

THESES OF THE DOCTORAL (PhD) DISSERTATION
ANALYSIS OF THE MANAGEMENT TASKS AND WORKFORCE
MANAGEMENT IN THE CASE OF SPORTS ORGANISATIONS

Zsuzsa Hari-Koroknay

Supervisors:

Éva Prof. Dr. Bába Dr. Bácsné

Professor

Dr. Sándor Kovács

Associate professor



UNIVERSITY OF DEBRECEN
Doctoral School of Management and Business

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1. INTRODUCTION OF THE TOPICS AND OBJECTIVE

Sport is a process of value creation that is part of universal culture. It contributes not only to physical well-being, but also to mental health. This makes sport an excellent investment in our own well-being and health. But to do this, we need sports organisations that can ensure that we can play sport properly and safely, providing a framework for our sporting needs. In addition to active sport, thanks to continuous development, watching other people play sport has also become an enjoyable and entertaining activity, so sport consumption in a passive way has attracted more and more people, both as spectators and fans. There are many areas where sport has made inroads, and to maintain this position, we need sports leaders who can work together while competing with each other, to maintain this market position. In our country, this is also reflected in the fact that sport has been included among the national strategic sectors (NEMZETI SPORTSTRATÉGIA, 2007; GÉCZI - BAJI, 2016; SÁRKÖZY, 2017, BÁCSNÉ BÁBA et. al, 2018), thus making the development of sport a social and economic policy issue (STOCKER - SZABÓ, 2012; VÖRÖS - SZÖRÉNYINÉ KUKORELLI, 2019).

The market-based nature of sport has also evolved as consumer demand for sports services and products has emerged. This is not only the case for domestic markets, but also for global markets (ANDREFF, 2008). PAÁR (2015) examined the sports consumer population, finding that the vast majority of the Hungarian population does not have sports expenditure. This can be both an opportunity and a threat (PAÁR, 2015); an opportunity because sport can attract new consumer groups. However, there is a danger that, a range of products that meet as many consumer needs as possible “need to be developed” for a narrow range of consumers in an increasingly competitive environment. ANDREFF and SZYMANSKI (2006) identified fashion, the utility value of sporting goods, their market price, the employment and income status of households, the use of sports equipment by the population and the life cycle of the sporting goods as the most important variables determining the demand for sporting goods and its growth and size.

Another component of the economy is supply, which in the case of the sports sector is characterised by oligopoly. This means that a significant part of the sporting goods market is dominated by a handful of internationally recognised companies competing with each

other in the global market and with local businesses in each domestic market. In this competition, price is not the main variable, but competitive instruments such as marketing strategy, product differentiation, production diversification or, more fundamentally, innovation (ANDREFF - SZYMANSKI, 2006). In this competition, the quality of the product offered, cost management and innovation are therefore more decisive for the participants.

The timeliness and importance of my research lies in the fact that sport is one of the most dynamically developing sectors in the world. However, to increase and maintain economic relevance, it is important to have a well-structured organisation, an appropriate division of responsibilities and an efficient use of resources. On this basis, I decided to focus my research on the management tasks and workforce management related to sports organisations.

The main objective of my research is to determine the organisational framework of Hungarian sports organisations and to identify the characteristics of the sports managers employed, in which I identify profiles of sport organisations and sport leaders. I set further objectives in this context:

C1: Characterisation of sports organisations in terms of size, scope of activity, organisational structure, strategy and market position.

C2: Characterisation of sports organisations by management functions and human resource management activities.

C3: Characterisation of sports leaders in terms of leadership duties, style, attributes, skills, goals and roles.

The basic hypothesis of my doctoral dissertation is that the organisational framework (strategy, market position and structure) of sport organisations in Hungary differs by type of sport organisation.

My basic hypothesis for sports leaders is that the characteristics of sport leaders vary by level of leadership, leadership experience and type of employment.

My further hypotheses:

H1: I assume that the sports organisations in the sample are small in terms of turnover/headcount.

H2: Since sports organisations are traditionally created “bottom-up” in a self-organised manner, I assume that NGOs, including associations, are the dominant entities.

H3: I assume that, in terms of their organisational structure, sport associations and enterprises are characterised by linear and functional organisational structures, while sports federations are characterised by divisional or matrix organisational structures.

H4: I assume that, in terms of market positioning of organisations, sports enterprises are more market leaders/challengers and are more likely to have a commercial and transfer strategy among the types of strategy.

H5: In the case of sports organisations, athletes are the central figures, so I assume that leadership and operational tasks are more important for managers.

H6: I assume that, due to the nature of sport, recruitment, selection, integration, training, performance appraisal and motivation are more important human resource management activities.

H7: I assume that personality traits and knowledge of the sports industry profession are important for sports leaders in their leadership role.

H8: I assume that conceptual skills are more important for senior managers, interpersonal skills for mid-level managers and professional/technical skills for operational managers.

H9: I assume that the defining leadership characteristics change throughout a sports leadership career.

2. DATABASE AND THE APPLIED METHODS

The aim of my research is to map the management tasks and practices of different types of sports organisations, and the skills and roles required at different levels of the organisational hierarchy. Sport has become a national strategic sector, which has put sporting even more in the spotlight. This was also helped by the fact that a healthy lifestyle, with a focus on nutrition and exercise, became trendy and fashionable, which also helped to make sport a priority. However, to maintain this prominent position, sport leaders are needed who are able to take strategic decisions not only at micro level, but also at national economic level, to maintain sport's leading role in society.

In my dissertation, I assessed the specificities of sports organisations and the practice of sports leadership. In the case of sport organisations, I assessed the nature of the organisation, its economic data, structure, human resource management and organisational strategy, which may influence the actions of the sport leader. In mapping the practice of sports leadership, I focused on the personality, leadership style and responsibilities of the leader, and I wanted to assess the difference between management and leadership.

To verify my research questions and hypotheses, I conducted primary and secondary data collection. In the course of secondary research, I collected and processed the sources of domestic and international literature relevant to the study. In terms of the subject, I focused on management, leadership, human resource management, sports economics and sports management. In my primary research, I used the most common quantitative research method, a questionnaire survey, with sport leaders as the subjects.

2.1. The Methods of Primary Research

In my primary research, I collected both qualitative and quantitative data using a questionnaire survey. In addition to demographic variables, I identified other grouping criteria in the questionnaire survey in order to broaden the range of statistical methods used. The remaining questions were grouped into blocks in order to have the opportunity to analyse the blocks separately and to explore the links and connections between the blocks. These questions cover three broad groups of core management tasks, mapping the sub-tasks of organisational management, human resource management and process management in sport organisations. The interviewees are, of course, managers working in sports

organisations, regardless of their level of management, i.e. whether they are senior, mid-level or operational managers. According to the European Sport Model and the Hungarian Sport Act, the interviewees are managers (whether at top, middle or operational level) who hold management positions and perform managerial tasks in sports associations, sports enterprises, foundations, national and international sports federations. In addition to their tasks, the questionnaire is also designed to assess the skills, roles and qualities of managers.

The data from the survey was processed using IBM SPSS. In addition to descriptive statistics, I performed parametric and non-parametric tests depending on the distribution. For my research, I chose a special version of factor analysis, called principal component analysis (PCA). This allowed me to perform a multivariate analysis that reduces the number of initial variables so that correlations and relationships could be explored that might not have been directly possible. Factor analysis is essentially a structural exploratory method when dependent and independent variables cannot be clearly identified. I used Varimax rotation to generate the principal component structure (SAJTOS - MITEV, 2007; ÁCS, 2015) and Welch's robust test to detect mean differences between groups in the generated principal components.

In addition to these, I used the FAMD /Factor Analysis of Mixed Data/ combined data type factor analysis technique (PAGÉS, 2014; CHAVENT et al., 2014) to visualise the characteristics of sports organisations on a common map. Among the characteristics, I highlighted and plotted the ordinal measurement level (Human Resource Management 7 functions) and categorical (Market Position, Structure, Type, Strategy) data. This map can highlight and summarise the relationships in the data and show the main organisational profiles. All calculations were done with R 4.2.3 (15-03-2023) (R CORE TEAM, 2023), all figures were created with R Studio 2022.02.2 (Build 485) and enhanced with Inkscape 1.0.1. vector image editor.

2.2. Presentation of the Research Sample

I used two questionnaires in my research. On the one hand, the questions aim to map the characteristics, activities and structures of sports organisations. On the other hand, the different aspects of leadership, the characteristics of leadership (style, work distribution, qualities, skills, etc.) were assessed.

The time taken to complete the questionnaire during the pilot research suggested that a shortening or a breakdown was needed, as there was a significant number of respondents who did not complete the questionnaire in the first few completions. Based on these, the questions in the questionnaire had to be asked in two parts, so there was a separate questionnaire to measure the sports organisation and another questionnaire to measure the management.

2.2.1. Presentation of the Sports Organization Sample

After data adjustment and coding, a total of 445 responses were summarised and analysed. In terms of gender distribution, 81.12% of respondents were male (361 respondents), while 18.88% were female (84 respondents). Regarding the age of the respondents, the youngest one was 26 years old and the oldest interviewee was 83 years old. Age is categorised by decade. The sample is dominated by respondents aged over 40 (79.78%). The average age of the sample is 50.84 years. The distribution of respondents by educational level is shown in Figure 1. More than 80.0% of the sample have at least tertiary education

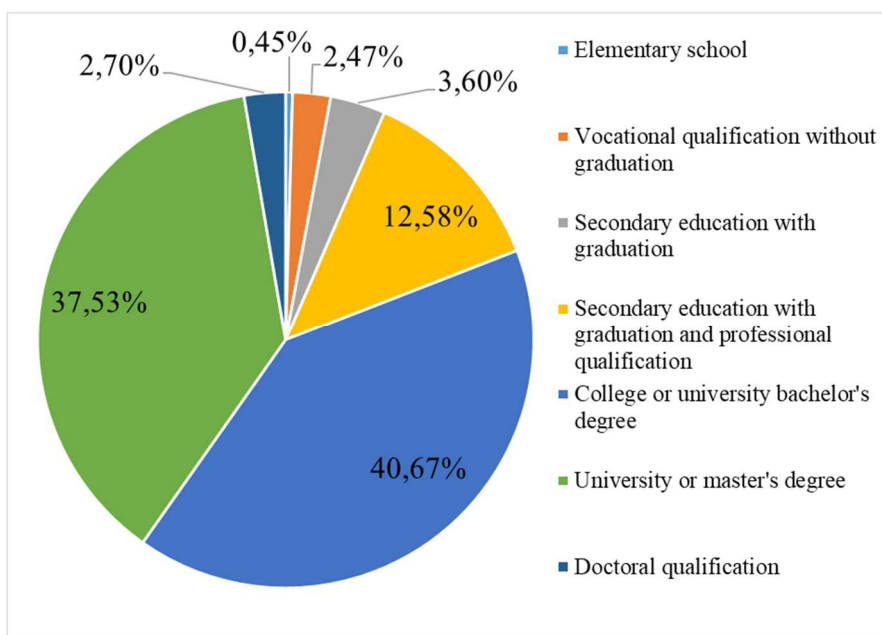


Figure 1: Distribution of respondents by education (N=445)

Source: Own compilation, 2024

In terms of educational orientation, 83.59% of the respondents have a sports degree. The distribution of qualifications related to sports by gender is shown in Table 1. Most of them have a coaching qualification, including specialist coaches, those with an NQR (National

Qualifications Register) qualification and those with various levels of coaching qualifications issued by sports federations. This is followed by the highest number of people with "other" qualifications. The other categories include, among others, physical therapist, sports communicator, referee, competition referee, physical education (PE) teacher, physiotherapist teacher, sports facility manager.

Table 1: Distribution of respondents by education and gender (N=372)

Education	Male	Female	Total
Coach	149	30	179
Other	81	20	101
Sports manager	42	5	47
Sports organizer	34	3	37
Sports economist	7	1	8

Source: Own compilation, 2024

Table 2 shows the distribution of respondents by time spent at the sports organisation and hours worked per week. More than half of the sample had been working for the same sports organisation for at least 10 years. In terms of weekly working hours, almost 50.00% of the sample work less than 40 hours.

Table 2: Distribution of respondents by time spent in a sports organisation and weekly working hours (n=445)

Time spent in a sports organisation	Less than 5 years ago	5-10 years ago	More than 10 years
	14,61%	27,87%	57,53%
Weekly working hours	40 hours a week	More than 40 hours per week	Less than 40 hours per week
	21,35%	30,11%	48,54%

Source: Own compilation, 2024

Figure 2 shows the distribution of sports organisations by region at national level. 43.82% of the sports organisations in the sample are based in Central Hungary. Following that, 14% of sports organisations are located in the Northern Great Plain, and a further 14% in Central

Transdanubia. In total, 3.82% of the sports organisations in the sample are located in the Southern Transdanubia region.

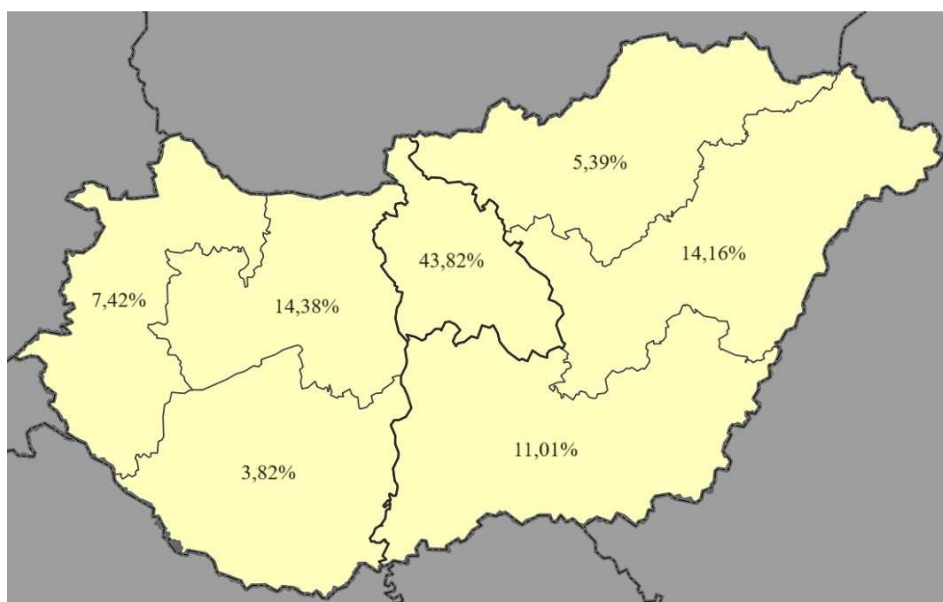


Figure 2: Spatial distribution of the sports organisations in the sample (n=445)

Source: Own compilation, 2024

Table 3 shows the types of organisations included in the sample. I was able to reach all types of sports organisations, to a greater or lesser extent, in terms of the possible forms of sporting activity in Hungary. In the sample, I categorised these sports organisations into three broad groups for ease of comparison.

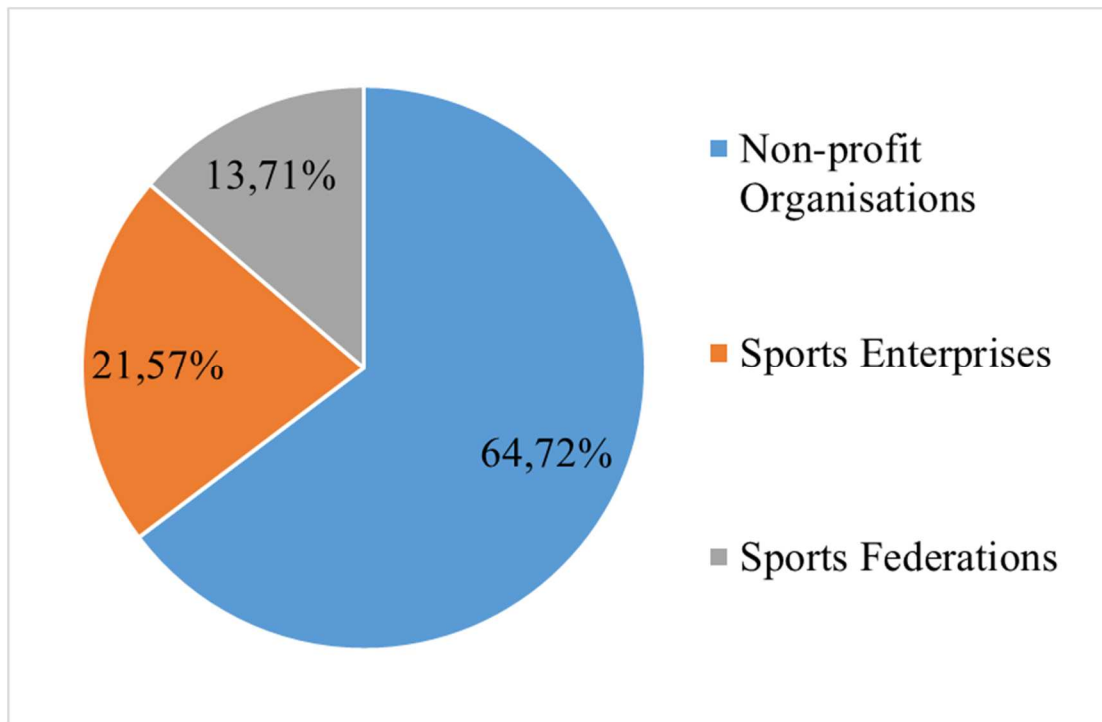
1 Table 3: Distribution of sampled sports organisations (n=445)

Type of sports organization	Percentage	Number
Sports Association	63,60%	283
Non-Profit Sports Enterprises	13,03%	58
National Sports Federations	10,34%	46
For-Profit Sports Enterprises	7,19%	32
Regional Federations	2,47%	11
Project Organisations	1,35%	6
Foundations	1,12%	5
International Federations	0,90%	4
Total	100,0%	445

Source: Own compilation, 2024

Sport associations, together with foundations, are presented as non-profit organisations, accounting for 64.72% of the sample (Figure 3). Sports enterprises are made up of non-

profit and for-profit sports enterprises and project organisations and represent 21.57% of the sample. The remaining 13.71% is the category of sports federations, which is a combination of national sports federations, regional federations and international federations.



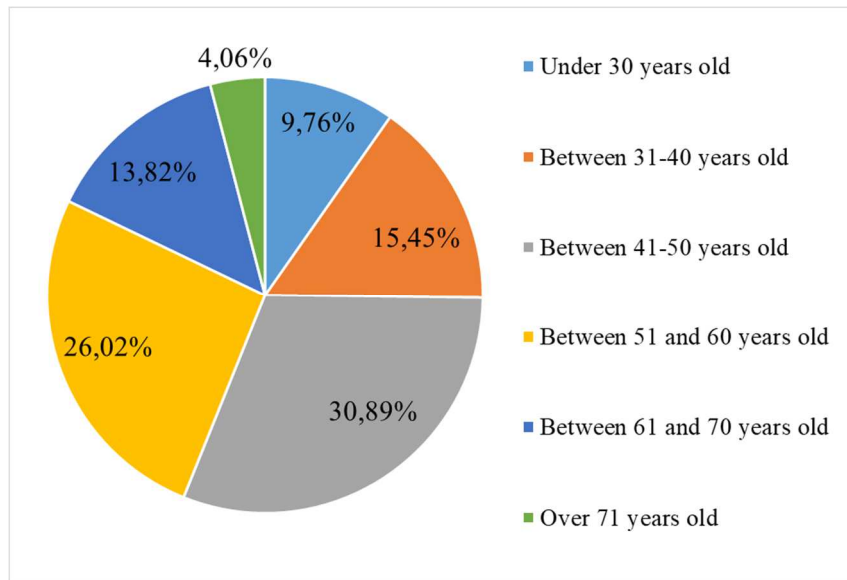
1 Figure 3: Categorisation of sports organisation types (n=445)

Source: Own compilation, 2024

I present my results along these categories, analysing and presenting non-profit entities, sports enterprises and sports federations separately. In the analysis, I describe each type of organisation, which can be interpreted as a kind of organisational profile.

2.2.2. Presentation of the Sports Manager Sample

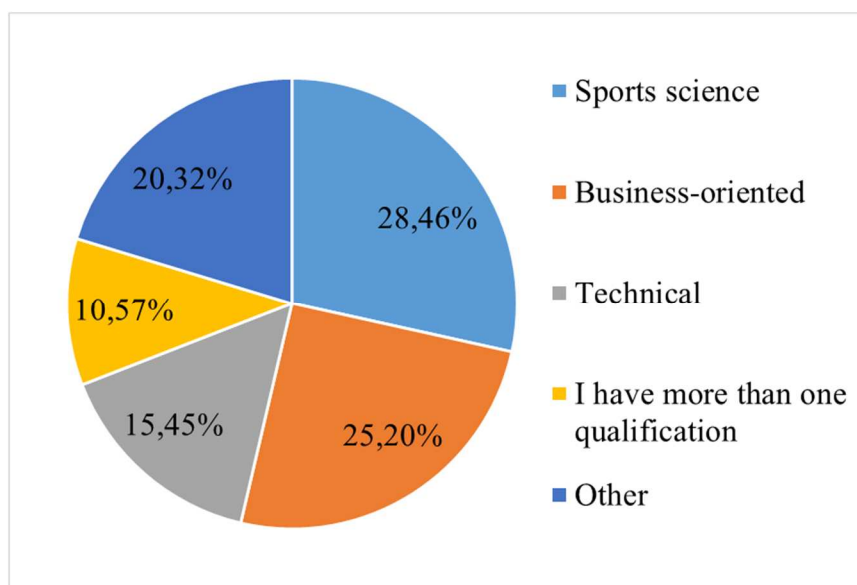
The other questionnaire in my research is designed to assess the characteristics of sports managers and their management activities. The sample of the sports manager survey included 123 respondents. Of these, 95 (77.24%) are men and 28 (22.76%) are women. The age distribution of sports managers (Figure 4) shows that the highest proportion of sports managers are aged between 41-50 years (30.89%), with a further 26.02% aged between 51-60 years. 9.76% of the sample belonged to the youngest age category, while the smallest group belonged to the age category over 71 (4.06%). The average age of the sample is 48.98 years.



2Figure 4: Age distribution of the sample of sports managers (n=123)

Source: Own compilation, 2024

For the highest level of education, everyone has at least a GCSE (“maturity exam”), but those with only a GCSE and nothing else represent only 8.13% of the sample. More than 80.00% of the sample have a university degree, and the majority of the sample (36.59%) are managers with Master's degree. In terms of the orientation of qualifications (Figure 5), the highest number of graduates, 28.46%, have a degree in sports science, and a further 25.20% have a business-oriented qualification.



3Figure 5: Sample of sports managers, by educational orientation (n=123)

Source: Own compilation, 2024

The other category includes qualifications in fields such as science, humanities, health, law, agriculture or public administration. 10.57% of respondents had more than one qualification, typically combining a sports science qualification with a degree or qualification in another discipline. 64.23% of the respondents have a sport-related qualification, which is the same for all types of qualification. Most of them have a degree in sports organisation and sports management or a coaching qualification. The coaching qualification includes the professional coaching qualification (which is a university-level qualification) and the coaching licence qualification issued by sports federations. More and more people are also graduates in sports economics and sports communication.

For basic demographic variables, income is always the most sensitive issue, especially when it comes to the world of sport. The survey was based on the gross monthly earnings for August 2022 as reported by the HCSO, which averaged HUF 497,200. Accordingly, respondents had to decide whether their monthly income was average, above average or below average. 48.78% of the respondents have above average income, while 26.02% have average income and the remaining 25.20% have below average monthly income.

3. MAIN FINDINGS OF THE DISSERTATION

I present my primary research findings related to the objectives of my dissertation and draw conclusions from them. The main objective of my research was to identify the organisational framework of sports organisations in Hungary and to explore the characteristics of the sports managers employed.

By reviewing and processing the relevant literature on the topic and by conducting primary research, I believe I have been able to develop a comprehensive picture of the characteristics of sport organisations and sport leaders.

The main objective of my research was to define the organisational framework of Hungarian sports organisations and to identify the characteristics of the managers employed. Based on these findings, the basic hypothesis of the dissertation is that the organisational framework (strategy, market position and structure) of Hungarian sports organisations differs according to the types of sports organisations. Furthermore, the characteristics of sport managers differ by leadership level, leadership experience and employment type.

In relation to the objectives and hypotheses formulated in my thesis, I have drawn the following conclusions:

My first objective was to characterise sports organisations by size, scope of activity, ownership, organisational structure, strategy and market position. I defined three hypotheses for my objective:

H1: I assume that the sports organisations are small in terms of revenue/headcount.

I analysed sports organisations according to three categories: non-profit organisations, sports enterprises and sports federations. For non-profit organisations, more than 70.00% of the sample (n=288) indicated a lower revenue category, either "no employees" or "less than 10 employees" (Table 4). Among the sports enterprises (n=96), more than 50.00% of the sampled organisations also chose a lower revenue category, which was associated with lower staffing levels, similar to non-profit organisations (Table 4).

Less than 20.00% of the sampled sports federations (n=61) had more than 10 employees and the majority (65.58%) also chose a lower revenue category (Table 4).

2Table 4: Cross-tabulation by turnover and number of employees by type of organisation (n=445)

<i>Non-profit Organisations</i>	Employee headcount categories					Total
Revenue Category	No Employees	Under 10 people	Between 10 and 50	Between 51 and 250	Over 250 people	
Under HUF 1,000,000	54	6	5	0	0	65
Between HUF 1,000,001 and HUF 10,000,000	55	32	2	0	0	89
Between HUF 10,000,001 and HUF 50,000,000	18	33	8	2	0	61
Between HUF 50,000,001 and HUF 100,000,000	0	12	14	0	0	26
Between 100,000,001 and 500,000,000 HUF	0	3	24	6	0	33
Over HUF 500,000,001	0	0	0	10	4	14
Total	127	86	53	18	4	288
<i>Sports Enterprises</i>	Employee headcount categories					Total
Revenue Category	No Employees	Under 10 people	Between 10 and 50	Between 51 and 250	Over 250 people	
Under HUF 1,000,000	8	0	0	0	0	8
Between HUF 1,000,001 and HUF 10,000,000	12	5	3	0	0	20
Between HUF 10,000,001 and HUF 50,000,000	7	14	0	3	0	24
Between HUF 50,000,001 and HUF 100,000,000	0	5	3	0	0	8
Between 100,000,001 and 500,000,000 HUF	0	7	10	9	0	26
Over HUF 500,000,001	0	0	1	6	3	10
Total	27	31	17	18	3	96
<i>Sports Federations</i>	Employee headcount categories					Total
Revenue Category	No Employees	Under 10 people	Between 10 and 50	Between 51 and 250	Over 250 people	
Under HUF 1,000,000	4	0	0	0	0	4
Between HUF 1,000,001 and HUF 10,000,000	10	4	1	0	0	15
Between HUF 10,000,001 and HUF 50,000,000	8	12	1	0	0	21
Between HUF 50,000,001 and HUF 100,000,000	0	7	1	0	0	8
Between 100,000,001 and 500,000,000 HUF	0	3	4	1	0	8
Over HUF 500,000,001	0	0	2	2	1	5
Total	22	26	9	3	1	61

Source: Own compilation, 2024

Overall, it can be observed that the fewer employees a sports organisation has, the more likely it is to be classified in a lower revenue category. My results **confirm my hypothesis H1**.

H2: Since sports organisations are traditionally created “bottom-up” in a self-organised manner, I assume that NGOs, including associations, are the dominant entities.

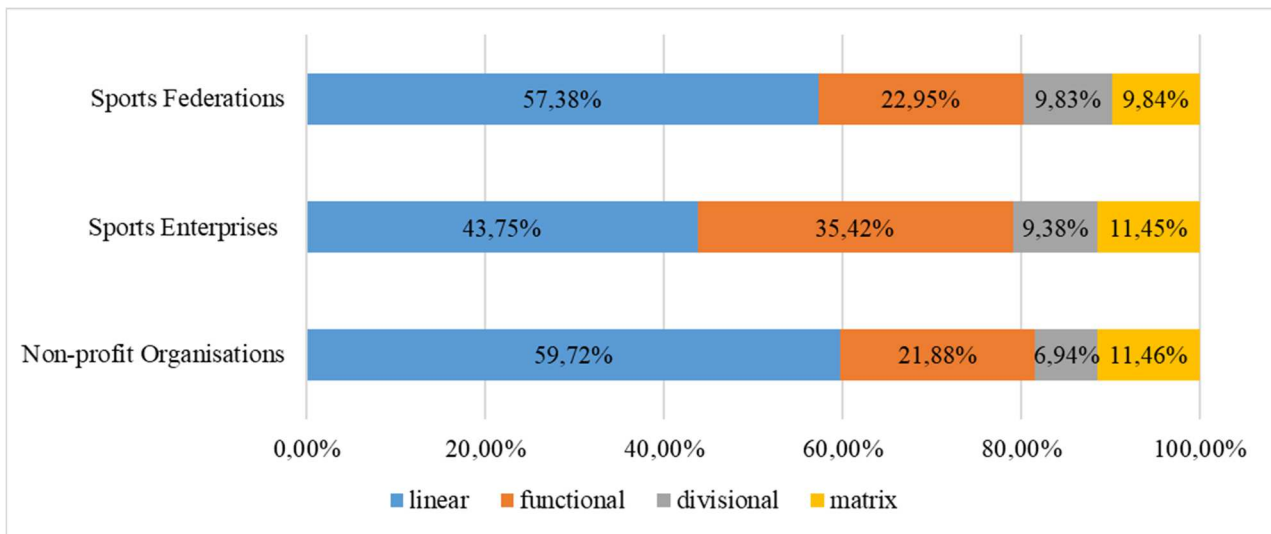
According to the KSH (2024a), the number of foundations and associated non-profit organisations increased steadily between 2005 and 2022. The number of associated non-profit organisations is more predominant, including sport associations, public bodies and non-profit business entities. On the website of the National Office for the Judiciary, birosag.hu, entering “sport association” in the search box when searching for NGOs and then selecting association as the type of organisation brings up 5786 results. A survey of the number of non-profit organisations in 2015 (KSH, 2015) shows that the total number of organisations in the traditional NGO form is 54,401, of which 19,917 are foundations and 34,484 are associations. In the case of associations, a further breakdown by groups of activity shows that there were 7,872 sports associations in Hungary in 2015, representing 88.80% of the total number of non-profit sports organisations. The 2022 data already show that 10,014 non-profit organisations, broken down by activity group, fall under the classification of sports (KSH, 2024b).

In the study sample developed in my research, both in terms of sports organisations and in the sports managers' questionnaire, the largest proportion of organisations in terms of participation is sports associations. In the sports organisation questionnaire, the sample shows 63.60% sports associations, while the majority of sports managers, 74.80%, hold a managerial position in this type of organisation. Thus, based on my primary and secondary data, **my hypothesis H2 is that the association form is dominant in the case of NGO forms.**

H3: I assume that, in terms of their organisational structure, sports associations and sports enterprises are of the linear and functional type, while federations are of the divisional or matrix type.

59.72% of nonprofit organisations (n=288) have a linear structure, while 21.88% have a functional structure (Figure 6). Sports enterprises (n=96) are also characterised by a linear (43.75%) and functional (35.42%) structure (Figure 6). Contrary to the hypothesis, the distribution of sports associations (n=61) by structure (Figure 6) shows a similar picture to

non-profit organisations, i.e. 57.38% have a linear organisational structure, while 22.95% have a functional organisational structure.



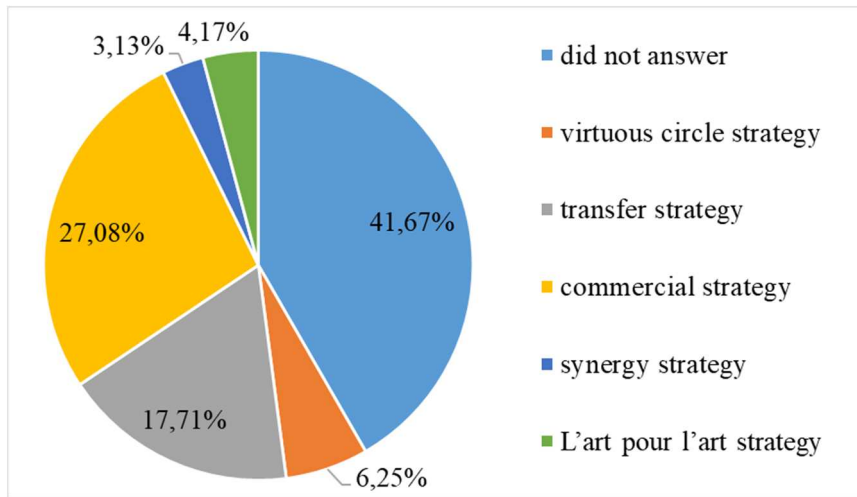
4Figure 6: Distribution of the sports organisations in the sample by organisational structure (n=445)

Source: Own compilation, 2024

In the profile map (Figure 8) drawn for the sports organisation profiles, it can be observed that non-profit organisations are characterised by a linear organisational structure, sports enterprises by a functional organisational structure and sports federations are closest to a divisional organisational structure, although this is not dominant in the light of the above data. Thus, summarising my results, **I confirm the assumption of my hypothesis H3 concerning sports associations and sports enterprises, while I reject the part concerning sports federations.**

H4: I assume that, in terms of market positioning of organisations, sports enterprises are more market leaders/challengers and are more likely to have a commercial and transfer strategy among the types of strategy.

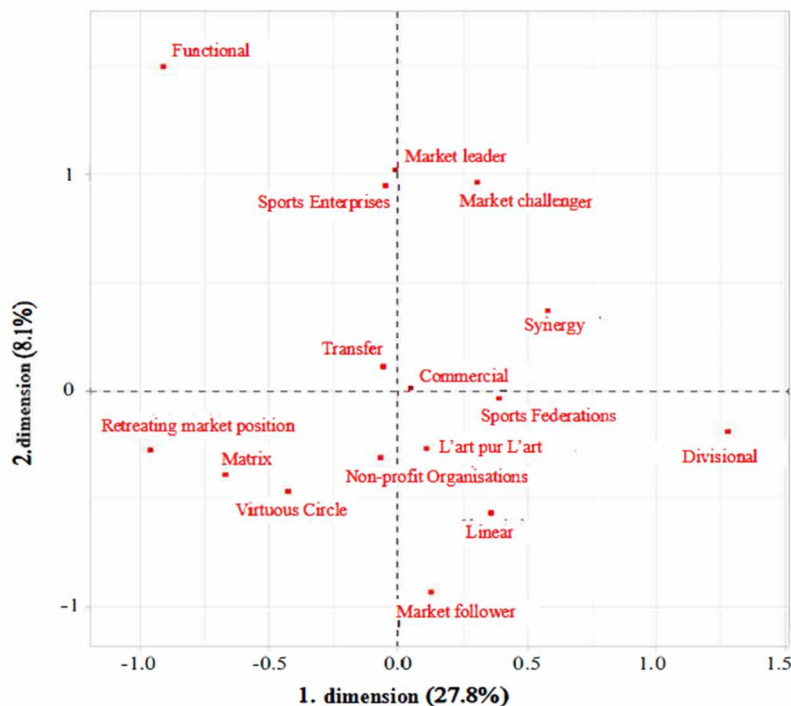
In the analysis of sports enterprises, concerning strategy, it can be seen (Figure 7) that 41.67% of the organisations surveyed did not answer the question, i.e. they do not consider themselves as a for-profit organisation. Furthermore, 27.08% of the organisations follow a commercial strategy, 17.71% a transfer strategy and 6.25% chose to describe a virtuous circle strategy as the strategy for their organisation.



5Figure 7: Distribution of sports enterprises by strategy in the sample (n=96)

Source: Own compilation, 2024

This was also confirmed by the combined data type factor analysis (Figure 8), with a relatively higher proportion of transfer and commercial strategies in sports enterprises. In terms of market position, 33.33% of sports enterprises describe their market position as follower, while 23.96% describe their market position as market leader and a further 29.17% as challenger.



6Figure 8: Display of the examined organisational characteristics on the factor map

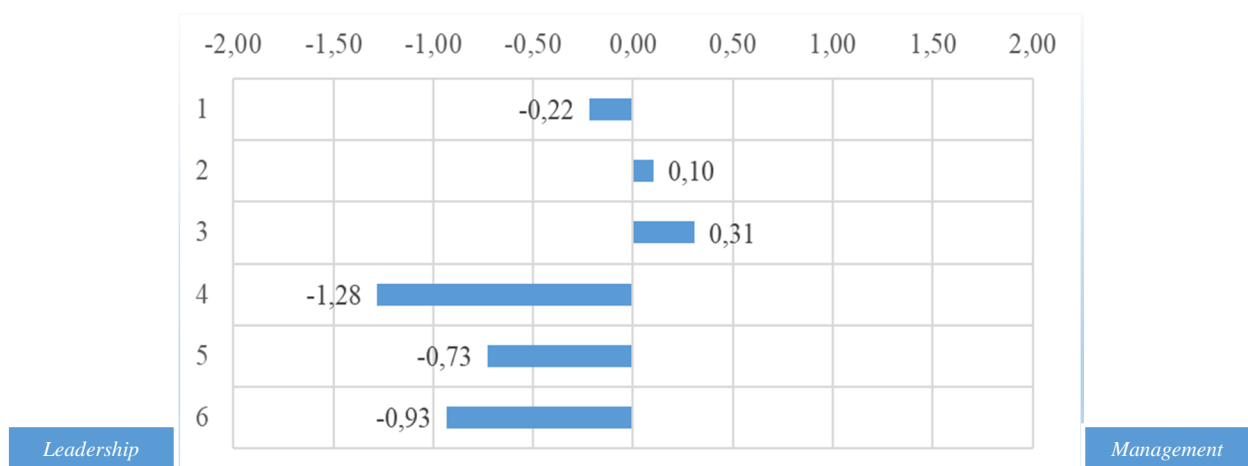
Source: Own compilation, 2024

Using the FAMD method, it was possible to illustrate (Figure 8) that the "role" of market leader and challenger is the closest to sports enterprises. These **confirm my hypothesis H4**.

My second objective was to characterise the management functions and human resource management activities of sports organisations. I defined two hypotheses for my objective.

H5: In the case of sports organisations, athletes are the central figures, so I assume that leadership and operational tasks are more important for managers.

In my dissertation, I used a 5-point scale to assess management and leadership tasks, where the management and leadership factors were contrasted and the respondent had to decide between one or the other factor (or, by marking the middle value if they considered both factors important) (Figure 9). When assessing the tasks, 5 (+1) pairs were identified, of which three pairs of factors were more important for leadership tasks, while two pairs of factors were more important for management tasks. Among the leadership tasks, the (mental) atmosphere at work, building commitment, inspiring colleagues and completing tasks on time were considered important.



7Figure 9: Graphical representation of the assessment of the Management and Leadership tasks (n=123)

Source: Own compilation, 2024

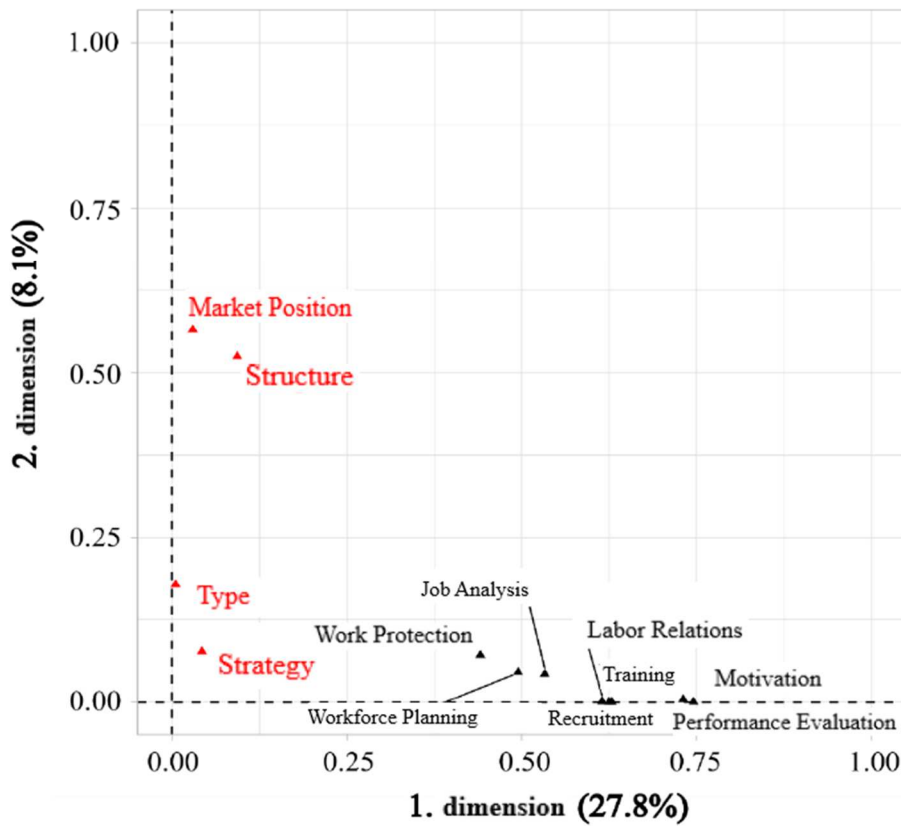
In terms of the prevalence of management tasks, it can be said that process tasks have a higher average, i.e. they are more typical than operational tasks. Organisation,

communication, decision-making, planning and control have an average of 4.00 or above. The same tasks showed a link in the PCA analysis, since they were included in a single principal component as process tasks.

Based on my results, **my hypothesis H5 on the importance of leadership is confirmed, while my hypothesis on the importance of operational tasks is rejected.**

H6: I assume that among the human resource management functions, those closer to sport, i.e. recruitment, selection, integration, training, performance appraisal and motivation are more important.

The sports organisations questionnaire measured the importance of the human resource management functions of the organisations according to the respondents. For non-profit and sports federations, the order of the first four most important functions is the same (with higher averages for sports federations), i.e.: training, development; motivation, incentives; recruitment, selection, integration; and performance evaluation. For sport enterprises, the most important function was considered to be motivation and incentives, followed by training and development. Recruitment, selection and integration was chosen as the third most important function, while performance appraisal was found to be the fifth most important factor. Overall, it can be observed that among the functions of human resource management, those with a clear sports industry dimension are indeed more important (transfer, team integration, performance under pressure, motivation and perseverance). This is confirmed and corroborated by the dimensions of the combined variable-type factor analysis (Figure 10), where the HR functions considered most important include performance appraisal, motivation, training and development, and recruitment, selection and integration. **I confirm my hypothesis H6** based on my results.



8Figure 10: Interpreting the dimensions of a combined variable-type factor analysis

Source: Own compilation, 2024

My third objective is to characterise sports leaders according to their leadership duties, leadership style, leadership attributes, leadership skills, leadership goals and leadership roles. For this objective, I defined three hypotheses.

H7: I assume that personality traits and knowledge of the sports industry profession are important for sports leaders in their leadership role.

For the sports leadership questionnaire, I thought it was important to also assess the qualities of the leaders, as I believe that there are some qualities that define and distinguish certain leaders from other leaders. In Table 5, the leadership qualities are presented in order of importance (based on average), which shows that intelligence, emotional intelligence, creativity, stress tolerance, sports industry knowledge, self-learning, sports management knowledge are among the most important leadership qualities according to the respondents.

3Table 5: Perception of the importance of the following factors prevailing in leadership activities in the sample (n=123)

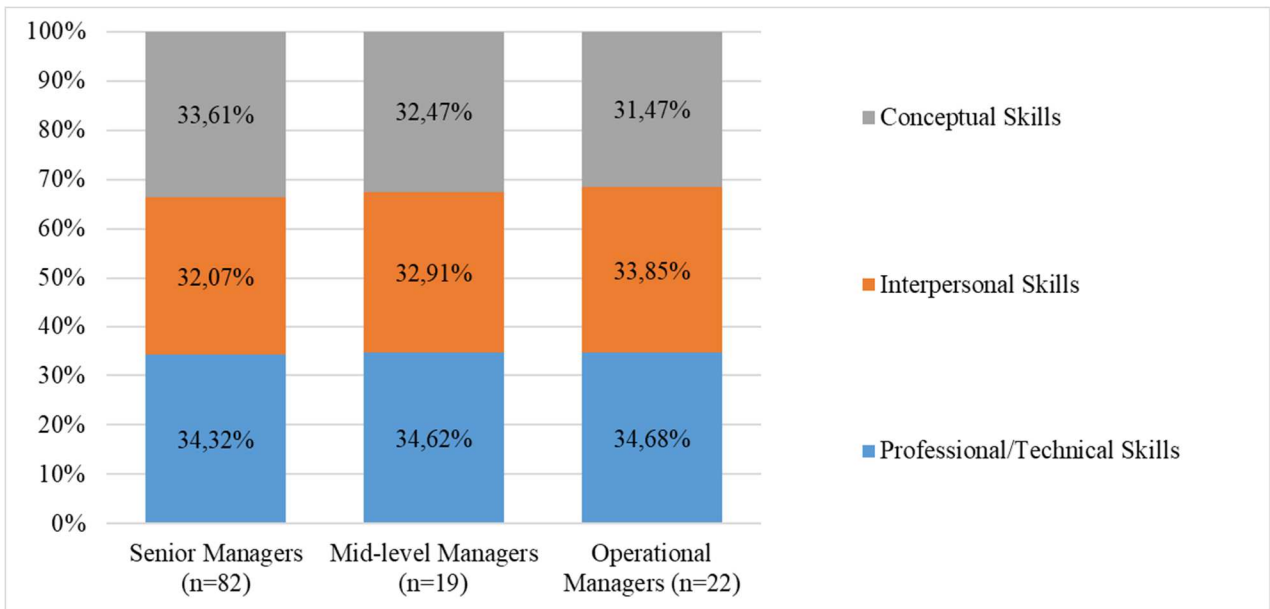
Factors	average	standard deviation
Intelligence	4,67	0,551
Emotional intelligence	4,46	0,716
Creativity	4,46	0,705
Stress tolerance	4,43	0,800
Sports industry knowledge	4,41	0,808
Self-learning	4,27	0,800
Sports management knowledge	4,25	0,865
Time management	4,18	0,840
Required legal knowledge	4,06	0,952
Economic knowledge	4,01	0,892
Management knowledge	3,96	0,872
Management experience	3,91	0,941
Language skills	3,51	1,097
Athletic past	3,24	1,155

Source: Own compilation, 2024

These attributes were merged into the core components of the leader’s personality and the knowledge of the sports industry profession. No significant difference was observed by level of leadership, i.e. the sports leaders in the sample can be said to have overall important leadership personality traits and the knowledge of the sports industry profession, which is the basis for **accepting hypothesis H7**.

H8: I assume that conceptual skills are more important for senior managers, interpersonal skills for mid-level managers and professional/technical skills for operational managers.

When examining the skills of sports leaders, I found similar results to the literature, although the proportions are slightly different (Figure 11).



9Figure 11: Distribution of sport leadership skills by leadership level in the sample (n=123)

Source: Own compilation, 2024

In the case of conceptual skills, they are most prevalent in senior management and are observed in a lower percentage as you move down the hierarchy. In the case of interpersonal skills, the opposite of the previous skill is seen, i.e. it is least prevalent in senior managers and most prevalent in operational managers. For professional/technical skills, there is also an increasing rate as you move down the ladder. The discrepancy with the literature is most noticeable for this skill, as the professional/technical skill is proportionally the largest compared to the other two skills. Based on these results, **my hypothesis H8 was not confirmed.**

H9: I assume that the defining leadership characteristics change throughout a sports leadership career.

In my research, I investigated the characteristics of sports leadership (skills, roles, attributes, tasks, goals) using principal component analysis based on leadership work/experience. Significant differences were observed for 6 of the 19 principal components (Table 6).

4Table 6: Testing the principal components of management work, according to experience in the sample

Components	< 5 year	5-10 year	11-20 year	21-30 year	31-40 year	> 41 year	p-value*
Conceptual skills	0,01	0,06	-0,20	-0,21	0,50	0,38	0,004
Professional/Technical skills	0,17	0,01	-0,16	-0,04	0,04	-0,56	0,205
Interpersonal skills	0,00	0,23	-0,14	-0,08	-0,64	-0,08	0,487
Managing people and tools	-0,26	0,07	-0,02	-0,19	0,69	0,83	0,477
Communication role	0,15	-0,08	-0,30	0,14	0,39	0,38	0,140
Management role	0,22	0,03	-0,27	-0,25	0,15	0,23	0,014
Allocation role	-0,16	0,10	0,25	-0,35	-0,33	0,71	0,920
Leadership personality	0,12	0,11	0,05	-0,53	-0,31	0,08	0,016
Theoretical knowledge	-0,05	0,15	-0,29	0,11	-0,11	0,52	0,007
Self-management	0,50	-0,08	-0,22	-0,53	-0,01	0,20	0,310
Knowledge of the sports industry	0,01	0,08	-0,08	0,01	-0,15	-0,33	0,989
Leadership experience	-0,01	-0,19	0,07	0,09	0,54	0,47	0,060
Process Tasks	0,09	-0,08	0,12	-0,06	0,30	-1,25	0,524
Human resource tasks	0,27	-0,06	-0,07	-0,27	-0,20	0,41	0,027
Organizational tasks	0,05	0,02	-0,20	0,34	0,12	-1,02	0,375
Information gathering	-0,31	0,09	0,13	-0,04	0,25	0,36	0,261
Working rationally in a good atmosphere	-0,12	0,12	-0,03	-0,45	0,64	0,09	0,612
Staff committed to a management decision	0,07	-0,16	0,06	-0,02	0,20	0,64	0,520
Accurate preparation for sporting performance	0,19	0,00	-0,07	-0,19	-0,35	0,47	0,425

The p-values are from Welch's robust test (for the equality of means) at 10% significance level

Source: Own compilation, 2024

Based on experience, differences can be observed in the main components of conceptual skills, managerial role, leadership personality, theoretical knowledge, managerial experience and human resource tasks. The factors can be divided into three distinct groups:

- “only at the beginning of a managerial career is it more important”,
- “only at the end of a managerial career is it more important”
- and “is relatively more important at the beginning and end of a managerial career”.

At the beginning of a managerial career, the personality of the manager is decisive, while at the end of the career, conceptual skills, experience and theoretical knowledge are relatively more important. The third group of factors, at the beginning and end of the managerial

career, can be categorised as managerial roles and human resource tasks. Based on this, **I was able to confirm my hypothesis H9.**

In the section of my baseline hypothesis on sports leaders, I hypothesised variation not only by level of leadership and leadership experience, but also by occupational type. However, my results do not confirm the difference in characteristics by occupational type.

The main objective of my doctoral dissertation was to define the organisational framework of Hungarian sports organisations and to explore the characteristics of the sports managers employed. In my primary and secondary research, I have presented a number of factors that can be used to characterise both sports organisations and sports leaders. My research has shown that the role of a sports manager in our country needs more attention than the organisational framework of sport. It has also been shown that sport organisations in Hungary are not necessarily business-driven, which can be a huge disadvantage for sport organisations in a rapidly developing economic environment.

My research proved that the majority of the Hungarian sports organisations in the study are small in size, with a lower number of employees and lower turnover. However, a positive finding is that by increasing the number of employees, organisations are able to achieve higher turnover, so productivity can increase in sport organisations (either economically or in terms of sport).

4. NEW AND NOVEL RESULTS OF THE DISSERTATION

The novelty of my research is that, in addition to the sports organisations that provide the framework for sporting activity, it also examines the sports leaders who manage them, and develops and presents a profile of both sports organisations and sports leaders. In this section I summarise the main findings of my dissertation, as well as new and novel results.

I consider the following to be my new and novel findings:

1. With this study, I have once again succeeded in confirming that the majority of sports organisations are small.
2. Sports associations and federations mainly pursue and transmit social values.
3. In the case of sport enterprises, the most prominent feature is the business character, and it should be stressed that Hungarian sport enterprises need to further develop in this area. The operation of this type of organisation shows a shift towards business operation, because the majority of sports enterprises follow some kind of business strategy - the largest proportion a commercial strategy. And in terms of market behaviour, they are the least restrained. This suggests that sport enterprises have a business mindset and see their economic activity as a competitive situation in which they strive to move forward and make a profit.
4. In contrast to the practice of international sports federations, where divisional and matrix organisational structures are found, Hungarian sports federations are more characterised by linear and functional organisational structures.
5. The creation and mapping of the sport organisational profile along the dimensions of human resource functions and organisational frameworks helps *sport organisations* to find their strategic direction, to develop and optimise the appropriate organisational form and human resource management practices.
6. Sport is an area where the main task of the sports manager is to ensure the conditions in which sport is played. The focus on the athletes is naturally present in the case of sport managers, because leadership is more dominant than management, while the tasks of resource allocation related to the creation of conditions for sporting activities are more prominent in their work. This is confirmed by the fact that conceptual and

professional/technical tasks dominated in terms of leadership skills, while interpersonal skills were more typical of mid-level and operational managers, who were more responsible for the sport performance.

7. Creating a sports leadership profile based on leadership skills, leadership roles, leadership attributes, leadership tasks and leadership goals.
 - In the case of sports leaders, in addition to the traditional conceptual, interpersonal and professional/technical skills, the ability to manage people and tools was identified.
 - The leadership roles in communication, management and allocation have been identified.
 - The most important characteristics of sport leaders were identified as leadership personality, theoretical knowledge, self-management, knowledge of the sports industry and leadership experience.
 - It has been possible to categorise the tasks of sports managers as process tasks, human resources tasks, organisational tasks and information gathering.
 - Three sport management objectives were identified as "*working rationally in a good atmosphere*", "*staff committed to a management decision*" and "*accurate preparation for sporting performance*".
8. Throughout the career of a sports leader, different leadership characteristics are the determining factors at the beginning of a career, at the end of a career, or at the beginning and end of a career.

5. PRACTICAL APPLICABILITY OF THE RESULTS

The main objective of my research was to explore the organisational framework of Hungarian sports organisations and the characteristics of the managers employed. I believe that the management tasks and HR management activities in sports organisations, which I chose as the topic of my research, were assessed in line with my objectives.

My primary and secondary research and its results provided me with the opportunity to define profiles of both sport organisations and sport leaders.

In developing the sports organisational profile, the organisational framework elements and human resource management functions were used to identify which organisational framework factors are more specific to each type of organisation and which HR functions are more important for them. A map was drawn up along the dimensions, on the basis of which I believe that sports organisations will be able to define themselves according to the given factors, and possibly optimise their operational framework and develop a strategic direction. To this end, I proposed the preparation of a preliminary SWOT1 and SWOT2 matrix summarising internal and external factors, which also helps to map their current situation with a view to creating future opportunities.

The profile of sports organisations showed that the most important human resource functions for organisations include performance appraisal, motivation, training and development, recruitment, selection and integration. At the same time, I observed that the majority of sports organisations would like to operate with more staff. Based on these, I propose that among the human resource management functions, the job design and HR planning functions should be strengthened, as by restructuring tasks and making a plan, they would be able to achieve higher productivity, which could even result in a more favourable financial position, and thus be able to recruit new employees.

In profiling sport leaders, I identified skills, roles, characteristics, tasks and goals that show differences by leadership level and managerial work experience. All this can also be utilised easily for sports organisations and sports leaders. For sports leaders, it helps to know what skills and attributes different levels of leaders need to have, the roles they should play and the tasks they should perform, and the objectives they should pursue in their leadership. For sports organisations, the practical use of the profile is to identify the factors to look out for

in candidates for each appointment or recruitment. Whether it's a job as a sports manager or long-term planning, it helps in deciding who can make a good leader within a sports organisation.

In my research, I found that there is not much evidence of a business-oriented operation in Hungarian sports organisations. Of the types of organisation, only sports enterprises show a shift towards business acumen. All sport organisations need to develop short and long-term plans that set out organisational goals and strategies to be followed, as this would help to start sport organisations on the path to a business-oriented thinking and later to such operations. This would not only improve the competitive position of individual market players, but would also improve the strategic position of sport in the long term, both domestically and internationally.

6. LIST OF PUBLICATIONS RELATED TO THE DISSERTATION



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Candidate: Zsuzsa Hari-Koroknay

Doctoral School: Károly Ihrig Doctoral School of Management and Business

MTMT ID: 10068453

List of publications related to the dissertation

Articles, studies (8)

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