Further Development of Framework Training for Managers in the Field of Risk Management According to the Requirements of Sports Clubs

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Abstract
Given the current state of the sports market and the risks posed to sports clubs, it is necessary to find ways to provide managers with adequate training to deal with these influences and factors. To this end, a modular training framework for sports club managers has been developed and presented based on the specificities of the environment. Based on the requirements of sports clubs, the main objective of this paper is to optimize this proposed framework in order to best meet their needs, to make it as addressable as possible and to make its integration into practice as effective as possible. In order to achieve the set objective, the methods of empirical research, inquiry and statistical evidence were used. For this purpose, a questionnaire survey was conducted to identify the most significant threats and resulting risks that sports organisations in Slovakia face most frequently in their operational practice. Using statistical research methods, the obtained data were analysed and specific conclusions were drawn about which factors represent the most significant threats to sports clubs. Based on the findings, our proposed modular framework for the professional education of sports managers was optimised to best meet the specific requirements of sports clubs. The main contribution lies in the correction and optimisation of the proposed framework so that sports clubs are able to make the most of the targeted training of sports managers. By focusing on the area of risk management, they will be able to effectively build high levels of resilience and sustainability.

Keywords: Optimalization, Risk Management, Sport Managers, Education, Risks

Introduction

Today's highly globalised world is increasingly influenced by local, regional and even global threats. This brings with it a range of risks that have the potential to fundamentally disrupt the trade and supply relationships that underpin the economies of the developed world. Business risk can take many forms and typically carries with it an increased vulnerability/exposure to disruption arising from the configuration of the organization (Gibb et al., 2006; What, 2020). One of the hallmarks of the rapid development of the economy and society is the development of new types and sectors of business activity. In this context, sporting entrepreneurship gradually came to the fore. Sport itself and the rise in its popularity can be regarded as one of the phenomena of our time. Sporting activities have a strong social and cultural context and the status and importance of sport can be viewed from a number of perspectives. Leisure-time sporting activities have an important place in maintaining an optimal level of physical and mental health in a wide range of the population or in building and maintaining interpersonal relationships.

The sports club and sports business environment is currently undergoing rapid changes and challenges that have a major impact on its future functioning and survival. Current trends in the sports business are causing the sector to become an important part of the national economy. Within the Slovak Republic there are currently 427 068 registered natural persons active in the sports sector. This register includes amateur athletes, professional athletes as well as sports professionals or club officials. Considering the employment in the national economy, which in the second quarter of this year amounted to 2 601 200 natural persons, it is possible to state the considerable size of the sports sector and its importance in the creation of supply chains and economic relations in the country (Buganová et al., 2022; Brutovský et al., 2022; Register, 2024; Zamestnanosť, 2024).

In terms of legal entities (organizations), the current number of registered entities is 7749. A significant factor in this sector has been the impact of the COVID-19 pandemic, which has crippled the entire sports sector and caused significant losses in this area. However, the sports sector has shown a high capacity to recover, showing a 7% growth in the number of registered organisations in the 9 months following the end of this crisis. This is both an indication of the high popularity of sport amongst the broader social strata and its ability to continue to develop (Zamestnanosť, 2024; Register, 2024).

One way to ensure the resilience and sustainability of sports clubs is to integrate an optimized risk management framework and selected elements of business continuity management (BCM) into club structures (What, 2020). BCM is a management discipline that sets out measures to ensure the long-term resilience of an entity through a defined framework. Incorporating these elements with a sports club's BCM system would contribute to improved performance while building a systematic approach to the organisation and the use of resources and reserves. Another important element in the context of global crises is crisis management and risk management systems. These systems have already proven their worth in ensuring the resilience of various organisations and current global trends are leading to their optimisation and wider integration into the sports business segment (What, 2020; Chandak et al., 2022; Furiak et al., 2024; Vasović et al., 2022; Riglietti, 2022). Crisis management, risk management and BCM are considered as key tools to enhance resilience and protect against various crisis situations as well as human errors (Bajgorić et al., 2022).

Current Situation in Sports Clubs in Slovakia

In order to investigate the current needs of sports clubs in Slovakia in the field of risk management, a questionnaire survey was conducted. The population includes approximately 4.7 thousand entities. Responses were collected from the beginning of February 2024 to March 2024. The resulting statistical sample consisted of 177 responses from sport entities. The data obtained showed a statistical error of 6.06% at the 90% confidence interval. When examining internal consistency and reliability through Cronbach's alpha test, the result took the value of 0.71.

Investigating the existence of a relationship focuses on identifying the presence of a relationship between variables and its statistical significance. For this purpose, the Pearson chi-square test of independence is used, which compares the observed frequency with the expected frequency. In this study, the significance level was set at $p < 0.05$. The Pearson chi-square test of independence was used to examine the relationship between the size of the club and its differentiation between manager and coach positions (Komendátová et al., 2018; Ostertagová, 2011).

Hypothesis testing involves examining the strength of the relationship between variables, assuming that a statistically significant relationship has already been established between them. Cramer's V and Pearson's contingency coefficient were used for this purpose (Komendátová et al., 2018; Luha, 2007; Titko et al., 2021). Pearson's contingency coefficient was used to assess the strength of the contingency relationship between variables based on qualitative traits. It can take values from 0 to 1 and their interpretation is as follows (Miery, 2023):

- A value of 0 - complete independence between the traits.
- A value of 1 - complete dependence between the traits.

Cramer's contingency coefficient V is used to determine the appropriate degree of contingency between two qualitative statistical features. Its values range from 0 to 1 and are interpreted as follows (Miery, 2023):

- A value of 0 - no relationship between the statistical features.
- A value of 1 - a perfect relationship between the statistical features.

Results of Statistical Research

From the data collected in the research, 5 indicators relevant to the topic of this study were compiled:

- clubs' vulnerability rates to selected factors,
- the clubs' approach to environmental changes,
- the degree of influence of selected stakeholders on clubs,
- indicators of the level of formal education of club managers,
- the relationship between club size and the distinction between the position of coach and manager.

The degree to which clubs are threatened by the selected factors was examined through managers' responses, where they assigned values to the factors they selected ranging from 1 (very low degree) to 5 (very high degree) based on how their club evaluates the threats from these factors. Clubs ranked economic factors and organizational factors as the most

significant threats, while they ranked threats from marketing factors as the least significant. The summary results are shown in Figure 1.

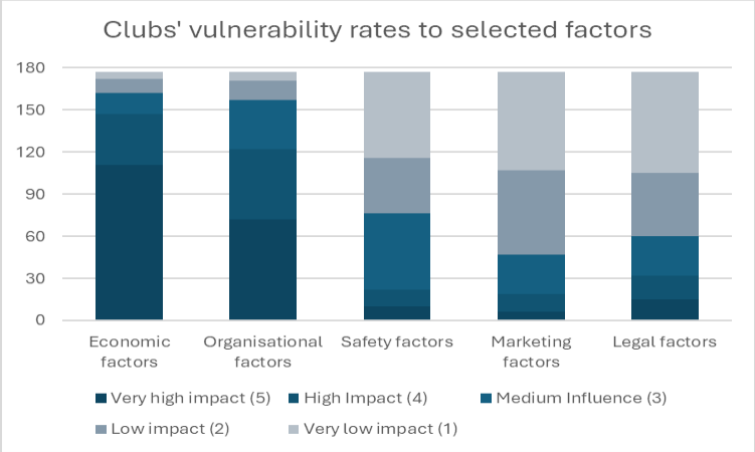

Figure 1: Clubs' Vulnerability Rates to Selected Factors

When examining the clubs' approach to environmental change as a source of potential risks and threats, club managers selected from pre-packaged responses. Based on the results, it was found that the most prevalent approach is based on flexible response to environmental changes, which is applied by 64.97% of clubs. On the other hand, the least frequent approach is planning for preventive measures, which was included by only 14.12% of the clubs. This shows, among other things, the significantly low implementation rates of risk management elements in the environment of sports clubs in Slovakia. The summary results are shown in Figure 2.

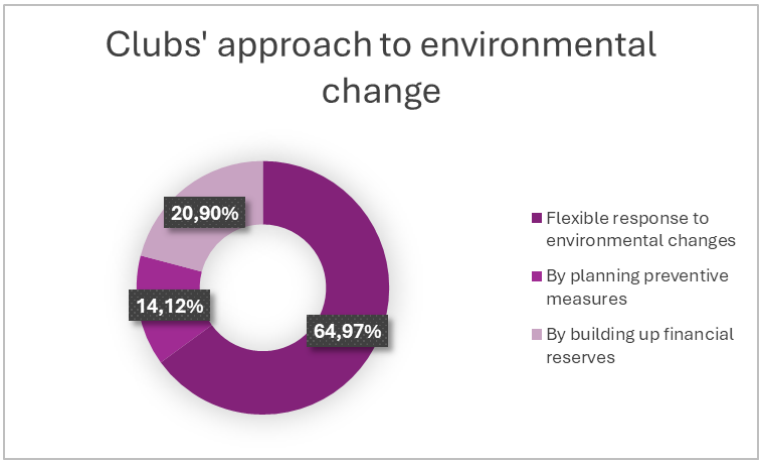

Figure 2: Clubs' Approach to Environmental Change

The degree of stakeholder influence is an important indicator influencing both the external and internal functioning of the club. In this matter, club managers responded by rating the influence of predefined stakeholder groups on a scale of 1 (very low influence) to 5 (very high influence). Based on the results, it can be concluded that clubs attribute the highest influence to their own members and athletes. On the contrary, the lowest influence is considered to be by the government and the state. The summary results are presented in Figure 3.

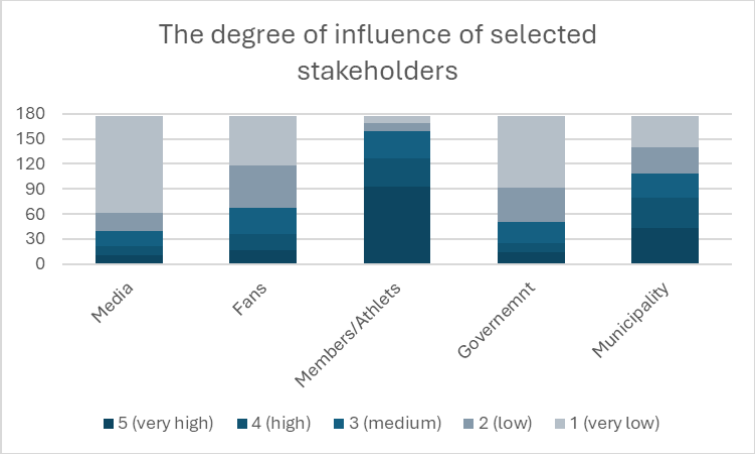

Figure 3: The Degree of Influence of Selected Stakeholders on Clubs

When examining the indicators of the level of formal training of club managers, the responses were divided into four categories:

- faculty of Physical Education and Sport,
- managerial or economic secondary or higher vocational education,
- other secondary or higher education,
- basic education.

Based on the results, it can be stated that the most numerous group is other secondary or higher vocational education (58.76%) and the least numerous group is primary education (2.26%). However, graduates of the Faculty of Physical Education and Sport represent only 14.12% of sports club managers. Based on these findings, there is a need to adapt the educational program to the requirements of different types of managers' qualifications, the vast majority of whom do not come from a sport or management background. The summary results of this question are presented in Figure 4.

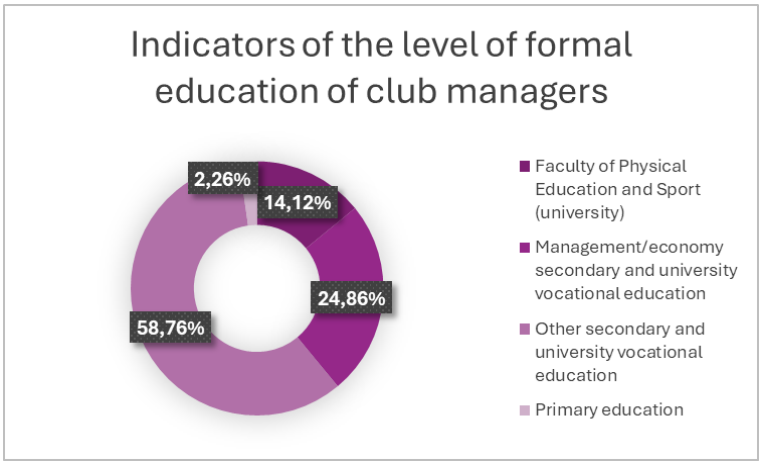

Figure 4: Indicators of the Level of Formal Education of Club Managers

The last part of the survey was to *test the hypothesis that smaller clubs tend to merge functions and that club managers also act as sports coaches*. This hypothesis was tested by applying the statistical methods described above to data relating to the size of clubs (by number of members) and the merging of managerial and coaching roles in clubs. From the data collected, a contingency table was constructed and the statistical methods described in the previous section were applied (Table 1).

Table 1: Contingency Table for Hypothesis

		Average monthly number of members				
		1 to 10	**11 to 50**	**51 to 100**	**101 to 200**	**201 to 450**
Merging the functions of manager and trainer	**Yes**	6	35	22	2	8
	No	15	57	19	9	4

Pearson Chi-Quadrat	*$\chi 2 = 10{,}0029$*
Critical value Chi-Quadrat	*9,4877*
Value ρ	*$\rho = 4{,}038E\text{-}03$*
Cramer's contingency coefficient	*$V = 0{,}1189$*
Pearson's contingency coefficient	*$C = 0{,}2313$*

Based on the analysis, it can be confirmed that there is a statistically significant relationship between the variables. Based on the calculation of the degree of association, a weak dependence was found. Thus, the results suggest that there is a weak relationship between club size and the merging of manager and coach roles, and there are other factors that influence this. These findings are shown in Figure 5.

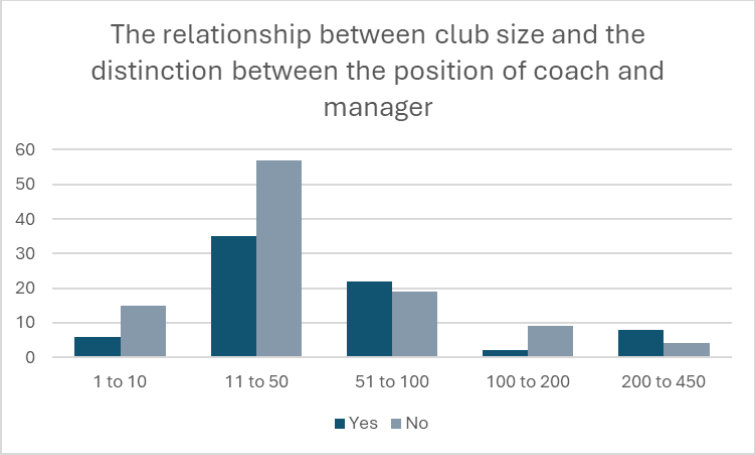

Figure 5: The Relationship Between Club Size and the Distinction Between the Position of Coach and Manager

Significant Risk Factors in Sports Clubs in Slovakia

The ability to categorize and describe the risk areas of sports clubs is a necessary step for the effective optimization of the educational framework of managers. To this end, based on the above statistical outputs, empirical research of the literature and publications of other authors, a typology of sport risks in the form of a Risk Grid was developed. The Grid is primarily based on a map of the relationships between environmental components, risk factors, domains and sports club, and attempts to reflect the current situation of clubs in a specific time interval. The main purpose of this is for practical use in creating individual risk categories depending on their origin. The origin of each risk is based on a standardised view based on the identification of a key factor area in a particular component of the organisation's environment. The sport risks grid is based on the sport risk classification framework by Shrivastava and Mitroff. Their framework classifies risk based on the origin in the internal or

external environment of the organisation and the domain that generates the risk. The authors defined two main areas of risk generation:

- Technical,
- Social (Beech et al. 2013).

The strength of this system was its focus on the creation of scenarios involving the joint action of a larger cluster of risks. This approach appears to be more efficient in terms of time and resource allocation compared to focusing on individual risks separately (Beech et al. 2013).

Due to the complexity of the environment of sport organizations and the dynamic evolution of the factors that act in it, the current network of identification and categorization of sport risks develops the system of classification of sport risks by the authors mentioned above. Instead of two basic components of the sport environment, it focuses on three components, thereby distinguishing between risks of the near and far external environment. It develops the original two areas of risk factors into five basic areas. These areas are assigned to each of the three components by mapping the relationships between the components of the sport organisation's environment in which they form a coherent and interconnected system. The risk identification and categorisation table places a strong emphasis on focusing on synergy and identifying clusters of risks which, as in the original framework, are considered to be more significant than individual isolated risks. Indeed, the nature of the sport environment, in which all components and factors are interconnected, is a characteristic feature and a challenge for effective risk management (Figure 6).

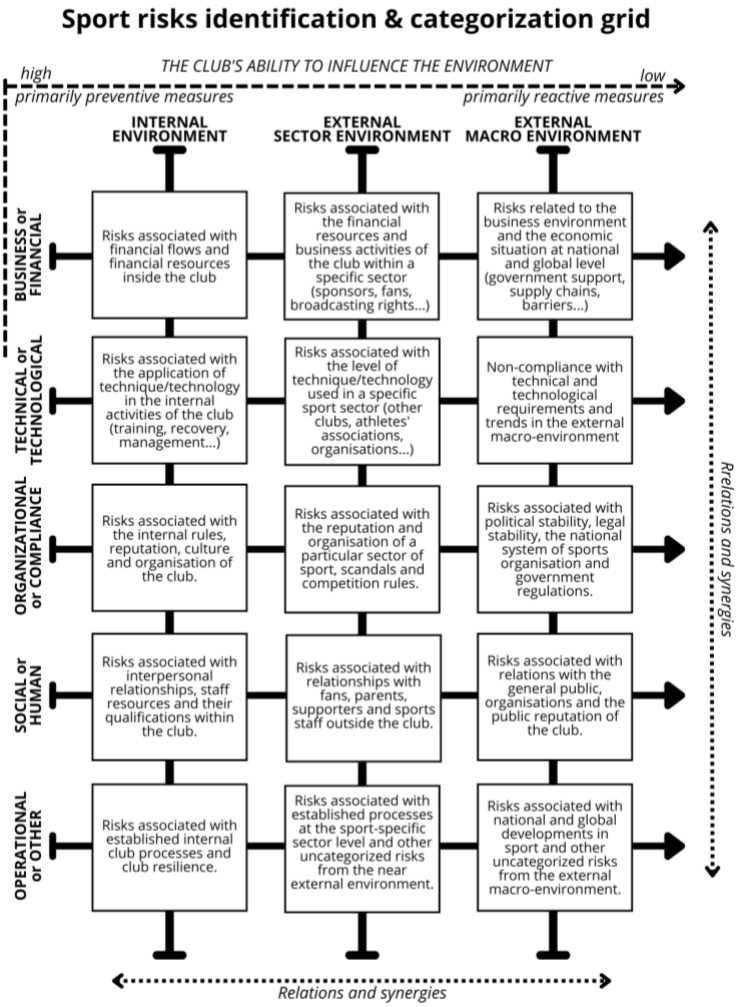

Figure 6: Sport Risk Identification & Categorization Grid

An extremely important part of the environment of sports organizations not only in Slovakia but also in the global dimension is the influence of stakeholders on the club itself. A major aspect that plays a significant role when examining the influence of stakeholders on a sports club is the dualistic nature of the sports business. This is because, according to him, the success of a sports club is determined by two important objectives:

- Achieving the desired sporting results.
- Achieving good economic results.

Stakeholder influence on sports clubs is generally considered to be a significant source of risk operating in all three components of the environment. Stakeholders and their influence on a sports club, shown in Figure 3, fundamentally affect the degree of stability of the environment, thereby also changing the conditions in which the club operates. For this reason, it is essential to include knowledge from this area in the framework education of sports club managers. Based on the described dualistic nature of sports organisations, stakeholders can be divided into two basic groups according to the underlying factor of their interest (Figure 7):

- Group 1 - stakeholders whose interest is primarily determined by the economic performance and material security of the club. These stakeholders, through motivation, effort and support, create the conditions necessary to achieve good

sporting results. These include athletes and sports professionals (club staff), parents and athlete organisations.

- Group 2 - stakeholders whose interest is conditioned by the achievement of good sporting results and the associated popularity of the club. On this basis, these stakeholders are able to provide material and financial support to the club. These are mainly sponsors, fans, NGOs working with clubs, the public and governmental organisations at central level.

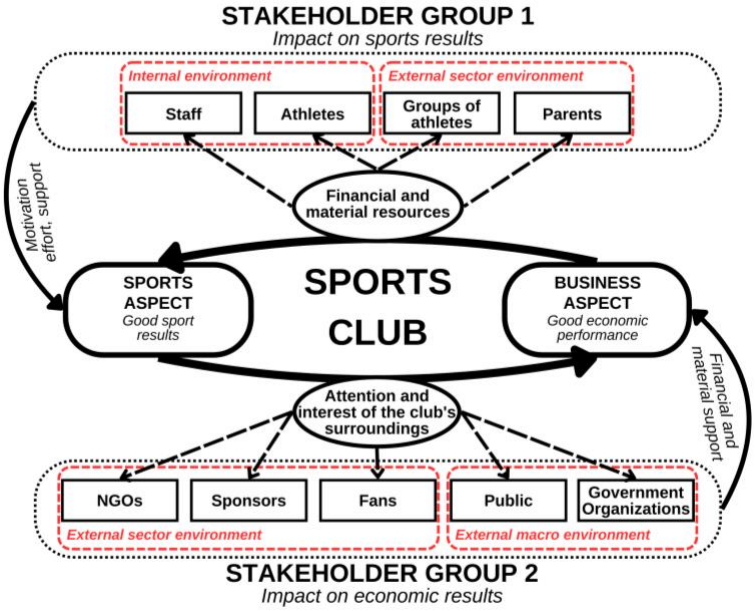

Figure 7: Diagram of the Influence of Interest Groups on the Main Components of the Dualistic Nature of Sports Business

Through this division, it is also possible to think of interest groups as factors in the individual components of the sport club environment that may represent a potential source of risks but also opportunities for the club. These risks and opportunities arise from anticipated changes that may threaten the functioning of the club or bring a new quality to the environment perceived as an opportunity for further development of the club.

Educational Octagon Framework

Based on the requirements and needs of sports clubs in Slovakia identified in the survey and based on further research into environmental components as sources of risk factors, the originally proposed educational framework was optimised. The new framework (Figure 8) is better suited to the requirements placed on clubs in the area of risk management and is set up to reflect, as far as possible, the needs arising from the factors of the different environmental components of the sports sector. This new framework, named as the 'Educational octagon framework', consists of the following components:

- 1 core learning module,
- 8 main learning modules,
- 2 optional learning modules.

The core learning module is, like the previous system, based on a core module, the content of which consists of the background, standards and implementation of the risk management process in an organisation according to ISO 31000:2019 and ISO 9001 based on their

requirements. This core module forms the basic prerequisite for learning in the other modules of the learning framework. The number of main learning modules has been increased to 8, and these emphasize an understanding of the functioning of the components of the environment and the different categories of risk arising from them. These learning modules target on individual areas and processes of risk management based on ISO 31000:2019 optimised for the field of sports organisations. The system also includes two optional learning modules that reflect the findings of the questionnaire survey. Optional modules can be placed in any area of the Educational octagon, and their content can be modelled according to which core learning modules in the framework structure they link.

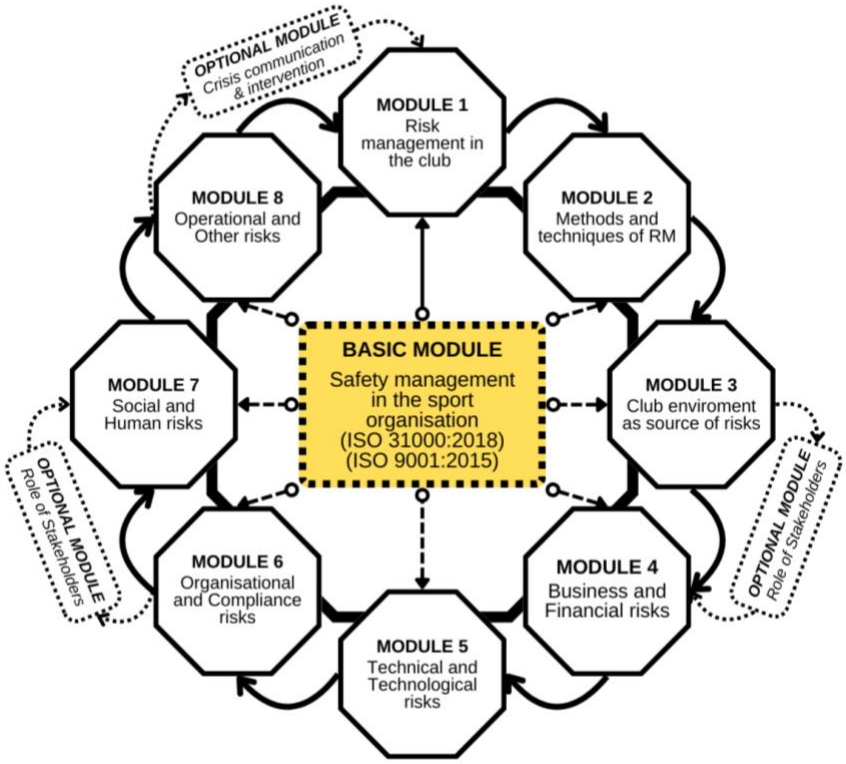

Figure 8: Educational Octagon Framework for Sport Clubs Managers

The improved version of the learning framework still retains the advantage of the modularity of the system, which makes it possible to adapt the content of the learning and the composition of the framework to the specific requirements of the qualification level of the target group of sport managers. The results of the statistical research clearly demonstrated the different level of qualification of the persons concerned for the job of a sports club manager, to which the Educational Octagon responds with the possibility of individual customisation. However, in contrast to the previous version of the model, the Educational Octagon places increased emphasis on the individual categories of sport risks based on the identification of the main areas according to the origin of the sport club risks. This system takes into account the ternary structure of the sports club environment, which breaks away from the standard two-component system known from other sectors and organisations.

Conclusion

The original educational model proposed on the basis of research into aspects of the functioning of sports clubs was subsequently revised in the light of new findings in this area

and on the basis of a statistical survey carried out among Slovak sports clubs. On the basis of the facts and findings based on these processes, an updated module was created for the education of sports managers and risk management professionals. The main changes in this framework are primarily based on research into the typology of sport risks combined with the specific structure of the environment, which creates a unique system in the issue of risk in sport organizations. Based on the results of this research, future manager education should place particular emphasis on creating and exploring scenarios in which risks act together to create synergies.

The educational octagon is based on the system of education of professionals in the private, public and state spheres, which is implemented by the Faculty of Security Engineering of the University of Žilina in Žilina. The improved version of the educational framework is the result of optimization of the initial version based on specific requirements and the current situation of sports clubs in Slovakia. Successful testing of this version of the framework will be followed by research into the possibilities of integrating it into the standard education of sports club managers and the use of other elements, especially modelling and simulation using virtual and augmented reality, or elements of artificial intelligence. We expect that these technologies will make the whole educational process more attractive and effective by providing the opportunity to gain practical experience in a controlled academic environment.

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