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THE EVALUATION OF THE DEVELOPMENT LEVEL OF PERFORMANCE AND RECREATIONAL SPORTS IN ROMANIA

***Miron Corneliu*[1]**
[1]*Iasi, Romania*

Abstract. *This article addresses the dynamics of the development of federations, clubs and the number of athletes from 1992 to 2017. It is just a finding that raises big questions about the non-involvement of politics in the development of sport in Romania and also challenges us to find sustainable and current solutions on sports development in Romania, which at this point reaches the lowest threshold if we are to relate the number of athletes to the country's population.*

On the other hand, if we notice the gyms, we will find that they grew after 2000 and an accelerated development was after 2010 when big fitness operators appeared on the Romanian market.

Keywords: *sports education, sports management and marketing, sustainable development, health, social policies.*

Introduction

We find that in Romania, according to the National Institute of Statistics, publishing a clear record between 1992 and 2017 regarding the number of sports federations, sports clubs and legitimate athletes, the number of clubs within the Federations decreases alarmingly from year to year and at the same time the number of legitimate sports practitioners decreases drastically. If in 1992 Romania had 49 Federations with 11,928 sports clubs / sections with a total of 379,842 athletes which, compared to a population of 23,143,860 represents 1.64%, in 2017 there were 82 federations in Romania of which only 63 had 7,628 sports clubs / sections with a total number of 111,317 athletes which, compared to a population of 22,230,843 results a percentage of 0.5%, a really alarming percentage. 19 federations no longer have any registered athletes due to the fact that they have been abolished or assimilated in other federations. If we do not take into account the migrant population, we will report 111,317 legitimate athletes to a population of 18,500,000, which results in a 0.6% extremely low percentage compared to countries like Germany, France, England where the number of the moving population is over 70% according to Eurostat.

From 82 federations we find that within 26 the number of athletes has increased, and within 56 the number has decreased, thus we notice that in some branches of sports, such as football, basketball, athletics, karate, motorcycling, sports dancing, the number of practitioners increases from one year to another, the most spectacular increase being in basketball which increased from 1992 to 2017 with 22,293 athletes, and in others such as handball, chess, boxing, bodybuilding, weightlifting, bowling, amateur radio, rugby, table tennis , the number of athletes decreases, handball has the biggest loss with 57,210 athletes from 1992 to 2017.

It is certain that in 1992 there were 49 Federations with 11,928 clubs totaling 379,482 athletes and in 2017 there were 82 Federations with 63 clubs and 111,317 athletes. A paradox given that the number of Federations has increased, but the number of clubs and athletes has drastically decreased.

On the other hand, an analysis of fitness centers shows that they grew after 2000 and accelerated development after 2010 when on

the Romania market appeared great operators of fitness centers (World Class).

Research methods

For the realization of the paper we used the statistical-mathematical method, the comparison method and the analysis of the specialized literature. The public websites of the sports federations but also the specialized forum, respectively the Ministry of Youth and Sports of Romania, were accessed [2-8]. Also, several laws, government decisions, normative acts were studied, regulating both the functioning of specialized federations and the rights of citizens.

Findings and results

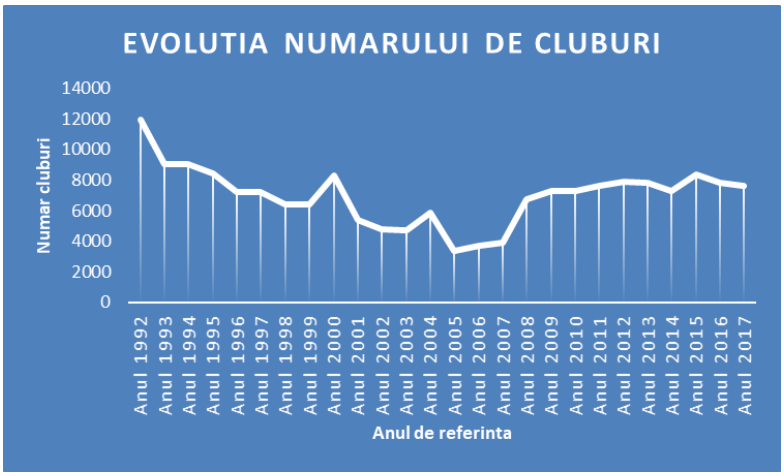

Fig. 1. Dynamics of the total number of legitimate athletes in Romania in the period 1992-2017

There is a rapidly decrease in the number of clubs from 1992 to 2005, followed by a slight increase until 2015 and a slight decrease in 2016 and 2017, respectively.

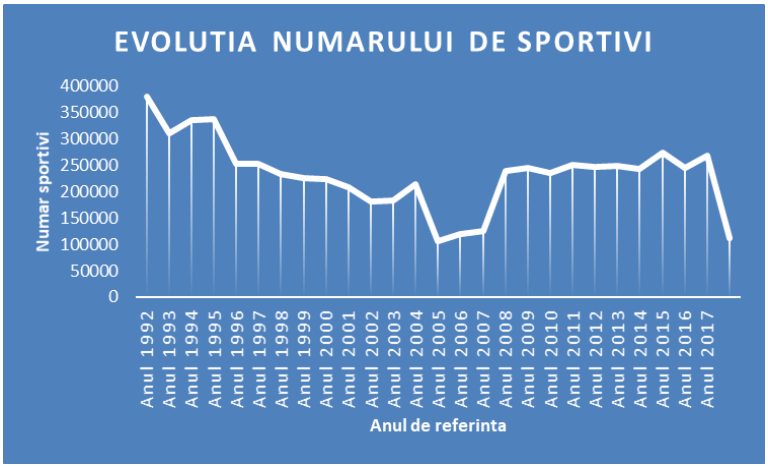

Fig. 2. Dynamics of the total number of clubs registered in Romania in the period 1992-2017

The number of athletes follows the same course as the number of clubs showing a rapidly decrease from 1992 to 2005 followed by 3 years of growth , then 9 years of relative stagnation and again 2 years of drastic decline in 2016 and 2017 paradoxically in the context where the number of clubs in 2016 and 2017 remained the same.

Year 1992 * Year 2017, namely comparison no. athletes from 1992 and those from 2017.

Table 1. Testing the statistical hypothesis to verify the null hypothesis

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3640.392[a]	3315	.000
Likelihood Ratio	462.950	3315	1.000
N of Valid Cases	86		

The Chi-Square test was used to determine if there was a significant difference between the expected frequencies and those observed in the relevant categories of the studied sample.

From the perspective of the answers grouped by number of athletes, Chi-Square tests [1] show Pearson coefficients in normal values, significant in intervals <0.5, with the value ≤ 0.001 in total. On the other hand, the Likelihood Ratio test, which measures the significance of the predictor for the proposed model gives us the value for x ^ 2 = 462,950, significant at p ≤ 1,000, which shows that the number of athletes does not matter for the perception on the dynamics of attracting sports practitioners, generally regardless of the federation, in the period 1992-2017.

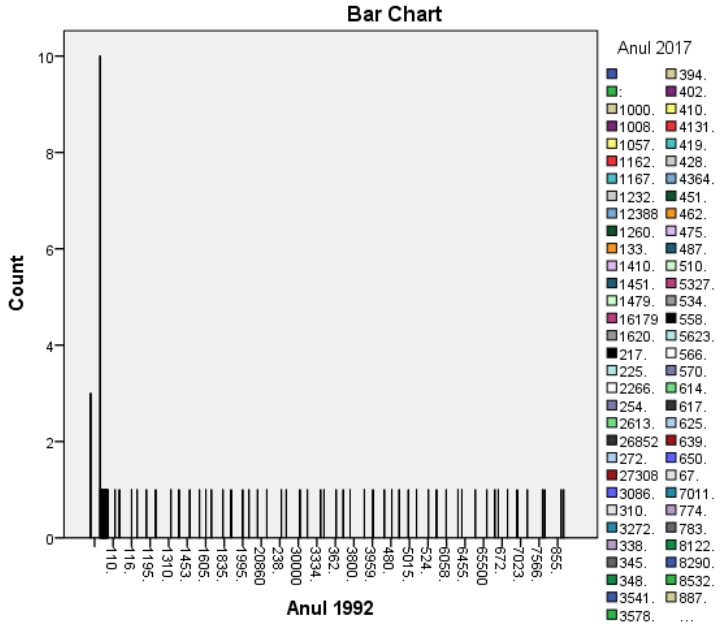

Fig. 3. Actual number of athletes registered as difference between 1992 and 2017

Table 2. Testing the small-scale model

Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	726.575			
Final	21.040	705.534	6068	1.000

Pseudo R-Square

Cox and Snell	1.000
Nagelkerke	1.000
McFadden	.932

The model as a whole meets the validation criteria with a Chi-Square of 705.534) (as the difference between intercept and final of -2 log likelihood), significant value at 1.000. It leads us to the conclusion that the period from 1992 to 2017 does not have a relevant influence. The explanations must therefore be sought in other factors such as lack of sports marketing.

Table 3. Test battery Likelihood Ratio

Likelihood Ratio Tests				
Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	21.040[a]	.000	0	.
Year 1992	84.664[b]	63.624	738	1.000
Year 2017	208.220[b]	187.180	1886	1.000

Test battery Likelihood Ratio it confirms us by the reduced model, created by omitting an effect from the final model (equivalent, since it has the same number of degrees of freedom), that the model is valid for all the considered elements.

Table 4. Analysis of variance

ANOVA Table[a]

			Sum of Squares	df	Mean Square	F	Sig.
Anul 1992* Anul 2017	Between Groups	(Combined)	7968534960.124	41	194354511.223	4.248	.018
	Within Groups		365994763.556	8	45749345.444		
	Total		8334529723.680	49			

Measures of Association

	Eta	Eta Squared
Anul 1992 * Anul 2017	.978	.956

ANOVA statistical inference test with the null hypothesis corresponding to the situation, whereby all the studied groups are random samples from the same population, it shows us that it is statistically significant at the value of .018 for a model with random effects. It follows that a derived linear model can be developed in future research, with the anticipated result of a possible negative correlation between the two temporal landmarks of the observed interval.

The results of the research show that in countries where education starts early, such as the Nordic countries, the percentage of population practicing exercisers is 90%, in countries that give special importance to sports such as England, Germany, France, Austria, SWISS percentage is about 77 and at the opposite pole are the countries that do not pay special attention to such education, countries such as Romania, Bulgaria where the percentage is below 30 being on the last two places in the EU according to Eurostat published in 2017 for a study year 2015, although the Romanian specialized newspapers and even the Ministry of Youth and Sports publish in the report National Strategy for Sports 2014-2028, that Romania would have a percentage of 40. The paradox appears in 2019 when Eurostat publishes a

study in which Romania appears on the first position with a percentage of 96, which raises 2 questions:

1. What.s good happened in the last 3 years in Romania?

2. How accurate or how sincere are Romanians in such questionnaires?

Conclusions and recommendations. In the current context, this paper is part of the theme and content of a study of individual behavior on exercise and also the involvement of policy on spending budget allocations to meet the main objective of practicing sport.

Also where there are sportsmen involved in marketing strategies we see that the number of athletes is growing, the best example is the Basketball Federation where in 1992 there were 5015 athletes but in 2017 they reached 27308 athletes and gyms that have an accelerated developed according to the articles from the financial and ProSport newspaper, saying: "*Fitness centers represent an official business of 160 million lei on the local market, in the last ten years the evolution being a spectacular one, given that the number of companies operating in this sector has increased from 277 companies in 2008 to just over 1,100 companies in 2017, shows an analysis of ZF, based on data from the Trade Register.*

The turnover reported by the companies operating on the CANE code "fitness center activities" increased from only 17 million lei in 2008 to 162 million lei in 2017, ie ten times, according to ZF calculations. The data also show that 1,900 employees worked in the field of sports centers in 2017, compared to only 445 employees that the companies that operated fitness centers had ten years ago, show the same source". This shows us how important marketing is in attracting people to the movement as the evolution of 21st century technology and the internet has brought certainty consistent or even radical changes in the practice of exercise in any form. People's participation in physical activity is extremely important for both individual health and public health and the benefits of adopting an active lifestyle are innumerable ranging from physical and mental well-being to socio-economic implications. These issues have gained great importance throughout the European Union but also in the rest of the world.

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