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## Crisis Management in Sports During Global Emergencies

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| Article Info                             | Abstract                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Article type:</b><br>Research Article | This study aimed to develop a grounded theory model explaining crisis management processes within Iranian sports organizations during the COVID-19 pandemic. Using Strauss & Corbin's (1990) grounded theory approach, qualitative data were collected through semi-structured interviews with 15 senior sports managers and sport management academics directly involved in decision-making during the pandemic. Data were analyzed through open, axial, and selective coding using manual coding supported by Microsoft Word. The analysis yielded a six-dimensional paradigmatic model. The model identifies six interconnected dimensions rather than a single cause. Managerial weaknesses and health-psychological vulnerabilities constituted the causal conditions. These operated within economic and infrastructural constraints and were shaped by legal and cultural-political intervening factors. Crisis response strategies were categorized as cultural, structural, and health-psychological. These strategies contributed to improved organizational resilience, health protection, and adaptive capacity. This study is limited by its focus on managerial perspectives and the specific Iranian context, which may restrict transferability. Nevertheless, the findings provide a context-sensitive framework to support future crisis preparedness and policy development in sport organizations. |
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| <b>Keywords:</b>                         | Crisis Management, Mental Health, Pandemic, Physical Health, Sport                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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## Introduction

Management faces dynamic challenges in contemporary organizations, where success depends on multiple factors, among which crisis management is paramount (Zheng et al., 2020). Crisis refers to unexpected events disrupting organizational equilibrium, requiring urgent problem-solving (Karimi Jafari et al., 2024; Manoli & Anagnostou, 2023). Crisis management involves strategies an organization adopts to minimize damage to itself and stakeholders (Alizadeh et al., 2023). Standard decision-making in crises typically involves goal setting, problem definition, solution search, consequence evaluation, and solution implementation. However, traditional crisis models often assume these steps follow a rigid, linear progression, which fails to capture the unpredictable nature of global emergencies, highlighting a critical gap in existing managerial theories.

One crisis affecting all individuals globally was the coronavirus outbreak, and as of March 12, 2020, COVID-19 was confirmed worldwide (Zheng et al., 2020). Unlike SARS, MERS, and influenza, this virus spread rapidly with higher transmission rates (Jangi, 2023). Trachsler and Jong (2020) described the situation as critical for managers across all sectors in the Netherlands. Although the initial focus on COVID-19 centered on medical issues and drug development (Ornell et al., 2020), the pandemic also created political, social, economic, and psychological problems, disrupting quality of life (Nikogoftar & Dosti, 2021). Consequently, experts across psychology, economics, and politics began examining consequences for sports and physical activity (Goodarzi & Mousavi, 2021).

To address the scattering of literature, previous studies can be categorized into systemic-managerial impacts and socio-economic consequences. Regarding systemic-managerial impacts, COVID-19 significantly impacted the global sports industry through temporary suspension of leagues and competitions, matches without spectators, cancellation of national and international events, closure of sports facilities, and stagnation of the sports equipment market (Heydari et al., 2020). Major sporting events worldwide were suspended (Peña et al., 2021), including the Tokyo 2020 Olympics postponed for one year (Mehra et al., 2024).

Regarding socio-economic consequences, the sports industry faced scheduling delays, spectator-free events, reduced economic value, and major financial problems (Manoli & Anagnostou, 2023; Rowe et al., 2022). Most global sports leagues lost billions of dollars (Clarkson et al., 2022; Yanguas et al., 2020). Keshkar et al. (2021) noted that club closures, league suspensions, and competition halts were first observable signs of the coronavirus outbreak, which severely affected sports club and federation income, leading to unemployment and bankruptcy. Furthermore, sports including golf, tennis, athletics, basketball, rugby, cycling, boxing, snooker, and ice hockey were all canceled, creating significant financial burdens (Nicola et al., 2020).

These consequences were also observed in the Iranian sports context. Dinani et al. (2024) pointed to COVID-19 effects on Iranian athletes' mental health. Alam & Abdurraheem (2023) showed income shortages, job loss, unemployment, decreased living standards, fitness, public welfare, and increased living costs. Nodehi & Ahmadi (2022) referred to sports' complex closures and staff unemployment. Benar et al. (2025) used grounded theory to identify COVID-19's impact channels on Guilan's sports economy. Findings showed that forced closures of sports facilities and events caused severe revenue losses and employment threats, while reduced household incomes and economic uncertainty decreased demand for sports goods and services. The pandemic led to an unprecedented recession, with six major disruption categories identified: supply, demand, labor market, private sector, public/semi-public sector, and investment. Additionally, Goodarzi & Mousavi (2021) stated that Iranian private and public sports clubs incurred financial and economic losses, which proves that despite historical lessons from SARS, MERS, and H1N1, organizations lacked specific protocols and financial or mental health preparedness plans.

Despite growing literature on COVID-19 impacts on sport, several critical gaps remain. First, most studies have focused on outcomes (financial losses, psychological distress) rather than the process of crisis management within sport organizations. Second, while some localized frameworks have explored crisis dynamics in Iran—such as the grounded theory models developed by Golmohammadi et al. (2023) for sports events, Alavi et al. (2022) for sports facilities utilizing Decision Support Systems (DSS), and Khoshdel Ahmadi et al. (2022) for utilizing modern technologies during the COVID-19 crisis—these frameworks primarily emphasize technical-structural logistics, operational infrastructures, or technological capacities. Consequently, they do not fully capture the multi-dimensional, non-linear dynamics of prolonged emergencies where deep-rooted managerial weaknesses, legal-political intervening factors, and health-psychological vulnerabilities simultaneously disrupt organization-wide processes.

Third, few studies adopt an inductive, theory-building approach grounded in the lived experiences of decision-makers. Accordingly, this study builds upon the existing local literature by addressing these technical and operational limitations. By developing a context-embedded grounded theory model, this research specifically explains how holistic, process-oriented crisis management in sport unfolds under global emergency conditions.

## Research Methods

This qualitative research applied grounded theory using Strauss & Corbin's (1990) approach. Data were collected field-based using semi-structured interviews.

**Participants:** Participants included senior sports managers from the Ministry of Sports and Youth, General Departments of Sports and Youth across provinces, university professors researching crisis management in sports, and crisis management managers. Purposive criterion-based sampling was employed. The inclusion criteria were uniformly applied to all categories of participants without exception, requiring: (a) direct involvement in decision-making during the COVID-19 pandemic, (b) a minimum of 5 years of experience in sports management or crisis management, and (c) willingness to participate. No participants were excluded after meeting these criteria.

**Data Collection:** Interviews continued until theoretical saturation, achieved at the 13th interview. Two additional interviews were conducted for assurance (total N=15). Interviews were conducted over a six-month period from October 2021 to March 2022. Face-to-face interviews occurred in quiet, calm environments. Specifically, 5 interviews were conducted face-to-face, whereas 10 interviews were conducted remotely via WhatsApp video/audio calls and direct phone interviews due to strict pandemic quarantine restrictions, health protocols, and inter-provincial geographical distances. Note-taking and voice recording were used. Average interview duration was 35 minutes.

**Ethical Considerations:** The consent form explained the purpose of the study, the voluntary nature of participation, the right to withdraw at any time without penalty, and how the data would be used. Participants were assured of confidentiality and anonymity; all identifiers were removed and replaced with codes (P1-P15). Audio files were stored on a password-protected computer accessible only to the research team and were deleted immediately after transcription. No incentives were offered for participation.

**Data Analysis:** Data analysis and coding occurred simultaneously with data collection. In open coding, initial codes were categorized based on common themes to form concepts. Concepts were then compared and categorized to determine categories. In axial coding, the paradigmatic model specified causal conditions, core phenomenon, contextual factors, intervening variables, strategies, and consequences. In selective coding, categories were interconnected to present a theoretical framework. Data were analyzed manually following Strauss and Corbin's (1990) constant comparative method. Microsoft Word organized transcripts, codes, and memos. Manual coding was selected to allow deeper theoretical sensitivity and close engagement with data.

**Trustworthiness:** Guba and Lincoln's (1985) criteria were applied. Table 1 shows all four criteria.

**Table 1- Trustworthiness Criteria in Qualitative Research**

| Method Used                                                                  | Criterion       |
|------------------------------------------------------------------------------|-----------------|
| Independent co-coding by two analysts, inter-coder agreement alignment       | Credibility     |
| Participant engagement until saturation, data triangulation, member checking | Dependability   |
| External expert evaluation, process description                              | Transferability |
| Detailed description of environment, participants, diverse perspectives      | Confirmability  |

## Findings

Participants included 15 individuals from university faculty, Ministry of Sports and Youth, and Student Affairs Organization. Six participants were active in both executive and academic fields. Table 2 shows participant characteristics.

**Table 2- Demographic Characteristics of Research Participants**

| Code | Position                     | Age | Gender | Experience | Education     | Field               |
|------|------------------------------|-----|--------|------------|---------------|---------------------|
| P1   | University Faculty           | 55  | M      | 22 years   | Ph.D.         | Executive, Academic |
| P2   | University Faculty           | 49  | M      | 21 years   | Ph.D.         | Executive, Academic |
| P3   | Student Affairs Org          | 38  | M      | 13 years   | Ph.D.         | Executive           |
| P4   | Student Affairs Org          | 45  | F      | 17 years   | Master's      | Executive           |
| P5   | Deputy of Physical Education | 49  | M      | 24 years   | Ph.D.         | Executive           |
| P6   | General Dept. Sports         | 51  | M      | 23 years   | Master's      | Executive           |
| P7   | Ministry of Sports           | 47  | M      | 19 years   | Ph.D.         | Executive, Academic |
| P8   | Headquarters Manager         | 46  | M      | 16 years   | Ph.D.         | Executive           |
| P9   | Executive Deputy Minister    | 51  | M      | 24 years   | Ph.D.         | Executive           |
| P10  | University Faculty           | 45  | F      | 16 years   | Ph.D.         | Executive, Academic |
| P11  | University Faculty           | 39  | M      | 17 years   | Ph.D.         | Executive, Academic |
| P12  | Private Club Manager         | 46  | M      | 14 years   | Master's      | Executive           |
| P13  | Sports Complex Manager       | 52  | M      | 17 years   | Master's      | Executive           |
| P14  | Headquarters Manager         | 36  | M      | 7 years    | Ph.D.         | Executive, Academic |
| P15  | Head Coach                   | 54  | M      | 20 years   | Ph.D. Student | Executive           |

Open Coding: Initially, 353 primary codes were extracted. After removing duplicates and overlapping codes, 164 primary codes entered axial coding.

**Table 3- Code Count per Category**

| Category                        | Number of Initial Codes |
|---------------------------------|-------------------------|
| Managerial Weaknesses           | 42                      |
| Health-Psychological Weaknesses | 28                      |
| Economic Weaknesses             | 19                      |
| Infrastructural Problems        | 21                      |
| Legal Problems                  | 15                      |
| Cultural-Political Issues       | 24                      |
| Cultural Strategies             | 8                       |
| Structural Strategies           | 7                       |
| Health-Psychological Strategies | 6                       |
| Economic Prosperity             | 5                       |
| Health Development              | 4                       |
| Sports Development              | 5                       |

Sample Quotes with Codes:

Managerial Weaknesses (P7): "During the pandemic, our clubs faced a 70% decline in financial balance. We had no reserves for such an emergency." (Code: Significant decline in clubs' financial balance)

Health-Psychological Weaknesses (P10): "Athletes called us daily reporting anxiety, insomnia, and intrusive thoughts. They didn't know when competitions would resume." (Code: Emergence of psychological disorders)

Economic Weaknesses (P12): "My sports business capital dropped by 80% in three months. I had to lay off 15 employees." (Code: Decline in capital of sports businesses)

Infrastructural Problems (P11): "The internet infrastructure couldn't support virtual training. Many athletes in rural areas had no access at all." (Code: Weakness in digital infrastructure)

Legal Problems (P9): "Insurance didn't cover pandemic-related injuries or cancellations. Athletes were left with no financial protection." (Code: Lack of civil liability insurance)

**Table 4- Axial Coding: Code → Subcategory → Quote Example**

| Initial Code Example                               | Subcategory                          | Category                        | Quote (Participant)                                                                |
|----------------------------------------------------|--------------------------------------|---------------------------------|------------------------------------------------------------------------------------|
| "Clubs couldn't pay salaries for 4 months"         | Lack of Financial Resource Provision | Managerial Weaknesses           | P1: "We had no financial reserves. The government support arrived after 6 months." |
| "Athletes feared losing fitness permanently"       | Psychological Weakness               | Health-Psychological Weaknesses | P2: "They thought their careers were over. Depression rates skyrocketed."          |
| "No innovative business models emerged"            | Entrepreneurship Problems            | Economic Weaknesses             | P8: "Everyone waited for handouts instead of creating new solutions."              |
| "Virtual platforms crashed during online coaching" | Weak Internet Infrastructure         | Infrastructural Problems        | P11: "Bandwidth was insufficient. Students in provinces had no connection."        |
| "Sanctions delayed vaccine imports for 3 months"   | External Political Issues            | Cultural-Political Issues       | P14: "Politics interfered with athlete health. This is unacceptable."              |

Axial Coding: Table 5 presents the axial coding structure.

**Table 5- Axial Coding**

| Initial Codes (Examples)                                       | Subcategory                           | Category                        |
|----------------------------------------------------------------|---------------------------------------|---------------------------------|
| Decline in clubs' financial balance, inability to pay salaries | Lack of Financial Resource Provision  | Managerial Weaknesses           |
| Poor equipment quality, unsafe venues                          | Inappropriate Venues & Equipment      |                                 |
| Lack of meritocracy in management                              | Weakness in Human Resource Management |                                 |
| No monitoring of physical health                               | Inappropriate Health                  | Health-Psychological Weaknesses |
| Anxiety, depression, insomnia                                  | Psychological Weakness                |                                 |
| Decline in sports business capital                             | Inappropriate Economic Conditions     | Economic Weaknesses             |
| Lack of creativity and innovation                              | Entrepreneurship Problems             |                                 |
| Inadequate media coverage                                      | Inappropriate Media Performance       | Infrastructural Problems        |

| Initial Codes (Examples)                | Subcategory                                      | Category                             |
|-----------------------------------------|--------------------------------------------------|--------------------------------------|
| Poor digital infrastructure             | Weak Internet Infrastructure                     | Legal Problems                       |
| Underutilized geographical potential    | Underutilization of Environmental Infrastructure |                                      |
| Lack of coordination among units        | Weakness in Laws & Contracts                     | Cultural-Political Issues            |
| No pandemic insurance coverage          | Inappropriate Sports Insurance                   |                                      |
| Improper consumption culture            | Incorrect Environmental Culture                  | COVID-19 Crisis Management in Sports |
| Political interference in sports        | Domestic Political Issues                        |                                      |
| Sanctions delaying medical imports      | External Political Issues                        | Cultural Strategies                  |
| Events with minimal cost/loss of life   | Comprehensive Crisis Management                  |                                      |
| Compliance culture promotion            | Educational-Cultural Approach                    | Structural Strategies                |
| Proficient sports managers              | Managerial                                       |                                      |
| Private sector support                  | Economic                                         | Health-Psychological Strategies      |
| Vaccines and medicines                  | Health                                           |                                      |
| Mental health services                  | Psychological                                    | Economic Prosperity                  |
| Reduced unwarranted costs               | Economic Development                             |                                      |
| New jobs (home sports, remote coaching) | Entrepreneurship Development                     | Health Development                   |
| Reduced physical injuries               | Physical Health Development                      |                                      |
| Reduced mental problems                 | Mental Health Development                        | Sports Development                   |
| Increased safety                        | Development of Sports Venues                     |                                      |
| High-quality events                     | Improvement of Event Quality                     |                                      |

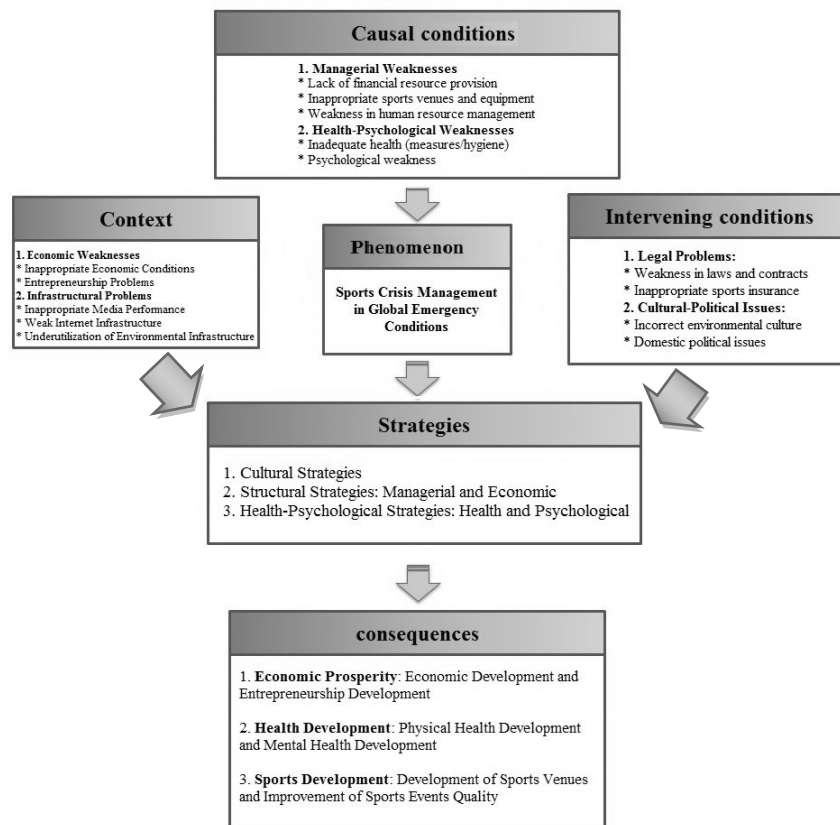
Selective Coding: Table 6 shows the selective coding model.

**Table 6- Selective Coding**

| Axial Codes                                                                                                     | Selective Codes                    |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------|
| Lack of Financial Resource Provision, Inappropriate Venues & Equipment, Weakness in Human Resource Management   | Managerial Weaknesses              |
| Inappropriate Health, Psychological Weakness                                                                    | Health-Psychological Weaknesses    |
| Comprehensive Crisis Management                                                                                 | Crisis Management during Pandemics |
| Inappropriate Economic Conditions, Entrepreneurship Problems                                                    | Economic Weaknesses                |
| Inappropriate Media Performance, Weak Internet Infrastructure, Underutilization of Environmental Infrastructure | Infrastructural Problems           |
| Weakness in Laws & Contracts, Inappropriate Sports Insurance                                                    | Legal Problems                     |
| Incorrect Environmental Culture, Domestic Political Issues, External Political Issues                           | Cultural-Political Issues          |
| Educational-Cultural Approach                                                                                   | Cultural Strategies                |
| Managerial, Economic                                                                                            | Structural Strategies              |
| Health, Psychological                                                                                           | Health-Psychological Strategies    |
| Economic Development, Entrepreneurship Development                                                              | Economic Prosperity                |
| Physical Health Development, Mental Health Development                                                          | Health Development                 |
| Development of Sports Venues, Improvement of Event Quality                                                      | Sports Development                 |

**Table 7- Alignment of Conclusions with Empirical Findings**

| Conclusion Claim                                          | Corresponding Finding                       | Evidence                       |
|-----------------------------------------------------------|---------------------------------------------|--------------------------------|
| Managerial weaknesses are causal                          | 42 codes in Managerial Weaknesses           | P7 quote, Table 4              |
| Health-psychological vulnerabilities are causal           | 28 codes in Health-Psychological Weaknesses | P10 quote, Table 4             |
| Economic and infrastructural factors are contextual       | 19 + 21 codes                               | P11, P12 quotes, Table 4       |
| Legal and cultural-political factors are intervening      | 15 + 24 codes                               | P9, P14 quotes, Table 4        |
| Cultural, structural, and health strategies are effective | 8 + 7 + 6 codes                             | Participant consensus, Table 4 |



**Figure 1. Final Research Model (Sports Crisis Management Model in Global Emergency Conditions)**

**Note:** The model illustrates the core phenomenon (Sports Crisis Management in Global Emergency Conditions), which is triggered by Causal Factors (Managerial Weaknesses, Health-Psychological Weaknesses). This phenomenon, under the influence of Contextual Factors (Economic Weaknesses, Infrastructural Problems) and Intervening Factors (Legal Problems, Cultural-Political Issues), shapes the Strategies employed (Cultural, Structural, and Health-Psychological Strategies), ultimately leading to the Consequences of Economic Prosperity, Health Development, and Sports Development.

## Discussion

The present study aimed to design a crisis management model in the sports sector during the outbreak of epidemic diseases. The research results indicated that:

**Causal Factors.** The causal factors comprised two parts: (1) managerial weaknesses (financial provision, safety standards, human resource management) and (2) health-psychological weaknesses. The first aligns with [Dinani et al. \(2024\)](#), [Alam & Abdurraheem \(2023\)](#), and [Nodehi & Ahmadi \(2022\)](#), who reported income shortages, unemployment, and human resource challenges. The second supports [Boshra et al. \(2020\)](#) and [Shahed Haghighdam et al. \(2020\)](#), who emphasized online psychology services. As P7 stated: "We had no financial reserves. Government support arrived after six months." Although [Goodarzi & Mousavi \(2021\)](#) noted that crises can create opportunities, the lack of financial access and safe equipment severely damaged Iran's sports industry. Crucially, this contradicts the structural boundaries of the crisis model by [Golmohammadi et al. \(2023\)](#), which primarily treats sports events as temporary, logistically isolated occurrences. In a prolonged epidemic pandemic, causal factors are not merely logistical failures; rather, deep-seated systemic weaknesses and multi-dimensional health-psychological vulnerabilities act as non-linear triggers that disrupt entire sport organizations long before an event even takes place. Thus, improving managerial structures and psychological status can enhance future resilience.

**Contextual Factors.** Economic factors (entrepreneurship conditions) and infrastructural factors (media, internet, environment) were identified. These align with [Nicola et al. \(2020\)](#), [Khoshdel Ahmadi et al. \(2022\)](#), and [Ratten \(2020\)](#), who highlighted material, social, and entrepreneurial thinking. [Soheili et al. \(2022\)](#) proposed media support, while [Barakhass et al. \(2020\)](#) emphasized technological innovation. As P11 noted: "Bandwidth was insufficient. Students in provinces had no connection." Entrepreneurial thinking can create alternative jobs during stagnation but depends on digital infrastructure. [Skinner & Smith \(2021\)](#) confirmed that digital and e-sports growth opportunities emerged, making infrastructure strengthening a prerequisite for resilience. These contextual findings expand upon the crisis framework of [Alavi et al. \(2022\)](#), which heavily

relies on Decision Support Systems (DSS) inside static sports venues. While Alavi et al. emphasize automated technological inputs for facilities, our model demonstrates that the macro-context of an epidemic requires systemic entrepreneurial adaptability and regional digital equity, which go far beyond localized facility-based software.

**Intervening Factors.** Legal factors (contracts, insurance) and cultural-political factors (environmental culture, domestic/foreign politics) served as intervening variables. These align with Yoosefi Lebni et al. (2021) and Khoshdel Ahmadi et al. (2022). As P14 stated: "Politics interfered with athlete health. Sanctions delayed vaccine imports for three months." Vague regulations, lack of NGO authority, unclear financial systems, and insufficient insurance coverage complicate crisis management. Poor energy consumption culture, political interference, and unjust sanctions create additional obstacles. Moderating these problems would improve managerial performance.

**Core Phenomenon.** Sports Crisis Management in Global Emergency Conditions means holding events with minimal financial cost and loss of life while adhering to sports-ethical principles and minimizing suspensions. When these conditions are met, the crisis is well-managed.

**Strategies.** Cultural, structural (managerial, economic), and health-psychological strategies were identified. Barrett & Shipway (2024) demonstrated management strategies for small organizations. Hammerschmidt et al. (2021) addressed economic problems and entrepreneurship. Soheili et al. (2020) confirmed systemic approach, e-government, and media support. Cultural reform, structural reforms (meritocracy, private sector support), and health strategies (vaccines, mental health services) together can manage epidemic crises effectively. By integrating socio-cultural and psychological dimensions, these multi-layered strategies offer a more integrated approach than the technology-centric crisis model proposed by Khoshdel Ahmadi et al. (2022). While Khoshdel Ahmadi et al. (2022) focus strictly on utilizing modern technologies and digital platforms during the COVID-19 crisis, our findings show that technology is merely an execution tool; true resilience requires an integrated framework that addresses legal, psychological, and institutional reforms simultaneously.

**Outcomes.** Economic prosperity, health development, and sports development emerged. Sonkeng et al. (2024) showed that access to sports maintains public health. Ratten et al. (2021) noted sport entrepreneurship during crises. Escamilla-Fajardo et al. (2020) found that entrepreneurial attitudes yield positive results. Khoshdel Ahmadi et al. (2022) highlighted technology capacities as positive consequences. As P1 explained: "Home sports created new jobs. People thought more about their health." Proper crisis management prevents unwarranted costs and recovers financial losses.

**Model Limitations and Generalizability.** This model was developed specifically within Iranian sports organizations during COVID-19. The state-influenced, resource-constrained Iranian context differs significantly from Western professional sport systems. Therefore, transferability to other national contexts or commercial sport leagues requires empirical validation. Additionally, the model focuses on epidemic diseases; applicability to other crises (natural disasters, financial crises, security threats) remains untested. Future research should examine model fit across diverse settings and crisis types.

## Conclusion

This study developed a grounded theory model of crisis management in sports during epidemic diseases. The six-dimensional paradigmatic model demonstrates that effective crisis management requires addressing causal conditions (managerial and health-psychological weaknesses), contextual factors (economic and infrastructural constraints), and intervening factors (legal and cultural-political issues). Strategies across cultural, structural, and health-psychological domains lead to outcomes including economic prosperity, health development, and sports development.

### Three Specific Recommendations for Policymakers:

1. **Establish a National Crisis Task Force for Sports** with representation from Ministry of Sports, private sector, and athlete associations. This task force should develop pandemic-specific protocols for league suspensions, financial support mechanisms, and mental health services within 90 days of emergency declaration.
2. **Mandate Pandemic Insurance Coverage** for all licensed athletes and sports organizations. Insurance must include cancellation protection, injury coverage during resumed competitions, and mental health support. This requires legislative action within six months.
3. **Invest in Digital Infrastructure for Remote Sports Delivery** including virtual coaching platforms, bandwidth expansion to rural areas, and e-sports development programs. A minimum allocation of 5% of annual sports budget should be designated for digital transformation.

**Call to Action for Policymakers:** The next global health emergency is not a matter of if but when. Sports

organizations cannot afford reactive, ad-hoc responses. We urge sports governing bodies to implement the recommended task force, insurance mandate, and digital investments before the next crisis emerges. The cost of inaction—financial collapse, athlete mental health crises, and loss of community engagement—far exceeds the investment required for preparedness.

### Research Limitations and Suggestions for Future Research

**Limitations of the Grounded Theory Method:** The subjectivity of coding remains inherent in grounded theory approaches. Although independent coder checks were employed, the researchers' theoretical sensitivity shaped category development. Different researchers might have produced alternative categorizations.

**Sampling Bias:** Participants were exclusively managers and academics. Athletes, coaches, referees, and support staff—groups that suffered greatly from COVID-19—were not included. Their perspectives might differ significantly from managerial viewpoints. As one participant noted (P15), "You should ask athletes, not just us." This sampling bias may have influenced reported themes toward managerial concerns (financial, structural) rather than athlete-centered issues (training disruption, competition anxiety).

**Generalizability Constraints:** The Iranian context—characterized by state-controlled sport organizations, economic sanctions, and centralized decision-making—limits transferability to market-driven sport systems. Findings are best considered context-sensitive rather than universally applicable.

#### Future Research Directions:

1. Conduct multi-stakeholder studies including athletes, coaches, referees, and support staff to capture diverse perspectives.
2. Test the model in post-pandemic conditions and compare results with the present study.
3. Validate the model in other national contexts (e.g., European, North American, Asian sport systems).
4. Examine model applicability to non-epidemic crises (natural disasters, financial crises, security threats).
5. Develop quantitative instruments based on the grounded theory model for large-scale hypothesis testing.

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### Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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### Statement on the Use of AI

During the development of this manuscript, the authors utilized ChatGPT (OpenAI) to enhance the linguistic quality and fluency of the text. Additionally, artificial intelligence was employed to assist with APA reference formatting. Following the use of these tools, the authors thoroughly reviewed and refined the content as needed, and accept complete responsibility for all aspects of the published work.

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