

PERFORMANCE FACTORS IN COMPLETING A TRAINING COURSE IN EUROPEAN FUNDS FOR SPORT

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Abstract. *This research aims to identify the performance factors in completing a training course in European funds by sports managers. Starting from the idea according to which there are features that guide sports specialists towards this area of specialisation, the study highlights that, within the occupational profile, some of these features can be enhanced through a systematic, coherent and consistent intervention in the field of writing European-funded projects. The research methods used in this paper were the following: experiment, testing and mathematical statistics. The study was conducted with a group of 46 people from sports structures in Romania, who attended a training course in European funds for sport, which lasted two months and covered approximately 40 hours in total. The course was designed from the perspective of the Eurodesign theory. The conclusions of the study emphasise that the profile of a highly-effective participant in the training course generally contains elements similar to those of a manager's profile, but also a number of specific elements. On the other hand, some features considered by us as prerequisites can form the basis for the decision to specialise in this field, while other features, such as the knowledge and skills acquired during the training course, seem to have been decisive for the participants' professional development.*

Keywords: *project, performance, European funds.*

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Introduction

Compared to other systems in Europe, the Romanian sports system attracts relatively low external funds for financing specific sports activities. For example, in the programmatic period 2014-2020, 1176 sports projects were financed, of which 234 were coordinated by Italian sports structures, compared to only 49 projects coordinated by Romanian sports entities. As shown in our previous research (Ionescu & Stănescu, 2021), Italy ranks first in the EU in terms of accessing Erasmus+ grants related to the sport component, followed by Spain, Croatia, Bulgaria, France, Greece and Slovenia.

EU projects are crucial for the growth of organizations, in general, and sports organizations, in particular. Thus, it is essential to ensure that these particular undertakings are properly managed (Szczepaniak, 2020). The organization must select strategies that will help it achieve the proposed strategic goals and identify projects to turn these strategies into reality.

In this context, sports organizations in Romania have an obvious need for development, from the perspective of qualified human resources, by identifying funding sources, accessing and implementing projects. At the European level, there has always been a tendency to prioritise training, as revealed by the following recommendations: “developing exchanges of information and experience on issues common to the education systems of the Member States”, “encouraging the development of youth exchanges and exchanges of socio-educational instructors”, “encouraging the development of distance education” (European Commission, 2012, p. 74). In recent years, also at the European level, there has been openness towards the training of human resources, including human resources within national sports structures (athletes, coaches, sports managers), with the Member States being directly responsible for the transfer of European policies and priorities.

Considering the previously presented context, this paper aims to highlight the importance of acquiring knowledge in the field of attracting European funds by sports managers. Thus, there is a need for professionalization of occupations in the field of sport, whether we are talking about the sports manager, project manager or sports club manager, but also for specialisation in these occupations.

Our study will start from the comparative analysis of occupational standards for a sports manager and a project manager to see what skills and knowledge a sports project manager needs to acquire in order to be successful in the field of European funds for sport. This research aims to identify the performance factors in completing a training course in European funds, which addresses the representatives of Romanian sports organizations, more specifically, club managers, federation managers, public and private sports organizations.

Occupational standard for a sports manager

Sports management includes a set of skills related to the rational and systematic organization and planning of sports activities, regardless of the context (Teixeira, 2019; López-Carril et al., 2019). Sports management encompasses the fundamental managerial skills of planning, organizing, leading and controlling, which are applied within a sports organization. Its primary objective is to improve and optimise various aspects of sport, including but not limited to competition, health and recreation, as well as the provision of goods and services (Lis & Tomanek, 2020).

In general, sports management is a field that incorporates several disciplines, including sports economics, sports law, management, accounting, sports marketing, event management, auditing, public policy and various other fields (Teixeira et al., 2019). The strengthening of research and knowledge of sports management, as well as the concern of higher education institutions to adapt their scientific programmes to the current and future needs of intervention in this field, allows today, in a global way, to better understand sports organizations and establish the bases for training a sports manager (Graham et al., 2018; Zimmer & Keiper, 2020; Lis, 2020; Seifried et al., 2021).

This symbiosis of broad knowledge also allows us to understand that the performance of sports managers is made up of specific characteristics depending on the context in which they act and that advanced training in sports management should be seen as a basis for quality practice and a prerequisite for successful performance. (Jackson et al., 2022) However, there

are no studies with significant data that provide information about professionals with training in sports management who carry out activities related to the field of European funds and about the contribution of such training to the improvement of their skills and the performance of their sports organizations.

Occupational standard for a project manager

Folwarczná (2010) describes the characteristics of a manager as someone whose main task is to lead and manage an organization and to achieve the goals and results that have been set. In addition, a manager must manage the individual components of an organization so that they function as a whole. Managers must understand social issues, economics and management methods; they must communicate effectively and be in good mental and physical condition. According to Provazník et al. (2012), managerial skills are closely related to education and experience. Interpersonal skills also play an essential role in managerial competence (Bedrnová et al., 2015; Mašát et al., 2021).

Lojda (2011) agrees with these skills and adds skills such as human resource management, leadership, employee motivation, delegation of authority and negotiation skills. Khelerová (2010) describes skills as practical habits that can be acquired through practice, adding that it is mainly about organizing and managing time, managing and motivating people, delegating, possessing communication skills and working with computers.

Over the years, several guidelines have been developed to define skill development standards, such as the Project Management Competency Development Framework, which was prepared by the Project Management Institute (PMI). The global reach of these standards demonstrates the obvious increase in awareness and acceptance of the need for formal project management methods. In the above-mentioned PMI's project, competency is defined as a term with different meanings for different people; however, it is generally accepted as something that encompasses knowledge, skills, attitudes and behaviours that are causally related to superior job performance. PMI (2007) adds that, when applied to project management, competencies cover three dimensions: knowledge, performance and personal characteristics. In terms of PMI standards, there are 46 skills that are divided into three groups as follows: 20 technical skills, 11 contextual skills and 15 behavioral skills.

Some authors propose different classifications for the critical competencies of project managers. Thus, Do Vale et al. (2018) have investigated the individual competencies of project managers through a methodological approach that combines a systematic literature review and an analysis of employment opportunities, concluding that it is possible to classify and code competencies into four categories: contextual, managerial, technical and behavioural. The same authors included the concepts of soft skills and hard skills to classify the competencies of project managers. Cakmakci (2019) also proposes a classification of project manager's skills into soft and hard skills, stating that the competence profile should be divided into the following dimensions: influencing, communication, emotional, contextual, management, cognitive skills, professionalism, knowledge and experience, project management knowledge, personal skills and attributes.

According to Müller and Turner (2010), many studies focus on the profile of the ideal project manager, successful project managers and their career development.

Various studies highlight multiple factors that influence the selection process of good project managers. For example, Segalla et al. (2001) have conducted a survey based on the opinions of approximately 300 managers to identify the main characteristics that justify an individual's employment: language training, test results, small business management skills, references, international work experience, academic training, and technical skills.

The International Project Management Association (IPMA) describes a combination of three competency elements required to manage a project: technical, behavioural and contextual (IPMA, 2015). Another international organization for professional project management, the Project Management Institute (PMI), has developed a Project Manager Competency Development Framework that includes three main components: knowledge, performance and staff (PMI, 2007).

On the other hand, academics also significantly contribute to shaping the profile of a project manager. Müller and Turner (2010) conducted an extensive study to explore the competence profile of successful managers by analysing their intellectual, managerial and emotional abilities. One of the most critical insights is that the ability of successful managers varies by project type (Müller & Turner, 2010).

Hölzle (2010) suggests the following competencies required for project managers to deal with unique and temporary organizational challenges that vary according to the type and scope of the project: project-specific expertise, problem-solving skills, leadership, social skills, entrepreneurship and project management. Another study by Ramazani and Jergeas (2015) focused on the requirements for a competent project manager, grouping them into three categories: personal characteristics – personality, abilities and motivation; education – anything related to academic education; development – based on experience and professional development.

In their article, Lutas et al. (2020) created a conceptual model to identify the ideal profile of a project manager. Based on the professional literature, the authors have developed several categories of factors that describe the profile of a good project manager:

- Experience (Technical vs. Managerial): Work experience is one of the factors that influence a manager's skills. Experienced project managers are familiar with the technical aspects of project management, such as critical path analysis, work breakdown structures, resource allocation and risk management.
- Certifications: They can be classified into knowledge-based and competency-based project management certifications. Unlike knowledge-based certificates that require theoretical learning, competency-based certificates also require hands-on experience in the field. A project management certification is typically viewed as a stepping stone to becoming a professional in the project management field. Certifications are intended to provide individuals with the most appropriate knowledge and skills to manage their projects successfully (Joseph & Marnewick, 2018).
- Education in the field: Training is also a relevant component of the profile of a good project manager. Project managers are expected to bring a high level of technical knowledge to the project. Bauer et al. (2014) support the idea that successful project management requires specific technical skills that can be formally acquired through project training.

Comparison of occupational standards for a sports manager and a project manager

In this section, we will analyse the occupational profile of a project manager (PM) and compare it with the occupational profile of a sports manager (SM) to see to what extent sports managers can also become good project managers of non-reimbursable funds, what knowledge, skills and abilities are common to the two occupational profiles and what are the areas where these two profiles do not intersect in order to identify the recommended educational paths for sports managers to become project managers as well.

Similarities	Differences
Knowledge	
Identical level of knowledge of the English language	The sports manager must have knowledge of sales and marketing, while this is not necessary for the project manager.
Identical level of knowledge of human resource management, and administration and management	The sports manager needs a lower level of functional knowledge.
Identical level of ICT knowledge	The sports manager must have a more developed level of knowledge of the legislation than the project manager. The project manager must have knowledge of mathematics, economics and accounting, while for the sports manager, they are not provided in the occupational profile.
Skills	
Identical level of learning, ICT, managerial and administrative skills	Higher level for the project manager in communication skills, teamwork skills, specialist professional skills and self-management skills
Cognitive skills	
Identical level of verbal skills, spatial skills, shape perception, decision-making ability	Higher level for the project manager in the case of learning, numerical, operational and quick reaction skills
Non-cognitive skills	
Identical level of visual, auditory and interpersonal skills	Physical abilities are present in the profile of the sports manager and absent in the case of the project manager.

Given that our focus is on the performance of participants in a Eurodesign course in the field of sport, we will highlight the comparison between their cognitive skills (Figure 1).

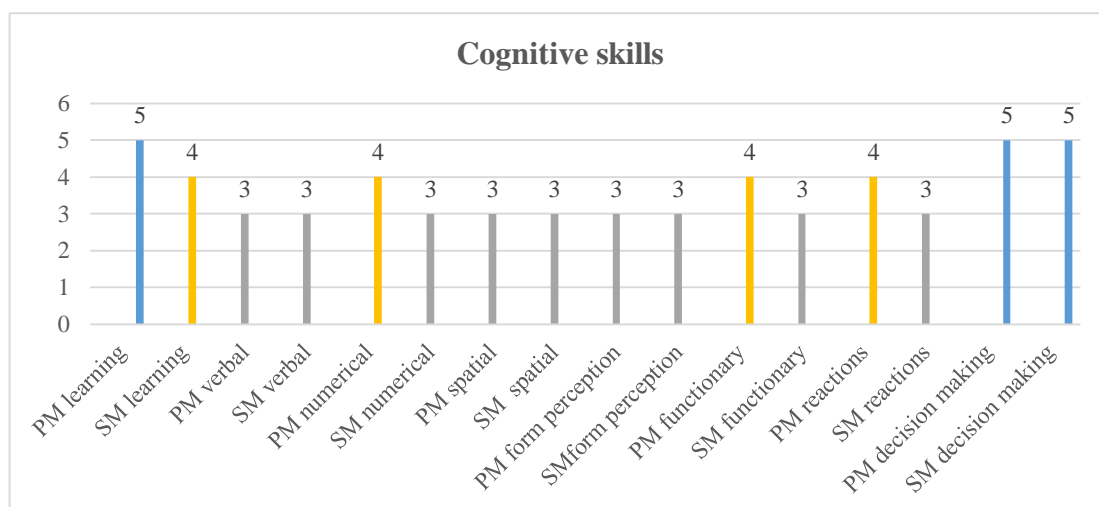


Figure 1. Comparison of skills between the occupational standards for a sports manager and a project manager (according to Cognitrom profiles for both managers)

From the comparison of the two occupational profiles in order for a sports manager to become an effective project manager, it results that they will have to develop the following skills: learning skills, numerical skills, functional skills and reaction ability.

Considering these two occupational standards and the differences between them, the Eurodesign course in sport was developed, emphasising the sports managers' skills that needed to be developed in particular.

The training course in European funds for sport

The training was delivered over two months, about 40 hours, at the end of 2022 (October and November). Face-to-face training and online learning were used in this Eurodesign course, which was 90% online and 10% face-to-face, especially for the part aimed at analysing the initial knowledge possessed by students at the beginning of this course, which was based on highly interactive methodology with alternating lectures, as well as training and practical exercises. Participants worked in groups, making accurate simulations of projects presented directly on application forms.

In the second part of the course, all participants presented their projects and project communication plans, being assessed according to the financier's evaluation criteria. As distance education tools, the online learning platform of the National University of Physical Education and Sport (<https://www.profunefs.ro>) was used, as well as the Microsoft Teams application, which allowed for the recording of courses, interactive online exercises and active communication with the participants.

The units of competence for this Eurodesign course were the following:

- Key competence units: communication in Romanian, communication in English, mathematical skills, computer skills, functional skills, decision-making skills;
- Specific skills: documentation to prepare the project, project development, project management, monitoring and evaluation, risk management, dissemination and sustainability.

To complete the course, the participants had to pass the required tests and to get actively involved in the exercises and simulations provided during classes. At the end of the course, the participants presented: a project application for the different formed groups – focusing on the design of a communication plan for a European project (with a well-defined role within the group), as well as an individual project application on a theme of the project established together with the trainer at the beginning of the course.

Methodology

The main *objectives* of the current research were:

- to identify the performance factors in completing a training course in European funds by sport managers;
- to assess the effectiveness of a Eurodesign training programme in the field of sport.

The main *tasks* of the research focused on:

- studying the general sources of information in the field of project management, the skills and abilities required for a successful project manager, factors that describe the profile of an effective manager;
- designing and delivering the European design course;
- applying psychological tests of cognitive abilities for the programme participants;
- applying questionnaires and collecting the data;
- analysis and interpretation of the data obtained;
- drawing up conclusions related to the study carried out.

The present study aims to test three *hypotheses*:

H1. Cognitive skills (verbal, numerical, decision-making, functional ones) influence performance in the European design.

H2. A training program designed and implemented from the European funds perspective improves the competences (knowledge, skills, attitudes) of the participants in sport management area.

H3. The knowledge and skills acquired during the training course is decisive for participants' professional performance.

Research stages

The main research stages were:

1. Registration of the target group. The registration of the participants was made online between 4 and 15 October 2022, based on a Google questionnaire that gathered data about their gender, age, last school graduated, level of English, type of organization, position in the sports structure (most of them were management team members in their sports organizations), number of projects, interest in writing and implementing projects. The registration questionnaire also included self-reports about the participants' knowledge of writing a European project.

2. Initial evaluation of their knowledge and cognitive skill tests, on 15 October 2022

3. Delivery of the course, 15 October - 15 December 2022, about 40 hours in total

4. Final evaluation of the participants, 15 - 20 December 2022

5. Processing the results, December 2022 – March 2023.

Target group

The research initially involved 125 representatives of public and private sports structures in Romania. Throughout the training course, after several lessons, a part of them dropped out, and only 46 participants completed the course. The profile of the 46 participants who attended the Eurodesign course in sport is shown in Figure 2, according to which there were:

- 41% men and 59% women;
- mostly aged between 35 and 54 years;
- level of education: 24% Bachelor's degree, 54% Master's degree, 15% PhD;
- level of English: 20% beginner, 54% intermediate, 26% advanced.

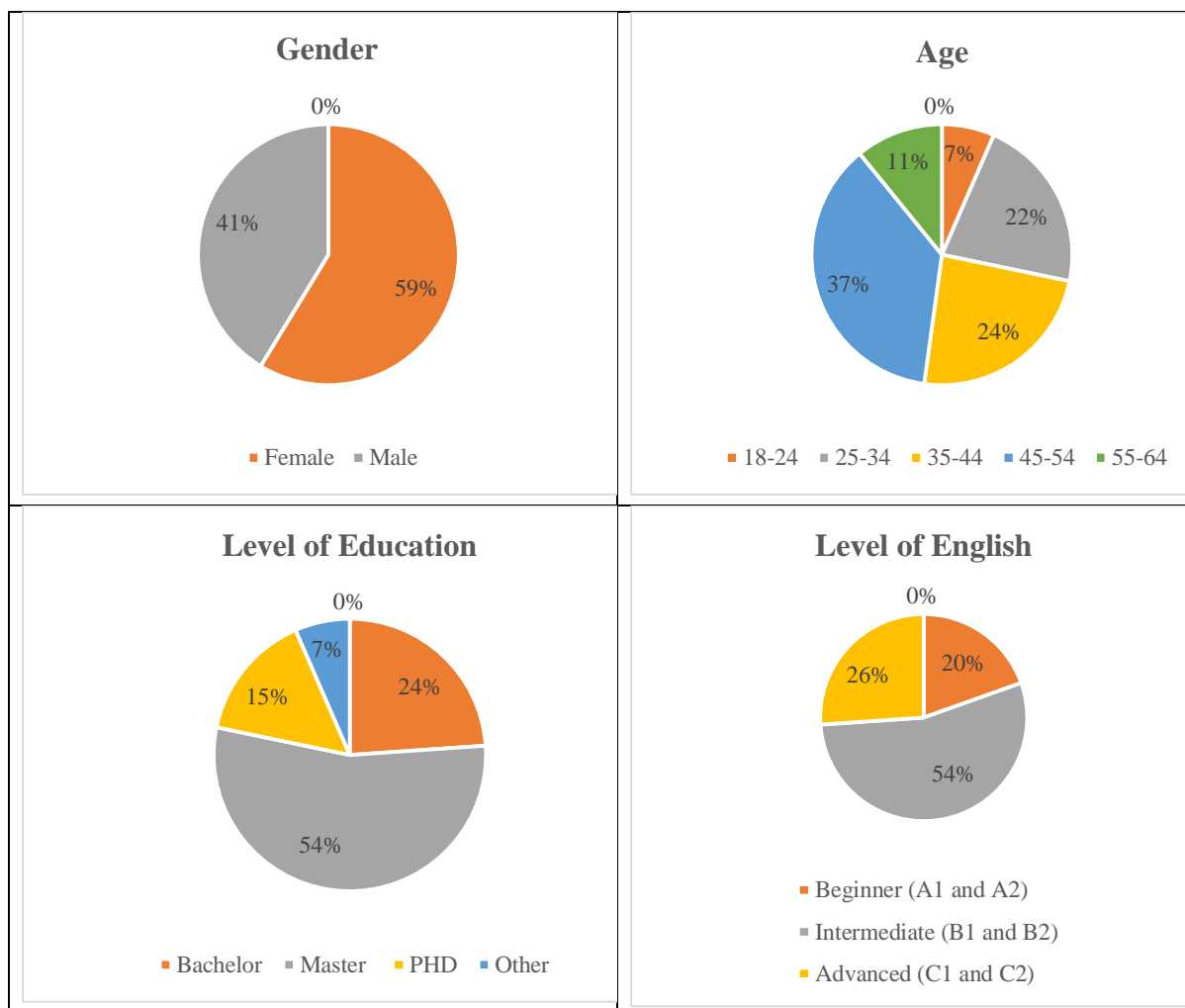


Figure 2. Profile of the 46 participants who attended the Eurodesign course in sport

The research methods used in this paper were the following: experiment, testing (Cognitrom test – verbal and numerical cognitive abilities, functional skills, decision-making ability) and mathematical statistics. As statistical methods, we used: correlations, T - test, Exploratory Factor Analysis (EFA) and cross-tabulations. In the Factor Analysis, we also used the Eigenvalues, which actually reflect the number of extracted factors whose sum should equal one number of items subject to Factor Analysis. The Eigenvalue represents the communality for each item. The experimental variables were:

Variables related to Knowledge (KnowAvg): participants in the training course responded to a questionnaire where they self-assessed their knowledge regarding the application for European projects, the actual writing of the project and the analysis of needs, by outlining the purpose and objectives of the project, making the Gantt chart, making the budget, finding international partners and disseminating the project results. The questionnaire was applied at the beginning and at the end of the training course to see its impact on the participants' knowledge. The questions and corresponding codes to self-assess the participants' knowledge at the beginning and on completion of the training are presented below.

Total Score variable (ScoreKnow): the participants' knowledge about how to write a funded project was checked through a final evaluation test related to: known funding opportunities,

call launching platforms, project characteristics, project budget, Gantt chart, project stages, problem tree, SWOT analysis, SMART objectives, PERT method, evaluation types, project results and impact. If they responded correctly to all the questions, the participants could get a final score of 18 points. The questions were included in an online single-choice/multiple-choice questionnaire, with each item scoring 1 for a correct response and 0 for an incorrect response.

Individual Score variable (IndScore): the score obtained when evaluating the final project drafts after the two months of training intervention depended on the financier's evaluation criteria: Relevance, Project Design, Team Experience, Dissemination of Project Results/Impact. The maximum score for all criteria was 100 points, with a maximum of 30 points for Relevance, a maximum of 20 points for Project Design, a maximum of 20 points for Team Experience and a maximum of 30 points for Impact.

Variables related to Experience: in this study, experience was measured by taking into consideration the following variables (inspired by the conceptual model developed by Lutas et al., 2020): High course frequency: those who actively participated in the course; Course finalists: those who made project drafts and passed the final knowledge test; Education; English knowledge; Experience within the organization; Organization experience in projects; Intention to submit projects; Knowledge of programmes with European funding; Ability to take responsibility for writing a project; Funds certificates; Experience in a project team; Project writing experience in the field of sport; Experience Average (ExpAvr): average score of the above variables. We used 5-point Likert scales and binary variables (Yes, No).

Variables related to Cognitive Skills: Verbal skills – understanding the meaning of words and correctly operating with them, ability to combine words in sentences and sentences based on precise rules, ability to read and understand information and ideas presented verbally or in writing; Numerical skills – ability to understand and use numerical content, the speed and correctness of performing simple mathematical calculations, analysing and solving a mathematical problem; Functional skills: ability to quickly identify significant details and errors in written materials and tables; Decision-Making skills – ability to choose as rationally as possible between several available alternatives in order to solve a situation/problem.

The research variables are shown in Table 1.

Table 1. *Research variables: Description and scale*

Variables	Items	Description	Scale
Knowledge	KnowAvg	Knowledge Average: knowledge about implementation (KImplement), writing (KWrite), needs (Kneeds), scope (Kscope), Gantt (KGantt), Budget (KBudget), partners (Kpartners), calls (KCall), dissemination (KMk) (evaluated in two moments, T0 and T1)	5-point Likert scales
IndScore	RELEVANCE	The Relevance criterion: the relevance for the objectives of the action, for the development and evolution needs of the participating organizations, the needs and objectives of the participants in the project	30 POINTS
	DESIGN	The Project Design criterion: clarity, completeness and quality of the work programme, including appropriate stages of preparation, implementation, monitoring, evaluation and dissemination; Appropriateness and quality of the methodology	20 POINTS

	TEAM	proposed to address the identified needs; Concordance between project objectives and proposed activities The Team criterion – experience of the implementation team: The extent to which: - the project involves an appropriate combination of complementary participating organizations with the necessary profile, experience and expertise to implement all aspects of the project successfully; - the distribution of responsibilities and tasks demonstrates the commitment and active contribution of all participating organizations. The existence of effective coordination and communication mechanisms between participating organizations and between them and other relevant stakeholders.	20 POINTS
	MK	The Dissemination of Project Results/Impact criterion: Quality of the project result evaluation; Potential impact of the project, quality of the dissemination plan and quality of the plans to ensure the project's sustainability	30 POINTS
	IndScore	The total score obtained when evaluating the drafts of final projects, according to the financer's evaluation criteria above. The maximum score for all criteria was 100 points: a maximum of 30 points for the Relevance criterion, a maximum of 20 points for the Design criterion, a maximum of 20 points for the Quality of the partnership and a maximum of 30 points for the Impact criterion. 19 participants were performers and produced project drafts that were evaluated by the facilitator (15%).	100 POINTS
ScoreKnow	KOPPORTUN	Participants' knowledge of known funding opportunities	multiple-choice question
	KPLATFORMUE	Participants' knowledge of the call platforms	multiple-choice question
	KDURATION	Participants' knowledge of the project duration	multiple-choice question
	KFEATURES	Participants' knowledge of the project characteristics	multiple-choice question
	KRESULTS	Participants' knowledge of the project results	multiple-choice question
	KBUDGET	Participants' knowledge of the budget items	multiple-choice question
	KDIFFERENCE	Participants' knowledge of the Gantt chart	multiple-choice question
	KSIMULTANEITY	Participants' knowledge about the simultaneity of project activities	multiple-choice question
	KSTEPS	Participants' knowledge about the project stages	multiple-choice question
	KTREE	Participants' knowledge about the problem tree and how to write causes and effects to their organization's problems	multiple-choice question
	KSWOT	Participants' knowledge about the SWOT analysis	multiple-choice question
	KOBSMART	Participants' knowledge of how to write SMART objectives	multiple-choice question
	IDENTIFYSMART	Participants' knowledge of how to identify SMART objectives	multiple-choice question
	KPERT	Participants' knowledge of the PERT method	multiple-choice question
KGANTT	Participants' knowledge of the Gantt chart	multiple-choice question	

	KEVALUATION	Participants' knowledge about the evaluation tools	multiple-choice question
	KIMPACT	Participants' knowledge about how to measure the impact of a project	multiple-choice question
	KDEFRESULTS	Participants' knowledge about the project's results	multiple-choice question
	ScoreKnow	The 46 participants' knowledge of writing a funded project was tested through a final evaluation test. If they responded correctly to all the questions, the participants could get a final score of 18 points. The questions were included in an online single-choice/multiple-choice questionnaire, with each item scoring 1 for a correct response and 0 for an incorrect response.	18 points
Experience	ExpAvg	Experience Average: education, English, experience in organisation, experience in projects, intention of application, certificates, experience in funds, experience in writing	5-point Likert scales and binary variables (Yes, No)
Cognitive skills	T0_Sverbal	Verbal ability at the initial time T0 – before the start of the course	Cognitrom test battery
	T0_Snum	Numerical ability at baseline T0 – before the start of the course	Cognitrom test battery
	T0_Sfunct	Functional ability at the initial time T0 – before the start of the course	Cognitrom test battery
	T0_Cdecide	Decision-making ability at the initial moment T0 – before the start of the course	Cognitrom test battery

Results

The 46 participants who attended the course were assessed with Cognitrom tests for their verbal, numerical, functional and decision-making skills. According to these tests, the 46 participants entered this course with the levels expressed below as averages (where 1 is the minimum value and 5 is the maximum value for cognitive skills).

Table 2 shows that the group of managers assessed with Cognitrom obtained an average score of 2.35 for the four skills (verbal, numerical, functional and decision-making ones).

Table 2. *Cognitive skills of the 46 participants who attended the course*

Skills	Count	Sum	Average
T_Sverbal	46	132	2.869565
T_Snum	46	107	2.326087
T_Sfunct	46	83	1.804348
T_Cdecide	46	110	2.391304
Average score			2.347826

Table 3 highlights that there are no significant correlations between managers' skills (measured with Cognitrom and analysed in detail) and the individual score. The verbal skills correlate medium and positive with numerical skills ($\rho = 0.55$) and weak with functional skills ($\rho = 0.33$), and decision capacity ($\rho = 0.34$). The numeric skills correlate weak and positive with functional skills ($\rho = 0.32$) and decision capacity ($\rho = 0.35$). The capacity to

decide also correlates with functional skills ($\rho = 0.45$). Thus we may say that the different skill correlate with each other.

Table 3. Spearman Correlation between the verbal and numerical cognitive abilities, functional skills, decision-making and the individual score

		T_Sverbal	T_Snumeric	T_Sfunc	T_Cdecide	IndScore	
Spearman's rho	T_Sverbal	Correlation Coefficient	1.000	.552**	.331*	.346*	.198
		Sig. (2-tailed)		.000	.025	.019	.188
		N	46	46	46	46	46
	T_Snumeric	Correlation Coefficient	.552**	1.000	.329*	.357*	.043
		Sig. (2-tailed)	.000		.026	.015	.779
		N	46	46	46	46	46
	T_Sfunc	Correlation Coefficient	.331*	.329*	1.000	.452**	.165
		Sig. (2-tailed)	.025	.026		.002	.274
		N	46	46	46	46	46
	T_Cdecide	Correlation Coefficient	.346*	.357*	.452**	1.000	.192
		Sig. (2-tailed)	.019	.015	.002		.200
		N	46	46	46	46	46
	IndScore	Correlation Coefficient	.198	.043	.165	.192	1.000
		Sig. (2-tailed)	.188	.779	.274	.200	
		N	46	46	46	46	46

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

However, the average of these skills correlates strong and positively with the individual score ($\rho = 0.771$). As shown in Table 4, there is a very medium positive correlation between the knowledge and experience ($\rho = 0.511$), and a weak positive correlation between skill and the final performance of a participant in a training course ($\rho = 0.304$). A weak positive correlation is also observed between individual score and the score achieved in the final individual assessments ($\rho = 0.365$). Thus, the acquisition of knowledge and skills increases performance in attracting European funds.

Table 4. Spearman Correlation between average variables

		ExpAvg	KnowAvg	SkillAvg	IndScore	ScoreKnow	
Spearman's rho	ExpAvg	Correlation Coefficient	1.000	.511**	-.043	.078	-.117
		Sig. (2-tailed)		.000	.777	.606	.438
		N	46	46	46	46	46
	KnowAvg	Correlation Coefficient	.511**	1.000	-.167	-.033	-.242
		Sig. (2-tailed)	.000		.267	.829	.106
		N	46	46	46	46	46

SkillAvg	Correlation Coefficient	.043	-.167	1.000	.771**	.304*
	Sig. (2-tailed)	.777	.267		.000	.040
	N	46	46	46	46	46
IndScore	Correlation Coefficient	.078	-.033	.771**	1.000	.365*
	Sig. (2-tailed)	.606	.829	.000		.013
	N	46	46	46	46	46
ScoreKnow	Correlation Coefficient	.117	-.242	.304*	.365*	1.000
	Sig. (2-tailed)	.438	.106	.040	.013	
	N	46	46	46	46	46

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The nine types of knowledge taken one by one do not correlate with IndScore, but they correlate with each other (Table 5).

Table 5. Spearman Correlation Knowledge types between variables

		T0_Kimplement	T0_KWrite	T0_Kneeds	T0_Kscope	T0_KGantt	T0_KBudget	T0_Kpartners	T0_KMk	
Spearman's rho	T0_Kimplement	rho	1.000	.752**	.333*	.432**	.612**	.703**	.579**	.460**
		Sig.		.000	.024	.003	.000	.000	.000	.001
		N	46	46	46	46	46	46	46	46
	T0_KWrite	rho	.752**	1.000	.343*	.444**	.577**	.652**	.617**	.493**
		Sig.	.000		.020	.002	.000	.000	.000	.000
		N	46	46	46	46	46	46	46	46
	T0_Kneeds	rho	.333*	.343*	1.000	.829**	.691**	.388**	.555**	.596**
		Sig.	.024	.020		.000	.000	.008	.000	.000
		N	46	46	46	46	46	46	46	46
	T0_Kscope	rho	.432**	.444**	.829**	1.000	.795**	.584**	.587**	.663**
		Sig.	.003	.002	.000		.000	.000	.000	.000
		N	46	46	46	46	46	46	46	46
	T0_KGantt	rho	.612**	.577**	.691**	.795**	1.000	.750**	.812**	.863**
		Sig.	.000	.000	.000	.000		.000	.000	.000
		N	46	46	46	46	46	46	46	46
	T0_KBudget	rho	.703**	.652**	.388**	.584**	.750**	1.000	.694**	.645**
		Sig.	.000	.000	.008	.000	.000		.000	.000
		N	46	46	46	46	46	46	46	46
T0_Kpartners	rho	.579**	.617**	.555**	.587**	.812**	.694**	1.000	.828**	
	Sig.	.000	.000	.000	.000	.000	.000		.000	
	N	46	46	46	46	46	46	46	46	
T0_KMk	rho	.460**	.493**	.596**	.663**	.863**	.645**	.828**	1.000	
	Sig.	.001	.000	.000	.000	.000	.000	.000		
	N	46	46	46	46	46	46	46	46	
IndScore	rho	-.109	-.028	-.008	.074	-.093	-.123	-.171	-.055	
	Sig.	.470	.854	.957	.627	.539	.417	.257	.715	
	N	46	46	46	46	46	46	46	46	

The T-test in Table 6 demonstrates that the average knowledge at the end of the course, at time T1 (3.72) increased compared to the average knowledge at the beginning of the course, at time T0 (2.46) by 1.26 points and this difference is statistically significant ($p < 0.05$).

The T-test demonstrates that the average of skills at the end of the course, at time T1 (3.25) increased compared to the average of skills at the beginning of the course, at time T0 (2.35) by 0.90 points and this difference is statistically significant.

The T- test for each of 9 type of knowledge in Table 7 below is statistically significant having p value < 0.01 . The main acquirments were due to the knowledge to write projects (an improvement of 1.55 points), finding partners (an improvement of 1.48 points), project implementation (an improvement of 1.41 points) and designing Gantt (an improvement of 1.39 points).

Table 6. *Statistical significance test on 46 subjects (t-Test: Paired Two Sample for Means)*

	Know_T0	Know_T1		Skills_T0	Skills_T1
Mean	2.46	3.72	Mean	2.35	3.25
Variance	1.17	0.51	Variance	0.82	2.71
Observations	46.00	46.00	Observations	46.00	46.00
Pearson Correlation	0.42		Pearson Correlation	0.73	
Hypothesized			Hypothesized		
Mean Difference	0.00		Mean Difference	0.00	
Df	45.00		Df	45.00	
t Stat	-8.49		t Stat	-5.28	
P(T<=t) one-tail	0.00		P(T<=t) one-tail	0.00	
t Critical one-tail	1.68		t Critical one-tail	1.68	
P(T<=t) two-tail	0.00		P(T<=t) two-tail	0.00	
t Critical two-tail	2.01		t Critical two-tail	2.01	

Table 5. *The T- test for each of 9 type of knowledge*

	Mean	P value	t Critical two-tail	Mean Difference
T0_KnowAvg	2.46	0.00	2.01	1.26
T1_KnowAvg	3.72			
T0_Kimplement	2.33	0.00	2.01	1.41
T1_KImplement	3.74			
T0_Kneeds	2.74	0.00	2.01	1.06
T1_KNeeds	3.80			
T0_KGantt	2.50	0.00	2.01	1.39
T1_KGantt	3.89			
T0_Kpartners	2.26	0.00	2.01	1.48
T1_Kpartners	3.74			
T0_KWrite	2.02	0.00	2.01	1.55
T1_KWrite	3.57			
T0_Kscope	2.70	0.00	2.01	1.26
T1_Kscope	3.96			
T0_KBudget	2.46	0.00	2.01	1.04
T1_KBudget	3.50			

T0_KCall	2.30	0.00	2.01	1.33
T1_KCall	3.63			
T0_KMk	2.80	0.00	2.01	0.90
T1_KMk	3.70			

Other differences between managers before taking classes and after the course comes from knowledge of how to find a call (Kcall = 1.33), define the project scop (Kscope = 1.26), knowledge regarding designing needs analysis (T0_Kneeds = 1.06), how to design the budget (KBudget = 1.04) and marketing/dissemination (T0_KMk = 0.89), confirming the second hypothesis.

These findings highlight the importance of assessing the needs for writing a European project as a first step in defining the right scope, objectives and activities of a project. The financial knowledge plays an important role in writing a project and is also one of the performance criteria in most of the project guidelines, as the evaluators search for projects that are cost-effective and allocate appropriate resources for each activity.

The crosstab analysis (Table 7) shows that, in general, women obtained higher values for the individual and final scores, regardless of whether they had previous project experience within the company, probably because they are more meticulous. It is observed that higher values are obtained by persons with a Bachelor's degree.

Table 7. Crosstab analysis

Row Labels	Values				
	Exp	Know	Skill	Ind Score	Score Know
None	0.86	3.28	3.42	16.67	12.33
No exp project	0.86	3.28	3.42	16.67	12.33
Male	0.86	3.28	3.42	16.67	12.33
Undergraduate	0.95	3.42	2.91	18.18	13.00
No exp project	0.97	3.54	2.87	22.22	13.11
Female	0.83	3.50	3.13	20.00	13.50
Male	1.08	3.58	2.67	24.00	12.80
With project exp	0.83	2.86	3.08	0.00	12.50
Female	0.83	2.86	3.08	0.00	12.50
Bachelor's degree	1.00	2.97	3.22	26.60	12.84
No exp project	1.00	3.15	3.25	29.44	12.78
Female	1.04	3.08	3.38	35.56	13.22
Male	0.97	3.23	3.11	23.33	12.33
With project exp	0.98	2.50	3.17	19.29	13.00
Female	0.99	2.42	3.24	22.50	13.00
Male	0.92	3.00	2.75	0.00	13.00
Master's degree	1.05	2.92	2.93	15.71	11.71
No exp project	0.96	2.85	2.56	15.00	12.00
Female	0.96	2.85	2.56	15.00	12.00
With project exp	1.17	3.02	3.42	16.67	11.33
Female	1.21	3.08	3.58	25.00	11.50
Male	1.08	2.89	3.08	0.00	11.00
Grand Total	0.98	3.09	3.12	22.28	12.67

These characteristics of the highly-effective group within a Eurodesign course in sport can be prerequisites for the formulation of subsequent courses: average English level, Bachelor’s studies, greater adaptability of women to this type of occupation. This information can be useful for both future participants and future trainers in the field of Eurodesign in sport.

In order to test the third hypothesis we analysed the importance of the knowledge and skills acquired during the training course for their professional performance. In the case of Exploratory Factor Analysis (EFA), starting from the correlation or variance and covariance matrix, factors are extracted by various techniques. Among the most commonly used, we mention the method of principal factors (focusing on the main components), maximum likelihood estimation. The choice of the most appropriate method depends on various statistical, methodological and interpretative criteria.

Communalities in Table 8 show how much of the variation (the communality value that should be greater than 0.5) can be considered for further analysis; otherwise, these variables must be removed from the factor analysis in the next steps. In our case, all four factors have values greater than 0.5, so we can include them into the model.

Table 8. *Communalities*

	Initial	Extraction
KnowAvg	1.000	.750
SkillAvg	1.000	.819
IndScore	1.000	.852
ExpAvg	1.000	.789

Extraction Method: Principal Component Analysis

Table 9. *Total Variance Explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
KnowAvg	1.821	45.529	45.529	1.821	45.529	45.529
SkillAvg	1.389	34.722	80.251	1.389	34.722	80.251
IndScore	.461	11.532	91.783			
ExpAvg	.329	8.217	100.000			

Extraction Method: Principal Component Analysis.

The factorial analysis in Table 9 demonstrates that, of the four factors, only two are important (Knowledge and Skills), because the first explains 45.5% of the variance, the second 34.7% of the variance, and therefore, together they explain 80.25% of the variance. The remaining 19.75% of the variance is explained by the individual score (11.53%), and 8.21% is explained by experience.

Discussion and Conclusion

This research has shown that there is a need for professionalization of occupations in the field of sport, whether we are talking about the sports manager, project manager, sports club manager, but also for specialisation in these occupations. Starting from a comparative analysis of the occupational standards of a sports manager and a project manager, we have determined that, in order for a sports manager to become an effective project manager, this one will have to develop the following skills: learning skills, numerical skills, functional skills and reaction ability. From our analyses, we can conclude that the research hypotheses are confirmed.

However, the first hypothesis is only partially confirmed, as none of the verbal, numerical, functional and decision-making skills correlates with individual performance, but taken as a whole, they have a moderate influence on performance. These skills, taken as a whole, influence the individual score.

The main factors that determine performance in writing European projects for the 46 participants who attended the course are (in order of importance): knowledge, skills, and then previous experience. There is a very strong positive correlation between knowledge and skills, and a very strong positive correlation between knowledge and the final performance of a participant in a training course. A strong positive correlation is also observed between skills and the score achieved in the final individual assessments. Thus, the acquisition of knowledge and skills increases performance in attracting European funds.

The present research has also shown that, besides these conditional factors that determine performance in writing a European project course in the field of sport, there are a number of specific factors from each participant's personal and professional biography, such as: average English level, Bachelor's degree, greater adaptability of women to this type of occupation. These characteristics can be useful for both future participants and future trainers in the field of Eurodesign in sport.

This research can contribute to creating a professional profile of the sports manager from the Eurodesign perspective. Other authors have also explored the profiles and competencies of successful project managers. One of these studies (Müller & Turner, 2010) provides insights into the factors that determine performance in writing European projects, such as knowledge, skills and previous experience, and emphasises the importance of knowledge and skills acquired during training courses for professional development.

Our study highlights that the performance of sports managers is made up of specific particularities depending on the context in which they act and that advanced training in sports management should be seen as a basis for quality practice and a prerequisite for successful performance (according to findings quoted by Jackson et al., 2022).

Our findings confirm and complete those of Segalla et al. (2021), who emphasised the main characteristics of a good manager: language training, test results, management skills, international work experience, academic training, and technical skills.

The conceptual model of the ideal profile of a project manager created by Lutas et al. (2020) was based on several categories of factors such as experience, certifications and education. Based on their model, when talking about performance in writing European projects, we have also found the order of importance of these factors: knowledge, skills, and then previous experience.

However, the results of this study should be viewed against the background of some limitations. The first limitation arises from the paucity of prior research relevant to our topic, especially in sport. Although not enough research has been done to show the experience and understanding requirements for strategic planning skills, a theory of experience and understanding is emerging, the core of which is that skills are derived from the knowledge of management activities. The uniqueness of our article responds to this issue. This was a significant opportunity to identify gaps in the literature and the need for further development in the field of management of European sports funds.

Also, the data collection and the variable measurement methods limited our ability to analyse the results thoroughly. On the other hand, our sample may not reflect the totally affected or relevant population. Therefore, future studies with larger sample sizes should be developed to identify critical associations between data and to explain the phenomenon of dropping out during the training.

By presenting empirical data on the performance factors in completing a training course in European funds for sport, this study significantly contributes to the professionalization of occupations in the field of sport.

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