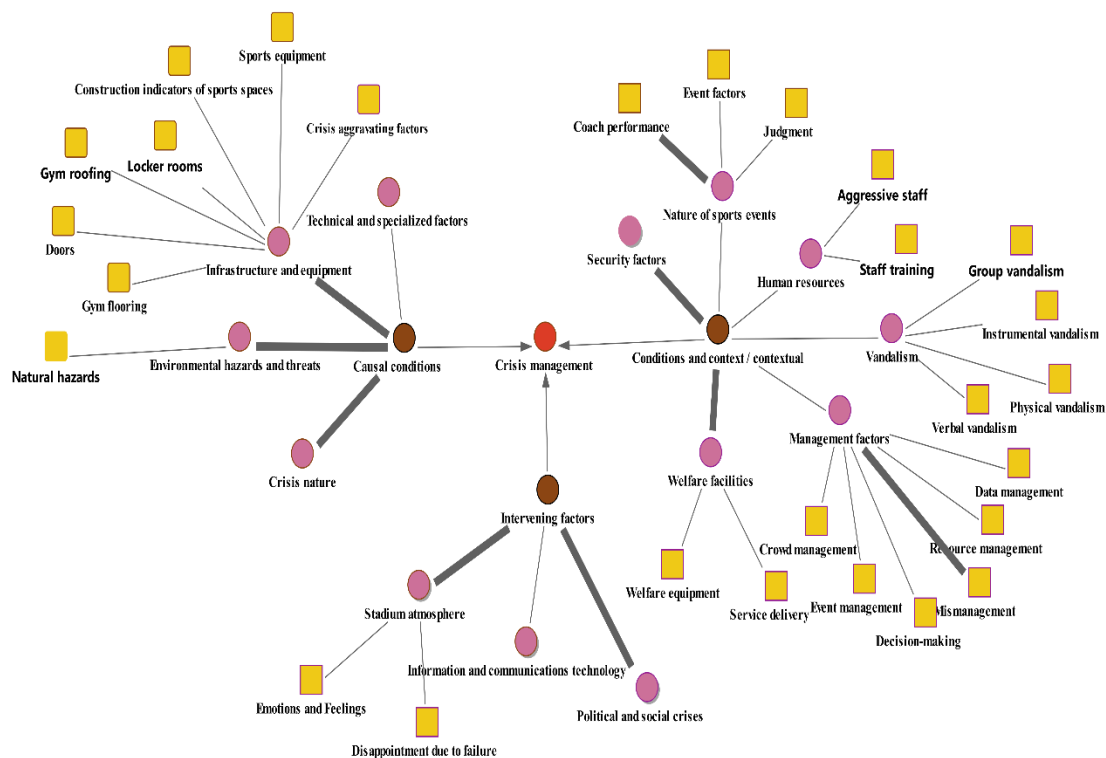
Figure 3. Final model of causal, contextual, and intervening factors affecting the crisis incidence in Iranian stadiums

presenting causal, contextual, and intervening factors affecting the incidence of crisis in Iranian stadiums.

According to the obtained results, the causal factors leading to the incidence of crisis in Iranian stadiums included the nature of the crisis, technical and specialized factors, infrastructure and equipment, and environmental hazards and threats. Among the mentioned variables, infrastructure and equipment factor showed a stronger effect considering its importance coefficient as indicated by the bold lines in Figure 3.

In addition, these themes included several subthemes, such as crisis aggravating factors, gym roofing, doors, gym flooring, locker rooms, as the designing indicators of sports places and equipment. The results of a great number of studies have been confirmative of the hypothesis indicating the relationship or impact of infrastructure and equipment in sports venues or stadiums.

The management parameters were identified as the main theme in contextual factors. This theme was composed of such subthemes as resource management, mismanagement, event management, crowd management, decision making, and information management.

Another theme related to contextual factors was 'welfare facilities' that included services and welfare equipment.

Vandalism was another main theme that entailed verbal, physical, group, and instrumental vandalism. The security factor was the other theme in relation to the managerial factor leading to the occurrence of crisis in the country's stadiums. Despite the importance of coach performance, the nature of sports events, along with the event and refereeing factors, was also found as a contextual factor affecting the incidence of crisis in Iranian stadiums.

Finally, human resources, including aggressive staff and staff training, were considered an influential factor. The relationship of security factors with crisis incidence has been confirmed in the studies performed across the world. However, the association of welfare facilities with crisis incidence in stadiums still requires the implementation of careful contextual analysis.

Considering the intervening factors leading to a crisis at stadiums, the main theme included stadium atmosphere, political and social conditions of the society, and information and

communications technology. Among these factors, political and social conditions and stadium atmosphere were found to have higher importance. The relationship between these two factors with the occurrence of crises at stadiums has been already confirmed in the literature as previously discussed in the introduction section.

Discussion and Conclusion

Based on the qualitative findings of the study, the causal factors affecting the incidence of crisis at the Iranian stadiums were found to consist of four main themes. These themes included the nature of the crisis, technical and specialized factors, infrastructure and equipment (i.e., crisis aggravating factors, sports equipment, construction indicators, locker rooms, gym roofing, doors, gym flooring), and environmental hazards (i.e., natural disasters).

Among these factors, the two themes of infrastructure/equipment and technical/specialized factors had the highest importance coefficient and frequency. It should be stated that the nature of the crisis is one of the effective factors in the occurrence of crises in the country's stadiums. It should be noted that under a crisis situation, managers should arrive at a perfect solution to take the most advantage of their limited resources and reduce various potential damages despite inadequate information and time constraints.

On the other hand, improper sports field design, electrical system destruction in sports venues, impaired sports facilities and equipment, performance deficiency of designers, supervisors, executors, and owners, non-observance of technical and engineering rules and regulations, poor design and construction of sports venues and gyms, unprincipled construction, lack of relevant authorities supervision, and steep slopes around the stadiums are regarded as technical and specialized factors exposing the spectators to danger upon emergency exit.

Moreover, narrow passages at the sports venue exits, disproportion of urban population with the stadium standard capacity, non-standard installation of gas and flammable facilities, non-standard and non-resistant buildings, and old and worn-out texture of sports facilities are all factors that can cause a crisis or aggravate the damage by a crisis. The application of international standards, developed by international sports federations, in the construction and equipment of various

stadiums can be very practical and effective. These findings are in line with those obtained by Paul (2016) (2), Liu (2011) (3), and Haskin (2004) (1).

Another influencing factor creating crisis at the Iranian stadiums, which is also the most important one, is the infrastructure and equipment. In fact, disruptions in stadiums' infrastructure and equipment have been either the main cause of most of the crises occurred in different stadiums worldwide or an aggravating factor that has increased the damage caused by various crises. In this respect, it should be noted that based on the views of the research participants, the components of infrastructure and equipment factor are divided into seven subthemes, including crisis aggravating factors, sports equipment, construction indicators, locker rooms, gym roofing, doors, and gym flooring.

Moreover, some deficiencies in stadium's infrastructure and equipment exacerbate potential crises. In this regard, such cases as explosives, flammable installations, steep slopes, narrow passages, and worn-out texture of building materials, can not only cause a crisis but also aggravate the damage induced by the crises. Another part of the crises is related to inadequate and non-standard sports equipment used at stadiums.

Failure to follow safety rules in using the stadium equipment may also be regarded as another cause of crisis. On the other hand, there are various standards for the construction of sports facilities minimizing the possibility of catastrophes if observed strictly. As a result, it can be beneficial for the stadium and other sports venue managers to pay attention to such issues as improper wall and beam covering, lack of green spaces, lack of safety and healthcare facilities, lack of parking, lack of transportation facilities, and lack of facilities in sports centers.

Additionally, there are some other factors that can increase the possibility of disasters in sports venues. Some of these factors include gym roofing, doors, and gym flooring, unprotected overhead projectors, lack of corrosion resistance based on climatic conditions. Consequently, it is necessary to use the opinions of relevant experts about the above-mentioned issues when planning the construction of sports venues. This measure leads to the development of sports venues of high security for the use of a large number of people.

The results led to the identification of six main themes related to the contextual factors leading to the incidence of crisis in the Iranian stadiums. These themes included human resources (i.e., aggressive staff and staff training), nature of sporting events (i.e., coaches' performance, event factors, and refereeing), security factors, vandalism (i.e., group, instrumental, physical, and verbal vandalism), welfare facilities (i.e., welfare equipment and human services), management factors (i.e., information management, resource management, mismanagement, decision-making, event management, and crowd management). Among these factors, the main theme of managerial factors had the highest importance coefficient and frequency.

The research participants considered the human factor as the most important factor That this factor refers to the stadium staff since the presence of aggressive and untrained staff in stadiums can lead to irreversible crises. It should be noted that while sporting events are potentially rousing and exciting, the financial aspects of these events (e.g., sponsorships) can increase the probability of the commitment of immoral activities, such as doping, corruption, and violence.

In this regard, the improper performance of leaders as figures influential in spectators' emotions, as well as the lack of the complete preparedness of the managers to hold competitions can be the cause of crisis in certain occasions. Moreover, the increased rate of refereeing errors, the decisive effect of the championship outcome on the spectators, improper manner of players and coaches to the referee, irrational reactions of coaches and players, and insensitivity of the coaches to the players' ignorance to rules can create hastiness and confusion in the attendees of the stadium. In addition, these factors arouse the spectators' negative emotions, thereby leading to crises and conflicts in the stadium.

Furthermore, security factors and unfulfillment of such preparations as the installation of CCTV systems, uncomfortable spectator seats, inconvenient access to the stadium, and non-compliance of sports space with the needs of stadiums and gym users during matches, may increase the risky and provocative behaviors in spectators at the stadium and challenge its security. This issue manifests its enormous

importance when considering the vandalism factor (i.e., group vandalism, instrumental, physical, and verbal vandalism), especially when agitators find the courage to cause confusion in the absence of the mentioned security cases.

The consequences of this problem can be the demolition of public properties and facilities, destruction of properties deliberately and in a planned way, protests and disturbances in stadiums at the crisis occurrence, negative reflection of public opinion, and the swarms of curious journalists. All the mentioned factors can contribute to the crisis and aggravate the negative outcomes.

Additionally, in most cases, it can result in such verbal vandalism and inappropriate behaviors as insulting, cursing, and chanting slogans that contain vulgar words by spectators, players, and coaches. More issues can also be observed, including attacking to equipment, verbal aggression (in more severe cases, physical clashes with the fans of the opposing team), throwing dangerous objects into the sports field, destruction of stadium properties and spectator buses, violence between spectators and players, beatings and injuries of spectators and players, and clashes between spectators and security forces.

Eventually, welfare facilities and management factors were identified as the contextual factors affecting the incidence of crisis at the country's stadiums. It should be noted that welfare facilities actually refer to the inadequate quality of equipment and facilities, as well as services. As mentioned earlier, the huge number of people attending the stadiums have their own special needs and expectations regarding the welfare facilities in the stadium. In case these appropriate services and facilities are not provided, the risk of crises heightens.

Ignorance of the information provided by employees, lack of access to correct information, organizational and information problems in finding solutions, and recording permanent incidents and reports are indicative of inefficient knowledge management. Moreover, ignorance about crowd management, lack of maneuvers for crowd management, poor coordination on the field, unfulfillment of collective satisfaction, and intentional incidents in sports stadiums due to managers' inefficiency in crowd management and unawareness of crowd management domains can

not only provide the prerequisite for the incidence of crisis in stadiums but also intensify the situation.

Based on the qualitative results, the intervening factors contained three main themes, including stadium atmosphere (i.e., importance, emotions, and disappointment due to failure), political and social crises, and information and communications technology. Among these variables, the stadium atmosphere was identified as the most important one, compared to other factors in this category.

In Iran, the managers of the stadiums are well aware of the fact that these venues are among the few places in the country where people can not only enjoy attending and watching their favorite team match but also venting their emotions. Therefore, stadiums are often overflowed with feelings which can lead to possible crises unless they are well controlled and managed. In this regard, the two variables, namely political/social crises and information and communications technology, can act similarly as intervening factors in the occurrence and spread of crises in the stadium. Moreover, these factors can increase the possibility or severity of crises occurrence.

Jian Yu (2008) considered the field of information technology as one of the important and necessary factors in managing the crises at stadiums (11). However, no one can ignore the role of political dissatisfaction or unfavorable economic condition and their extension to the stadiums. In this regard, when a large crowd of people is dissatisfied with the political and economic situation of their country and struggle with cultural poverty and unemployment, they have a high potential to outburst emotionally, especially in the extreme emotional conditions of stadiums. On the other hand, it should be also noted that people behave differently in crowds than in privacy; hence, the conditions for confusion and crisis increase sharply.

Conflict of Interests

There is no conflict of interest regarding the publication of this study.

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