



Providing a Model for the Development of Insurance Fields in Sports Industry

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ABSTRACT

The aim of this mixed-methods study is to develop a model for the development of insurance fields in the sports industry in Iran with a systematic data-based approach in the qualitative phase and a survey approach in the quantitative section. The data collection tools included document review, experts' interviews, and questionnaires, which its reliability and validity were validated. The participants in the qualitative section consisted of 21 university professors in sports management familiar with insurance issues and insurance industry experts familiar with the sports industry selected by purposive sampling approach in 2022. The statistical population in the quantitative section consisted of insurance sales networks and sports executive bodies. Based on the Morgan table, 384 individuals were selected through the available sampling. Data analysis was performed using NVIVO, Smart PLS software. The coding results led to the extraction of 88 primary codes, 20 axial codes, and 10 selective codes. The results showed that the core factors of casual conditions of the model of developing insurance fields in the sports industry included the external conditions, the background factors, the intervention conditions, the strategies, and the outcomes. Based on the research findings, the strengthening of the economic infrastructure and constructive marketing strategies had the most significant impact on the research model.

Introduction

Sport can be one of the important domains in the insurance industry. The prevalence of sports and the existence of growing sport organizations, professional and semi-professional leagues, sports clubs, athletes, coaches, referees, and spectators have led to the transformation of the sports domain into a significant area in terms of the insurance industry. Sports insurance is a specialized type of insurance coverage offered by insurers to policyholders. It provides coverage and financial

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protection against accidents, legal liabilities, employment guarantees, and damages that may occur during a sports event or at a sports venue. It also covers athletes, coaches, and sports organizers. Sports insurance encompasses various types of coverage, including sports accident insurance, sports managers' and employees' liability insurance, general liability insurance, sports event insurance, disability and retirement insurance for professional athletes, and more (Wong & Deubert, 2010). In recent years, there have been numerous reported incidents related directly to sports activities. Indeed, it is widely acknowledged today that risks and various types of accidents are inherent and inseparable parts of sports at different levels (Jamshidi, 2011). The risk in sports is the precondition and foundation of presence of sports insurance, which will greatly impact the demand for sports insurance. As the risks in sports increase, the need for sports insurance also increases, and conversely, as the risk decreases, the demand for sports insurance decreases (Bing-Feng, 2009). Insurance coverage in sports is one of the most practical ways to compensate for the damages resulting from sports-related incidents and minimize their impact on society (Wu, 2011). Sports insurance, as an important component of insurance, has a history of hundreds of years of development. In developed Western countries, sports insurance has become an integral part of the sports system and plays a significant role in the equations and development process of sports. The development of insurance industries in developed and emerging countries has followed a growth trajectory and has played a significant role in the continuous and stable economic growth of these countries. However, in developing countries, it has not been the case, and the role of insurance in the economy and household life is very insignificant (Shahabadi, hikholeslami Kandolusi, & Moradi, 2020).

The importance and necessity of developing insurance in sports stem from the diversity of insurance fields in the insurance industry. Insurance today covers a wide range of commercial and non-commercial activities, and even in cases where a specific insurance field does not exist for a particular activity, insurance coverage is still possible through specialized schemes. In other words, the insurance industry can act as a protective shield against risks, prevent severe economic events, reduce risk, and provide financial and mental security (Dehghani & Abbas Qolibek, 2011). Considering the importance and role of physical activity and exercise in daily life and personal health, examining key factors in sustaining individuals' participation in physical activities enables us to focus on athletes' satisfaction (Gaganis, Hasan, & Pasiouras, 2020).

The main duty of any organization is to identify the needs, wants, and values of the target market and adjust the organization to satisfy them. One of the key missions and responsibilities of any organization is to recognize and fulfill the needs of its customers through the provision of goods or the delivery of specific services. The existence of sports insurance is driven by the fulfillment of individuals' need for peace of mind regarding risks and uncertainties. This need is met by compensating for potential damages that may occur as a result of risks during sports activities (Naderian, Banimasani, Mousavi-Nafchi, Asefi, & Karimian, 2016).

One of the suitable tools for supporting athletes against injuries is sports insurance. Sports insurance is a contract in which the sports medical federation commits to compensate for the incurred damages to the athlete through the payment of a specified amount in the event of an accident (Nedae, Yazdani, & Golpar Raboky, 2020). Since the beginning of the twentieth century, the sports insurance system has made significant progress in many aspects in developed countries, reducing various sports risks faced by professional athletes, amateur athletes, and teams (Guan & Wang, 2018). In general, insurance can be divided into two main categories: social insurance (compulsory) and commercial or optional insurance (including personal insurance, property insurance, and liability insurance). Amateur and professional athletes, coaches, sports officials, managers, employees, and sports organizers, as recipients of insurance in sports and as part of the working community, should be covered by social insurance such as retirement insurance, health insurance, unemployment insurance, etc. On the other hand, Liability insurance for sports facility managers, sports venue insurance, sports event insurance, sports personnel insurance, spectator insurance, and other types of insurance in sports are examples of common commercial insurance in the sports field that are suitable for insured individuals (insurance cases) in sports (Xu, 2013). Today, in addition to efforts towards expanding the quantitative and qualitative aspects of comprehensive insurance coverage, attention is also given to the diversity of insurance coverage

and its multiple dimensions (Nedae et al., 2020). The development of insurance in various international domains has led to its utilization in all dimensions to date. Insurance plays a role in compensating for potential losses, enabling individuals, organizations, and companies to strive for increased confidence in managing potential injuries to themselves, human resources, or hardware and software equipment (Nedae et al., 2020). In other words, the emergence of insurance has led to the establishment of a specific and systematic mechanism for managing potential injuries and damages. The presence of insurance in all areas has resulted in accessible insurance for everyone today ((Fabricant, McLaren, Suryavanshi, Nwachukwu, & Dodwell, 2019); (Asongu & Odhiambo, 2020)). Aman et al. (2018) demonstrated in their research that engaging in sports, whether at an amateur or professional level, carries the risk of injury and harm. They also showed that the likelihood of lower limb injuries is highest in sports such as rugby and football. Therefore, the use of sports insurance is essential (Åman, Forssblad, & Larsén, 2018). Nowadays, insurance-related discussions have permeated all areas of sports, and this has led to the recognition of the development of the insurance industry in sports as an important issue (Nedae et al., 2020).

In a more comprehensive explanation, it should be mentioned that nowadays sports has become one of the most popular and attention-grabbing subjects for people. Apart from its recreational aspect, sports has also become an income-generating industry that attracts the attention of investors. Sports clubs and competitions are considered sources of income. Individuals known as sports managers can be divided into two groups: the first group includes coaches, assistant coaches, fitness trainers, sports teachers, lifeguards, swimming instructors, referees, team doctors, and the like, who directly supervise and manage sports activities. They are referred to as technical managers. The second group consists of those who do not have technical supervision over sports activities but immediately oversee athletes or sports facilities, equipment, and venues. This group includes experts, responsible experts, directors of physical education, federation presidents, boards, and sports associations (administrative managers). From a legal view and regardless of their duties, both groups have legal responsibilities in relation to sports incidents, based on their respective positions (Banim Hasani, 2013). Liability insurance, which includes these individuals, can help mitigate the risks of sports incidents. This means that in addition to insuring themselves against sports accidents, these individuals also insure themselves against their own liability. Establishing legal personality and official structures are prerequisites for a good sports club to be able to protect its members against internal and external complaints and lawsuits. However, the club itself requires support to succeed against the claims of other groups. Therefore, it is necessary for the club to be covered by insurance. All individuals associated with the club, including supervisors, coaches, players, or organizers, should be under appropriate insurance coverage. Many sports federations cover all their members for public debts, professional fines, and personal incidents through insurance. Members should negotiate with the association to ensure that adequate insurance coverage is provided. Otherwise, they must personally obtain insurance (Banim Hasani, 2013).

There are various ways in which insurance becomes indispensable in sports. Firstly, there is insurance coverage for bodily injuries that can be extended to medical personnel, referees, coaches, staff, and spectators. Secondly, there is insurance coverage for injuries caused to others. The policyholder may be a player who is responsible for causing harm to another player or a spectator. In this case, the policyholder may act on behalf of the player. Additionally, the policyholder may have responsibilities regarding the health of athletes, spectators, and other participants through ensuring appropriate sports equipment, controlling the venue of the competition, or overall control of a specific situation (Rah Anjam, 2019).

Sports itself is a type of business. Any sports organization that is not protected against material damages resulting from its business activities desires to be covered by this insurance. Economic liabilities resulting from sports activities may occur. Insurers today have a keen interest in the methods of sports competitions and sports management because they want regulations to be put in place that reduce the risk of injuries and liabilities and provide safer equipment for participants in sports activities (Rah Anjam, 2019).

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All individuals associated with the club, including supervisors, coaches, players, and organizers, should be covered by appropriate insurance. Many sports federations cover all their members for public liabilities, professional fines, or personal accidents. Members should negotiate with the association to ensure adequate insurance coverage, otherwise, they should personally obtain insurance. There are various ways in which insurance becomes indispensable in sports. First, there is insurance coverage for bodily injuries, which can be extended to include physicians, referees, coaches, staff, and spectators. Second, there is insurance coverage for injuries caused to others. The insured party may be a player responsible for injuring another player or a spectator (Nematollahi et al., 2013).

The history of sports insurance in Iran indicates that prior to 1369, about five years athletes were covered by various insurance companies such as Alborz Insurance Company (for one year) and Dana and Iran Insurance Companies (each one for two years). However, due to their insufficient understanding of the structure of physical education organizations and other existing problems within the companies, they were unable to provide the necessary and desired services to athletes in terms of quantity and quality. For example, Iran Insurance Company in the last year of insuring athletes, which was in 1368, succeeded in covering a total of ninety thousand athletes nationwide, which was the highest number achieved in the five-year period that insurance companies were responsible for this matter. They also achieved success in terms of medical coverage (Banim Hasani, 2013). Since the transfer of insurance affairs to the Medical-Sports Services Provision Committee of the Medical-Sports Federation on 1369/1/5, in its first year, the federation managed to improve the insurance record in Iran and increase the number of individuals covered to 94 thousand. This progress continued in the following year, reaching 170 thousand individuals, and each year, with the increasing experience of the relevant officials, this number continued to rise (Karimi, 2013). In addition to providing these services, the Medical-Sports Federation has funded 80 to 90 percent of the construction facilities and medical equipment of its clinic and medical-sports clinics of the central administrations from the income of this committee. Currently, this committee has made such remarkable progress that it has gained the attention of the Asian Confederation. The federation has managed to create the most advanced computerized website in terms of various sports statistics. This computerized website, connected through a wide network across Iran via fax modems, records and updates all information related to the statistics of athletes, including membership, injuries, and their treatments. It can extract and provide necessary information regarding the statistics of athletes in each sport in each province, the number of injuries in each sport, and the type of injury suffered by each athlete, making it available to researchers and interested parties (Rah Anjam, 2019).

Research has been conducted in the field of sports insurance, and the results of Shokri Rad et al. (1399) showed that most athletes have a moderate level of satisfaction with sports insurance services. Furthermore, contextual factors play the most significant role, while intervention factors have the least impact on athletes' satisfaction with sports insurance services. The research findings indicate that the number of visits made by athletes to utilize sports insurance plays an important role in their satisfaction with the services. In a study by Nedaee et al. (2020), The research findings indicated that the highest prevalence of injuries among athletes was in the upper extremities, particularly in the form of dislocations (Nedaee et al., 2020). Additionally, the rate of injury was higher in team sports. The results related to satisfaction and ease of compensation for insured athletes showed that athletes had moderate satisfaction with sports insurance services. Additionally, guarantee was the most important factor and responsiveness was the least important factor in improving athletes' satisfaction with insurance services. The research results indicate that the number of visits by athletes to utilize sports insurance plays a significant role in athletes' satisfaction with the services provided by the Sports Medicine Federation. Javadi et al. (2022) found in their study that athletes had moderate satisfaction with sports insurance services. Among the research factors, guarantee was identified as the most important factor, while equipment was the least important factor in improving athletes' satisfaction with insurance services. Therefore, in order to develop insurance in sports, the identified solutions need to be implemented within a

comprehensive and overarching program across all dimensions and levels of sports (Javadi, Faridniya, Ariyayar, & Taghizadeh, 2022). This can contribute to the development of insurance in sports and the attainment of expected benefits and advantages in all practical sports sectors. Galini et al. (2020) conducted a study titled "Modeling Determining Factors in the Enhancement of Sports Insurance System in Iran" and found that strategic management effectiveness had a significant impact on updating laws, optimizing financial management, developing facilities, enhancing human capital, and capacity building for communication (Galini, Shojaee, Hami, & Soleymani Tape Sari, 2020). Furthermore, capacity building for communication and human empowerment had a significant impact on insurance education and cultural development. The enhancement of the supervision system had a significant effect on improving insurance rights and claim handling. Ultimately, expanding coverage, promoting insurance literacy, and improving customer satisfaction had a meaningful impact on increasing the penetration rate of sports insurance. In general, based on the research findings, it can be concluded that the model for enhancing the sports insurance system includes a systematic flow of structural, capability, process, performance, and outcome factors. In the research conducted by Shahabadi et al. (2020), the results demonstrate that the influence of economic incentives and institutional regime, innovation and invention systems, education and human resource development, and information technology and communication infrastructure have a positive and significant impact on the insurance penetration rate (Shahabadi et al., 2020). However, the impact of economic incentives and institutional regime component was greater than other components. Furthermore, the control variables including per capita income, inflation rate, and unemployment rate had a positive and significant, negative and significant, and negative and significant impact on the insurance penetration rate, respectively. Therefore, the increase in innovative technologies and changes in customer expectations are among the factors that have emphasized the necessity of new innovations in the insurance industry (Gąsiorkiewicz & Monkiewicz, 2023). Arokiam and Pushpanathan (2023) also stated in their research that one of the issues challenging insurance companies is the increasing fraud in the documentation sector and fraudulent activities carried out by some customers to obtain insurance claims, which affects the growth of insurance company services. Insurance fraud is perpetrated by customers, as well as some employees of the companies and sales agencies (Arokiam & Seraphim Pushpanathan, 2023). The development of decision-support systems to examine the claimed data can help prevent such unethical practices and contribute to the growth of the insurance industry and its services.

On the other hand, in a study by Grech (2019), it was found that amateur athletes strongly support the use of insurance services to protect themselves from potential injuries, although a significant number of them had limited information about sports insurance due to low advertising by insurance companies (Grech, 2019). Fabricant et al. (2019), in their research on the functions of the insurance industry in sports development, discovered that collaborations between sports organizations and insurance companies can create a platform for sports development, especially among children (Fabricant et al., 2019). Gaganis et al. (2020) examined cross-country evidence on the relationship between regulations and the development of the life insurance sector. The results of this study demonstrated a similar inverse relationship between the required capital ratio and insurance development (Gaganis et al., 2020). While overall supervisory power is not significant, the ability to intervene in the early stages can have a positive impact on insurance development. Pradhan et al. (2020) examined the interrelationships between financial sector reforms (banking, stock market, and insurance industry) and economic growth in Europe. The research findings indicate convincing evidence of a short-term two-way causality between stock market development, insurance market development, and economic growth (Pradhan, Arvin, Nair, & Bennett, 2020). Therefore, based on the mentioned content, this research aims to answer the following questions:

1. What are the influential factors in the model of developing insurance fields in the sports industry?
2. How the model of developing insurance fields in the sports industry?
3. To what extent is the model of developing insurance fields in the sports industry?

Methodology

In this research, in order to design the model of developing insurance fields in the sports industry in Iran in 1401, after reviewing the literature and theoretical foundations, initially, by conducting targeted interviews and using open coding, the core and selective themes of the development of insurance fields in the sports industry were identified through the data-driven approach. Since this study emphasizes the formation of a new theoretical framework, "theory development," and the need to elicit tacit knowledge from experts in this field, a data-driven strategy was utilized. Among the data-driven approaches, the paradigmatic approach was chosen due to its higher structure. In the second part of the research, to examine the credibility of the model of developing insurance fields in the sports industry based on the extracted factors from the data-driven approach, a quantitative method was employed. Accordingly, this research seeks to discover the relationship between casual conditions, contextual factors, intervening conditions, strategies, and outcomes of the development model of insurance fields in the sports industry and model them. According to the mentioned factors, the present research method is a mixed (quantitative and qualitative) exploratory research. It can be classified based on its objective as applied research, based on the time of data collection as cross-sectional, and based on the data collection method or the nature and method of research as survey research. The population of the qualitative section of the research consists of university professors in sports management familiar with insurance issues and insurance industry experts familiar with the sports industry. The sample size in the qualitative section is 21 individuals. Sampling in this qualitative method is purposeful and the interviewees were selected based on the research objectives. The research experts' characteristics include the following:

- Relevant work experience of experts in sports insurance.
- Presence of experts from senior management positions in insurance companies familiar with the subject of sports.
- Theoretical expertise, practical experience, willingness, and ability to participate in research and accessibility.
- Minimum work experience of 15 years.

Table 1. The research experts' characteristics

Expert no.	gender	Work experience	Education	Expert
1	Woman	16	PhD	Sports Management
2	Man	21	PhD	Insurance Specialist
3	Man	18	PhD	Physical Education
4	Woman	24	PhD	Sports Management
5	Man	18	Master's degree	Sports Marketing
6	Woman	23	PhD	Physical Education
7	Man	17	Master's degree	Insurance Specialist
8	Man	22	Master's degree	Insurance Specialist
9	Woman	26	PhD	Sports Marketing
10	Man	19	PhD	Sports Physiology
11	Man	24	PhD	Sports Marketing
12	Woman	17	Master's degree	Insurance Specialist
13	Man	19	PhD	Sports Management
14	Man	29	PhD	Physical Education
15	Woman	25	Master's degree	Insurance Specialist
16	Man	20	PhD	Sports Marketing
17	Woman	24	PhD	Insurance
18	Man	28	Master's degree	Sports Marketing
19	Man	18	PhD	Physical Education
20	Woman	25	Master's degree	Insurance Specialist
21	Man	16	PhD	Sports Management

In this research, interviews were used as a qualitative data collection tool. The interviewees included university professors in sports management familiar with insurance issues and insurance industry experts familiar with the sports industry. The interviews were semi-structured, meaning that they were conducted based on personal, behavioral, and time-related considerations, ranging from 30 to 60 minutes in this study. The interviews were conducted in person and over the phone, and a framework was developed to guide the interview process. During the interviews, after self-introduction and stating the purpose of the interview, a general definition of insurance fields in the sports industry was provided.

In this research, a total of 21 experts were interviewed. From the sixteenth interview onwards, data saturation was observed, meaning that the information obtained from the interviews became repetitive and no new insights were gained. However, to ensure reliability, four additional experts were interviewed.

In this research, the qualitative validity was assessed through presenting the obtained results to the participants (research participants) for their confirmation. If they validate the findings, it provides greater confidence in the validity of the research. To measure the reliability of the qualitative component, the method of test-retest reliability was employed, which indicates the consistency of data coding over time. This index can be calculated when a coder codes a text at two different time points. For calculating test-retest reliability, several interviews were selected as samples from the conducted interviews, and each of them was coded again at a short and specific time interval. Then, the designated codes from the two time intervals for each interview were compared, and the stability index for that research was calculated based on the level of agreements and disagreements observed in the two coding stages. In each interview, codes that are similar between the two time intervals are identified as agreements, while codes that are dissimilar are labeled as disagreements (Holsti, 1969). The reliability value for the qualitative component of the research was calculated as 0.762.

$$\text{Reliability} = \frac{2 \times \text{Number of Agreements}}{\text{Total Number of Codes}}$$

The population in the quantitative component of this research includes the heads and experts of sports federations, provincial sports associations, and insurance representatives from provincial insurance agencies who were actively involved in sports insurance. Initially, 5 provincial centers (Tehran, Mashhad, Kerman, Shiraz, and Bandar Abbas) were purposefully selected from among the 31 provincial centers in Iran. Then, the sports associations of each provincial center and 2 active insurance companies in each of these provincial centers were randomly selected. The sample size in the quantitative component (model validation) was determined to be 384 individuals based on the Morgan's table.

In addition, two questionnaires were used to collect the required data. Firstly, a specific type of questionnaire consisting of demographic and specialized questions was designed and implemented to gather necessary information from experts and to finalize the list of codes and dimensions related to the model of developing insurance fields in the sports industry. This questionnaire includes 88 questions aimed at validating the components and dimensions related to the model of developing insurance fields in the sports industry. For this purpose, a 5-point Likert scale was used in this questionnaire. The statements used in this questionnaire are designed as follows: completely appropriate, appropriate, relatively appropriate, inappropriate, and completely inappropriate, with values ranging from 1 to 5 respectively. The second questionnaire was used to assess the validity of the model of developing insurance fields in the sports industry. This questionnaire consists of 81 questions (7 questions were eliminated during the expert validation process).

To ensure the validity of the quantitative data and examine the sampling adequacy before factor analysis, the Kaiser-Meyer-Olkin (KMO) measure was used. This method calculates the correlation coefficient of the data. The higher the KMO value, the more suitable the data are for analysis. The KMO value ranges between zero and one, and values above 0.70 are considered suitable for analysis. Additionally, the reliability of the quantitative section of the questionnaire on the model of

developing insurance fields in the sports industry was assessed using internal consistency and Cronbach's alpha coefficient.

Table 2. Reliability and Validity of the Quantitative Section

Dimension	Cronbach's Alpha	(KMO) Measure
Casual conditions	0.730	0.939
Contextual Factors	0.835	0.948
Intervention Conditions	0.841	0.923
Outcomes	0.742	0.953
Strategies	0.878	0.955

Steps of the Data Grounded Process (Qualitative Research Findings)

The qualitative data obtained from the research were analyzed using NVivo software, version 11. The quantitative data analysis in the quantitative section was conducted using SPSS software, version 23, and SmartPLS software, version 3.

Results

Grounded theory, also known as data-driven theory, is a qualitative research method used for theory development around a specific phenomenon. This approach is employed when the existing literature on the subject lacks sufficient richness. The objective is to propose a new theory that has not been previously discussed in research communities.

1 -Designing and formulating research questions

2 -Data collection

3 -Data coding in three stages (open coding, axial coding, selective coding)

4 -Writing analytical notes, capturing thoughts, and interpreting data by the researcher

5 -Theory writing and formulation

In this stage of the coding process, while consolidating and establishing connections between concepts, the process of reaching a theory and articulating its model is finalized. By clustering the concepts around a central concept, a theoretical and systematic narrative is constructed.

Table 3. Selective coding of the model of developing insurance fields in the sports industry

rank	Open codes	Core codes	Selective coding codes	Central factor
1	Creating relevant databases between the two industries			
2	Utilizing complementary information systems			
3	Updating insurance software in the insurance industry			
4	Upgrading the technological infrastructure hardware of both industries	Upgrading technological infrastructure in insurance		
5	Organizing specialized insurance knowledge sessions for the sports community		Upgrading infrastructure	Casual conditions for the development of insurance fields in the sports industry.
6	Introducing innovative training methods by insurance companies	Providing education on insurance principles and concepts to the sports community		
7	Predicting insurance-related in-service training or retraining courses for the sports			

rank	Open codes	Core codes	Selective coding codes	Central factor
	community			
8	Specialized claims management for the sports industry stakeholders	Promoting a culture of claims advocacy among stakeholders in the sports industry	Supportive and facilitative approach	
9	Social advocacy for the stakeholders of the sports industry			
10	Enhancing awareness among stakeholders in the sports industry			
11	Entering into bulk coverage contracts			
12	Developing executive agreements between the insurance and sports industries	Signing memorandums of understanding and agreements at the macro level between the two industries		
13	Identifying opportunities between the two industries			
14	Developing negotiation and review timeframes for agreements between the two industries			
15	Prioritizing sports for sponsorship	Insurance supporters in sports		
16	Employing professional athletes to attract insurance sponsors			
17	Introducing sponsorship opportunities in sports to the insurance industry			
18	Determining the training needs of sports administrators in the insurance field			
19	Including insurance topics in the retraining programs for sports administrators	Improving the awareness of sports administrators about insurance knowledge		
20	Highlighting the benefits and advantages of insurance to sports industry administrators			
21	Gaining insurance knowledge in sports			
22	Preserving insurance knowledge in sports	Knowledge management system		
23	Distributing insurance knowledge in sports			
24	Predicting gateways for data collection and analysis in the sports industry	Identifying information needs	Alignment with organizational structure	Background factors influencing the model of developing insurance fields in the sports industry.
25	Predicting gateways for data collection and analysis in the insurance industry			
26	Developing appropriate processes for information needs assessment			
27	Establishing mechanisms to create transparency in sports			

rank	Open codes	Core codes	Selective coding codes	Central factor
	while respecting privacy	sports institutions		
28	Anticipating self-declaration incentives to promote transparency			
29	Establishing an intelligent control and monitoring system to promote transparency			
30	Consideration of organizational ethics and genuine sports values.			
31	Non-personal use of organizational facilities and resources.			
32	Appropriate responsiveness of officials in the prevention of corruption in sports.	Prevention of corruption in sports		
33	Commitment of officials in the prevention of corruption.			
34	Promotion of a culture of integrity and conscientiousness in the prevention of corruption in sports.			
35	Indigenization of plans by the insurance company.			
36	Verbal creativity and presentation creativity in proposing plans by insurance company representatives.	Innovation and creativity in insurance plans	Continuous control	
37	Continuous identification of sports risks.	Risk and threat management		
38	Risk differentiation and control.			
39	Formation of policy-making councils in sports.			
40	Non-interference of non-sports organizations.	Presence of experts at the sports management level		
41	Establishment of a sports governance system.			
42	Transparency of policies and appropriate direction.	Existence of transparent sports policies	Specialization in affairs	
43	Prioritizing the sports industry.			Interventionist conditions in the model of developing insurance fields in the sports industry.
44	Freedom of action for sports managers.			
45	Transparent financial balance in the sports field.			
46	Prompt payment of compensation by the insurance company.			
47	Provision of consultancy services by the insurance company.	Simplification of the insurance process	Overcoming legal obstacles	
48	Accuracy in performing insurance services operations.			
49	Transparency of sports insurance laws.	Facilitation of sports insurance		

rank	Open codes	Core codes	Selective coding codes	Central factor
50	Comprehensiveness of sports insurance laws.	laws and regulations		
51	Execution of sports insurance laws.			
52	Accuracy and accuracy of insurance services provided.	Improvement of the quality of existing insurance services		
53	Humility and understanding of insurance service providers.			
54	Promptness of services provided.			
55	Creativity and innovation in sales by insurance companies.			
56	Marketing strategies of insurance companies.	Improvement of the quality of existing insurance services		
57	Flexibility in service delivery methods of insurance companies.			
58	Independence in sales methods in different insurance companies.		Constructive marketing	
59	Provision of specialized services by insurance companies to athletes.	Facilitating the process of providing insurance services		Strategies for the model of developing insurance fields in the sports industry
60	Offering remote services.			
61	Predicting joint marketing programs.	Joint marketing programs between insurance and sports		
62	Customized marketing services for the sports industry to the insurance sector.			
63	Organizing joint advertising events.			
64	Financial incentives for sports service providers in terms of tax exemptions.	Economic growth of the insurance and sports industry		
65	Execution of joint economic programs between the two industries.		Strengthening the economic infrastructure of sports	
66	Increasing the capital level of the insurance company.	Financial support of the insurance industry for sports		
67	Purchasing shares in the insurance company.			
68	Participation in the business of the insurance company.			
69	Upgrading the knowledge and professional outlook of sports participants.	Individual development of the sports community		The consequences of implementing the model of developing insurance fields in the sports industry
70	Growth of individual and social aspects of sports participants.			
71	Organizing insurance festivals.		Individual and social culture-building	
72	Insurance media programs.	Development of insurance culture		
73	Holding various cultural competitions in the insurance fields.			
74	Establishing a needs assessment	Facilitating the		

rank	Open codes	Core codes	Selective coding codes	Central factor
75	process for new insurance fields. Predicting incentives for accepting new insurances.	acceptance of new insurance fields		
76	Proper information dissemination for accepting new insurances.			
77	Compensating damages incurred by people through insurance companies.	Improving the public perception of the insurance industry in society		
78	Strengthening public trust in the insurance industry.			
79	Simplifying and making insurance terminology understandable.			
80	Holding joint meetings between responsible parties of the two industries.	Improving communication between the sports community and the insurance industry		
81	Establishing work agreements between responsible parties of the two industries.			
82	Predicting insurance expert in legal units of sports organizations.			
83	Developing an effective survey system.			
84	Developing a system for handling complaints and criticisms.	Efficient public communication system in the insurance industry	Improving relationships	
85	Developing an efficient suggestions system.			
86	Predicting dedicated electronic and internet systems.			
87	Diversifying methods of communication with dedicated systems.	Predicting dedicated insurance systems for sports		
88	Introducing and educating the community about working with systems.			

In this research, expert interviews were conducted with two objectives. The first objective was to present the themes and codes extracted from the literature studies to the experts and seek their opinions regarding these themes and extracted codes, as well as identifying any aspects that were not considered in the literature studies. The second objective of the expert interviews was to gain a better understanding of the variables in order to define their operationalization, extract indicators, and classify them appropriately. The Delphi method was used to finalize the list of themes and codes. If the average score of expert opinions for a proposed code exceeds the threshold value of 3.00, that code will remain in the model. The results indicate that out of the initial 88 codes, 81 codes were approved by the experts and are included in the final model (p -value < 0.05). Seven codes with numbers 14, 16, 22, 25, 31, 80, and 84 did not receive approval from the experts and were removed from the model of developing insurance fields in the sports industry.

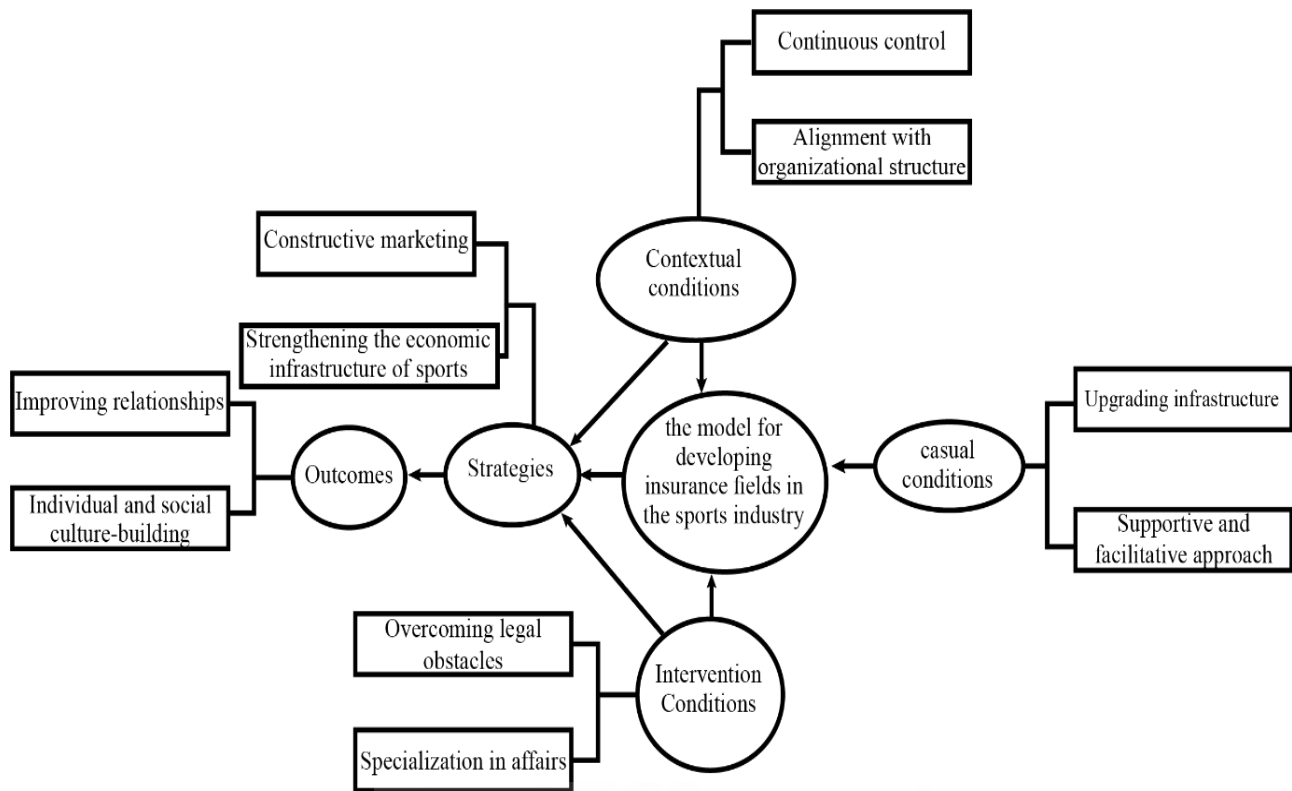


Figure 1. The model of developing insurance fields in the sports industry

To fit the measurement models of composite reliability using Cronbach's alpha and CR, convergent validity, and the structural model fit index (Q^2) were used. The corresponding results are presented in Table 4. Additionally, the standardized root mean square residual (SRMR) index of 0.041 was obtained for the development of insurance specializations in the sports industry, indicating a good model fit.

Table 4. Fit Indices

The organizing factor	Cronbach's Alpha	Composite Reliability (CR)	Convergent Validity	CV Red	CV Com
Casual conditions for implementing the model of developing insurance fields in the sports industry	0.881	0.899	0.660	-	0.247
Background factors of the implementation of the model of developing insurance fields in the sports industry	0.939	0.943	0.737	0.353	0.457
Intervening conditions for the model of developing insurance fields in the sports industry	0.941	0.949	0.768	0.323	0.490
Strategies the model of developing insurance fields in the sports industry	0.953	0.958	0.760	0.444	0.492
Outcomes of the model of developing insurance fields in the sports industry	0.956	0.961	0.760	0.436	0.498
Acceptable value	0.600 <	0.600 <			

To examine the significance of research questions, t-statistics have been used. If the t-statistic is greater than 1.96 or less than -1.96 (at a significance level of less than 5%), the question is

confirmed, indicating a significant relationship between the two variables. The results presented in Table 5 indicate that the core constructs of The casual conditions for implementing the model of developing insurance fields in the sports industry, Background factors of the implementation of the model of developing insurance fields in the sports, industry Intervening conditions for the model of developing insurance fields in the sports industry, Strategies the model of developing insurance fields in the sports industry, and Outcomes of the model of developing insurance fields in the sports industry are the constituent factors of the model of developing insurance fields in the sports industry.

Table 5. Examination of the relationship between variables in the third research question.

Factors	Path coefficient	t-statistic	p-value
casual conditions →Background factors of the implementation of the model of developing insurance fields in the sports industry	0.839	29.751	0.001
casual conditions Intervening conditions for the model of developing insurance fields in the sports industry	0.774	16.716	0.001
Background factors →Strategies for developing the model of insurance fields development in the sports industry	0.702	9.141	0.001
Intervening condition →Strategies for developing the model of insurance fields development in the sports industry	0.241	2.961	0.001
Development Strategies → Outcomes of the model of developing insurance fields in the sports industry	0.908	52.647	0.001

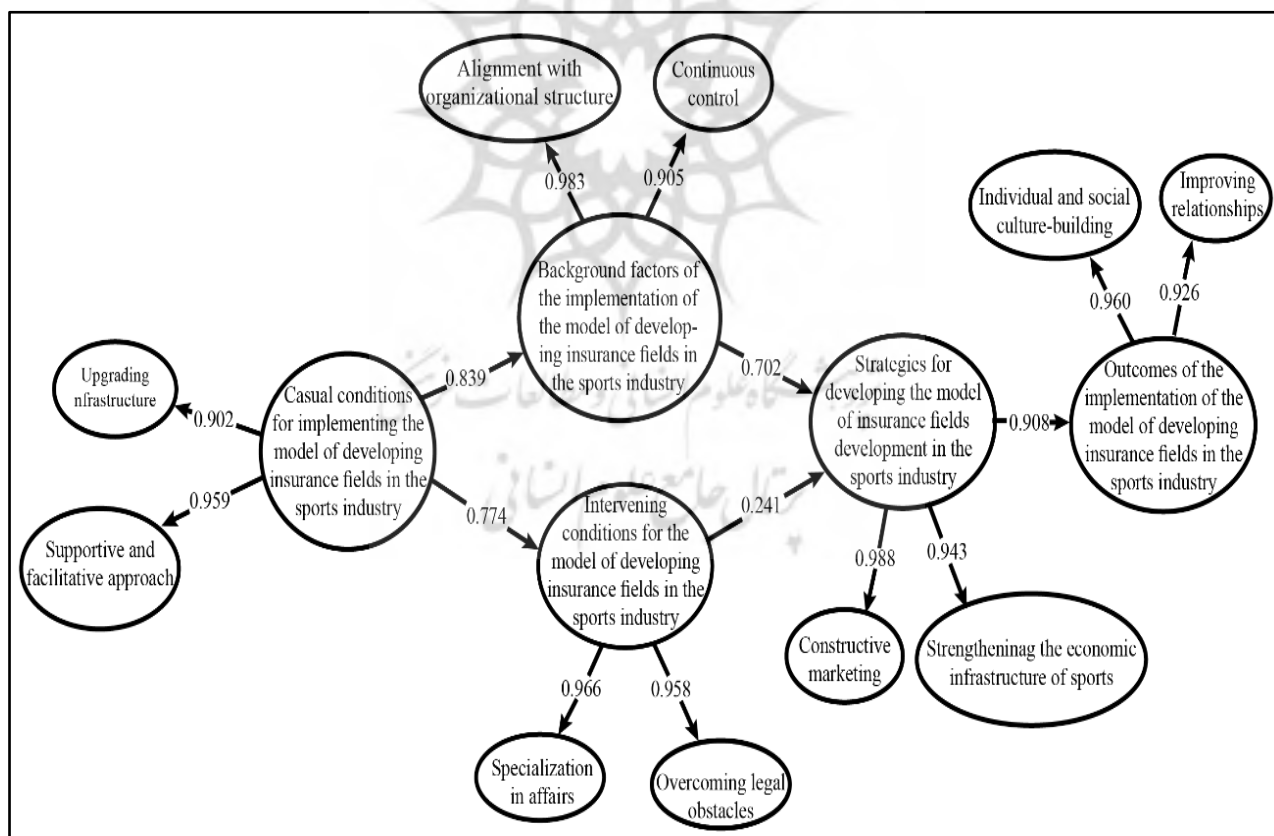


Figure 2. Significance coefficients of research paths

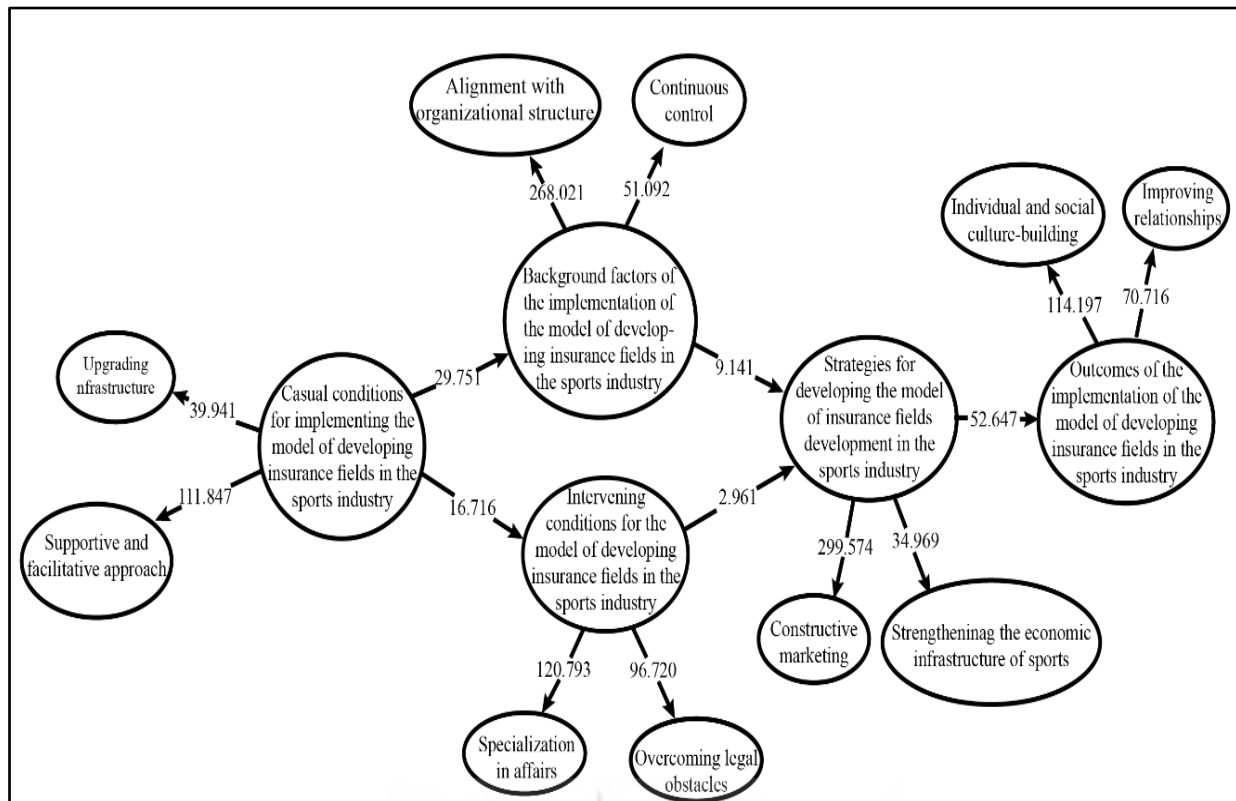


Figure 3. Significance coefficients of t-statistics for research paths

Discussion and Conclusion

The results of the qualitative section of the research showed that the extracted concepts consist of 88 open codes, 29 axial codes, and 10 selective codes, which constitute the model of developing insurance fields in the sports industry. The central concept of Casual conditions which includes selective codes, upgrading infrastructure, supportive and facilitative approach. The central concept of Background factors includes selective codes, organizational structure alignment, and continuous control. The central concept of Intervention conditions includes selective codes, specialization in affairs, and overcoming legal obstacles. The central concept of Strategies includes selective codes, constructive marketing, and strengthening the economic infrastructure of sports. The central concept of Outcomes includes selective codes, individual and social culture building, and improving relationships. In explaining and justifying this question, it can be said that in order to improve the sports insurance system, besides providing environmental and structural facilities, there is a need to achieve tangible performance components for customers and stakeholders of sports insurance. Sports insurance sectors should be able to gain the trust of stakeholders at a high level. Additionally, investment in the expansion of sports insurance and improving the health status of insured individuals can have a significant impact on reducing healthcare costs incurred by insurance companies and the public. Investment in expanding sports infrastructure, increasing access to sports facilities, and attracting sports professionals as coaches should be given serious attention in order to enhance the quality of sports training programs. Proper cultural promotion by relevant authorities, stakeholders, including mass media, athletes, coaches, and sports club officials, is essential to familiarize them with the necessities and benefits of sports insurance coverage more than ever before. Developing the relationship between insurance companies and sports helps identify the needs and concerns of both parties, and insurance companies strive to develop sports insurance offerings. If an insurance company can properly identify the issues, needs, and concerns of the sports community and take steps to address them in a way that avoids a sense of selling and confrontation among policyholders, it indicates that the company is on the right track. Therefore, the relationship established with sports authorities should be friendly, meaning that the sports community should see the insurance company as a partner in solving their problems. Based on the

findings of Nedae et al. (1399), assurance and responsiveness were identified as the most important factors, while insignificance was the least important factor in improving athletes' satisfaction with insurance services (Nedae et al., 2020). In Javadi et al.'s (1399) study, it was revealed that for the development of insurance in sports, the identified solutions need to be implemented within a comprehensive and overarching program at all levels and dimensions of sports (Javadi et al., 2022). This can contribute to the development of insurance in sports and achieve the expected benefits and advantages in all practical sports sectors. In Fabricant et al.'s (2019) research, they reported that by examining the relationship between public health insurance status and physical activity among American youth, collaboration between insurance policyholders and community sports programs can enhance levels of physical activity and sports engagement (Fabricant et al., 2019). The results of the validity examination of the research model demonstrate that the central elements of the conditions, background factors, intervention conditions, strategies, and outcomes are the key components of the model of developing insurance fields in the sports industry. Among them, strengthening the economic infrastructure and constructive marketing strategies have the most significant impact on the research model. In explaining and justifying this matter, it can be said that marketing in the insurance industry is one of the major challenges for insurance companies and can have the greatest influence on their success or failure. Marketing is a key concept in customer and market relations. For an insurance company to succeed, it must align its goals with customer desires and market requirements; therefore, marketing is considered a managerial tool from this perspective. Currently, insurance companies are seeking new solutions for profitable growth, increased investment, time and cost management for the growth of their products and commercial services, attracting the best agents, and utilizing the best methods and successful strategies to establish easy communication with agents and policyholders.

On the other hand, there is a need for sports marketing to identify and manage the needs of fans, players, and sports managers and provide market-oriented responses to fulfill these needs. Constructive and interactive marketing addresses many of the challenges between insurance companies and sports. Social security organizations, insurance companies, and sports medical federations each have comprehensive tools for marketing insurance in sports, but due to the lack of a clear procedure and lack of integration, they are unable to fully utilize their capabilities. Specialized insurance in sports does not currently exist, and the existing potential in all sectors must be utilized to cover all aspects of sports under insurance. Additionally, the operational capacity and economic infrastructure of the sports system and insurance companies need to be enhanced to improve performance and ensure sustainability. Since insurance systems face significant changes today, they need multidimensional capabilities to reduce financial and non-financial risks. Therefore, financial transparency should exist in insurance companies, and until their income and expenses are not characterized by a high level of transparency, making sound decisions in this industry will face serious challenges, and they will not be able to solve the problems of the sports industry. In this regard, the results of the study by Farahani et al. (1397) showed that there is sufficient maturity in insurance companies in Iran, but these companies have not made serious strides in the field of insurance in sports. Insurance companies and responsible insurance institutions in the sports sector of Iran have comprehensive tools for marketing insurance in sports, but due to the lack of a clear procedure and lack of integration, they are unable to fully utilize their capabilities (Farahani, Pournaghi, & Mahdavi Kelishomi, 2018). In a study conducted by Grech (2019), it was concluded that amateur athletes strongly support the use of insurance services to protect themselves from potential injuries, although a large number of them had limited knowledge about sports insurance due to inadequate advertising by insurance companies (Grech, 2019). In the study by Aman et al. (2018), the results showed that both amateur and professional sports involve a probability of risk and injury. Therefore, the use of sports insurance is a crucial matter (Aman et al., 2018).

In this regard, according to the findings of the research, it is suggested to strengthen the supervision of the sports insurance industry and formalize this industry, while establishing a strong database of information and data. The existing risks regarding sports insurance are extensive, and sufficient statistics and information need to be collected in all areas. Insurance companies should establish specialized insurance units and then carry out advertising, information dissemination, and

awareness campaigns, delegating all matters to them. All sports insurances should be designed and defined as clear processes from start to finish. Enhancing the flexibility of sports insurance is necessary, as sports activities encompass a wide range of professional and non-professional individuals who need support and protection. In the field of improving social insurance services in sports, it is necessary for the Ministry of Sports to enter into a memorandum of understanding with the Social Security Organization to establish a sports insurance fund in Iran and define a comprehensive social insurance system for the sports community, especially professional and championship sports in the country. Interaction between sports clubs, sports organizations, and insurance companies is important to update the activities and optimize the performance of various aspects of sports insurance, facilitating the presence of insurance companies, insurance representatives, and active brokers in the field of sports insurance. Furthermore, one of the major limitations for researchers is to attract cooperation, trust, and confidence from insurance and sports experts and access to experts knowledgeable about sports insurance laws and the lack of suitable and relevant scientific resources. In this regard, the use of other qualitative methods such as meta-synthesis and thematic analysis is suggested for designing the research model. Additionally, considering the lack of interest from insurance companies to enter the sports industry, it is recommended to identify and prioritize the existing obstacles for their entry into the sports industry in a research study.

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