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PROVIDING HIGHER EDUCATION INSTITUTIONS IN THE REPUBLIC OF MOLDOVA WITH ACADEMIC STAFF: PROBLEMS AND PERSPECTIVES

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Abstract. The defiance of higher education institutions with the retention of qualified academic staff, lately, continues to be a strident one for the vision of development and prosperity in the educational services market.

The authors, in the presented research apply the comparative analysis of the scientificdidactic staff according to the criteria: age, didactic norm, didactic and scientific degree for the years of study 2015/2016 and 2021/2022 in the higher education institutions of the Republic of Moldova in order to identify the problems faced by HEI. The basis of the results obtained, priorities and perspectives of employment and improvement of the existing situation were formulated.

The competitiveness of academic staff is becoming a key factor in the modern educational process.

Keywords: higher education, academic staff, education, qualified staff.

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Introduction

The level of development of countries in the modern world is determined by the intellectual potential it holds. The role and importance of higher education in political, social and economic life can hardly be estimated. Not by chance, higher education is today considered one of the main values, without which the further development of society is impossible.

The educational system in the Republic of Moldova, as well as the global one, during the COVID-19 pandemic crisis, faced challenges such as: globalization, diversity of software products, implementation of large-scale technologies in the educational process, developing more and more activities and jobs that require more knowledge and training in the field of information technologies (De Waal & Kerklaan, 2015).

The services in the contemporary world are based on quality educational systems, able to respond to these challenges, while developing the need for human empowerment, by acquiring the knowledge and skills essential for building a modern society.

Education allows society to interpret the world around it, in the correct way, innovating new ways and means to conform to the environment, generating opinions on economic and social life.

The subject of the study is the structure of the didactic-scientific staff in the higher education institutions of the Republic of Moldova, and the subject of the study is the priorities and perspectives of employment and improvement of the existing situation.

The purpose of the study is apply the comparative analysis of the scientific-didactic staff according to the criteria: age, didactic norm, didactic and scientific degree for the years of study 2015/2016 and 2021/2022 in the higher education institutions of the Republic of Moldova in order to identify the problems faced by HEI. And the research of the study is the identifications priorities and perspectives of employment and improvement of the existing situation were formulated.

Literature Review

According to the organization's theory, qualified personnel are a key factor in the development and prosperity of organizations including HEI, which in turn through long-term financial investments can be motivated and guided to advance in the career. A qualified didactic-scientific staff is a promoter of didactic-scientific activity, research, innovation, and reform measures. Unfortunately, it is found that the teaching profession does not enjoy success among high school graduates (Negura, 2018). This phenomenon can be explained by the absence of state policies in the process of attracting, training and perpetuating qualified teaching staff in the educational system.

The education system in the Republic of Moldova, in the last two decades, is engaged in a series of ambitious reforms and faces obstacles of different sizes. With reference to the academic staff, there are numerous problems of attracting, training and perpetuating it (TîrŞu, 2021; Banari & Beldiga, 2021)

- number of those willing to practice a teaching career decreases drastically;
- situation and economic instability;
- devaluing the image of a teacher, as a result of demining the importance of education in society;
- unattractive remuneration.

The employment of academic staff in the Republic of Moldova is regulated by the following legal norms:

- Code of the Republic of Moldova: Article 118. Filling the didactic, scientific-didactic and scientific positions (The education code of the Republic of Moldova, 2014).
- Labor Code of the Republic of Moldova: Chapter XI. Work of employees in education and in organizations in the field of science and innovation. Articles 296 to 301 (The Labor Code of the Republic of Moldova, 2003).
- GD no. 616/2016 elaborated by the National Agency for Quality Assurance in Education and Research (ANACEC) and approved by the Government (Decision nr.616, 2016).
- Internal regulations, Regulations regarding the occupation of didactic / scientific-didactic positions and the conferring of scientific-didactic / honorary titles (Technical University of Moldova. Legislation, 2022).

The purpose of this paper is to understand the challenges faced by higher education institutions (HEI) in the context of academic staff and to identify solutions to prevent underdevelopment and insufficiency of qualified teaching staff. Because, according to the data presented by the National Bureau of Statistics of the Republic of Moldova, the number of scientific-didactic staff in HEI decreased by 37% in the academic year 2020/2021 compared to 2010/2011 (National Bureau of Statistics of the Republic of Moldova, 2022).

Respectively, the identification of the employees' expectations regarding the working environment is a critical issue in the ability of the HEI to keep the teaching staff. In this respect, the current state of the Moldovan university system is of scientific and practical interest and requires a comprehensive study.

Methods

The literature in the field specific to the proposed research was analyzed with the aim of evaluating and analyzing the most relevant visions.

The present study was elaborated based on the data provided by the National Bureau of Statistics of the Republic of Moldova for the academic years 2015/2016 and 2021/2022.

The results were obtained by applying dynamic process analysis, comparative analysis, classifications, synthesis, analogy, various statistical methods, graphical representations and tabulation, etc. The representation of the data was performed with the MS Office Excel program.

Results

The conjuncture of contemporary society has become much more complicated due to the pandemic crisis. The crisis period was marked with the avalanche of the implementation of new technologies and information opportunities that were adopted unannounced. This period, the educational services offered by universities have undergone essential changes. Previously, university institutions were recognized not only as a place where lectures are held, but also as a location associated with social communication between a teacher and a student. This process has become more flexible and complex. In a new vision in which basic definitions take on a new form, accreditation and quality assurance in educational institutions have become particularly important tools. What is happening today in universities is a demonstration and a particular case of a paradigm shift in human life in a new technological order, a post-industrial society. We live in a world where information and information technologies have become the basis of human life. Now there is also a palpable requirement of a whole new culture of the functioning of the entire human society as a whole and of specific people who, in order to be perceived at the level of public opinion as cultural representatives of society, must have a completely different set of skills. What happens in academia is a reflection of the whole process and, as is often the case, takes somewhat exaggerated forms that go beyond the norms established in society. It is very important to note that today's education is not only about the transfer of skills or a set of knowledge, but also this process of transmitting knowledge is negatively determined by the lack of a cultural community in universities, the contingent of teachers and students is too heterogeneous. In this regard, the transfer of knowledge in the classic format of teacher-student communication is outdated.

Currently, the higher education system in the Republic of Moldova is in the process of development and optimization. Every year, the requirements for a teacher are increased and require the teacher to correspond to the following performance indicators:

- didactic activity direct contact hours;
- methodical activity by publishing methodical-didactic works, by elaborating institutional and classical tests, placing the teaching material on different educational platforms, etc.;
- scientific activity publication of articles in scientific journals, participation in various conferences, symposiums, etc.;
- community activity activities in projects, participation in different tracksuits / seminars / professional training activities, etc.

The specific characteristics of the pedagogical activity include a set of communication and interaction links, the constant need to make decisions, the detection of constructive ways of conflict resolution, etc. Thus, all the requirements towards the teacher create a constant tension that results in a decrease in the capacity to work, physical fatigue, disappointment and emotional exhaustion are often a decisive factor in the decision of the teacher to abandon the pedagogical activity. On the other hand, the training of qualified and permanent teaching staff in HEI is a necessary condition for long-term survival of HEI. The lack of qualified teaching staff limits the development of national or international investment projects, as well as the development of innovation sectors.

In order to identify the existing situation in the HEI in the Republic of Moldova, the analysis of the scientific-didactic staff was carried out according to the following criteria:

1. by age group;

2. according to the form of employment: holders or external accumulation;

- 3. basic staff according to the full or partial teaching norm;
- 4. basic staff according to the scientific degree and didactic title.

Based on the analyzed data, the academic staff under the age of 40 in the academic year 2021/2022 indicates 23.66% of the total number of employees and recorded a negative dynamic of 13.9% compared to the academic year 2015/2016 (Table 1).

Table 1 Scientific-teaching staff classified by age categories											
	Scientific-didactic staff, persons										
Age,	Professor			Associate Professor		Ûniversity lecturer		Teaching staff		Total	
years	2015/	2021/	2015/	2021/	2015/	2021/	2015/	2021/	2015/	2021/	
	2016	2022	2016	2022	2016	2022	2016	2022	2016	2022	
under 30	-	-	3	-	198	9	144	130	345	139	
30 - 39	4	1	203	144	978	173	252	471	1437	789	
40 - 49	25	18	467	527	512	261	110	428	1114	1234	
50 - 59	48	49	413	411	271	100	43	196	775	756	
over 60	261	264	566	509	222	89	23	142	1072	1004	
TOTAL	338	332	1652	1591	2181	632	572	1367	4743	3922	

Source: elaborated by the authors on the basis of the data provided by the National Bureau of Statistics





Source: elaborated by the authors

According to the results reflected in Figure 1, it is found that the number of employees classified by age categories during the years 2015-2022 differs from one category to another. At the same time, it is established that in the academic year 2020/2021 the scientific-didactic staff of the HEI in the Republic of Moldova decreased by 821 compared to the reference period. With regret, the decrease is also evident in the age category under 39 years, which indicates that the provision of scientific-didactic staff in all categories aged up to 40 years is a difficult subject for HEI.

Table 2 represents the teaching-scientific staff classified by age group. According to the calculated share, it can be identified that teachers under the age of 30 constitute 3.54%, registering a decrease of 3.73% compared to the academic year 2015/2016.

The decrease in the number of scientific-didactic staff aged up to 39 years emphasizes that young specialists are not attracted to the teaching profession, being influenced by several factors such as, for example, the low salaries in this field of activity, the lack of promotion of the role and impact of this profession in the economy, society, etc.

On the other hand, the share of teachers in the age categories 50-59 years and over 60 years, who represent people with the age limit for retirement, is 19.27% and 25.59% respectively. It should be noted that the exit of the given group of people from the educational system risks generating a shortage of discernible teachers.

Table 2 The pace of change of the scientific-didactic staff, by age in the academic year 2021/2022 compared to the academic year 2015/2016, %								
Age Professor (%)		Associate Professor (%)	University lecturer (%)	Teaching staff (%)	Total (%)			
under 30	0,00	0,00	-95,45	-9,72	-59,71			
30 - 39	-75,00	-29,06	-82,31	86,90	-45,09			
40 - 49	-28,00	12,85	-49,02	289,09	10,77			
50 - 59	2,08	-0,48	-63,10	355,81	-2,45			
over 60	1,15	-10,07	-59,91	517,39	-6,35			
Total	-1,78	-3,69	-71,02	138,99	-17,31			

Source: developed by the authors based on the data provided by the National Bureau of Statistics

According to the data presented in Table 2, it can be mentioned that the total number of scientific-didactic staff in the academic year 2020/2021 compared to the reference period decreased by 17.31%. The decrease of the scientific-didactic staff was registered approximately in all age categories except for the age of 40-49 years where there is an increase of 10.77%. This increase is due to the lack of young teaching staff and the aging process of existing academic staff.



Figure 2. Tenured scientific-didactic staff for a. y. 2021/2022 compared to a.y. 2015/2016 Source: developed by the authors based on the data provided by the National Bureau of Statistics

Analyzing the scientific-didactic staff by types of employment: titular (Figure 2) or external accumulation (Figure 3), it is attested that for both forms of employment there is an increase in the number of staff only in the category of teaching staff: holders with 138,99% and 203,53% external cumulated, respectively. This increasing trend of teaching staff can be explained by applying the Education Code of the Republic of Moldova no. 152 from 17.07.2014 (The education code of the Republic of Moldova, 2014) and the Framework Regulation on the organization, conduct of the competition and occupation of teaching and scientific-didactic positions in higher education (Technical University of Moldova. Legislation, 2022), approved by MECC Order no. 126 of February 10, 2021 (Ministry of Education, Culture and Research of the Republic of Moldova, 2021). According to these normative acts, the teachers who do not hold the title of Doctor of Sciences from the category of university lecturer were transferred to the category of teacher.



Figure 3. Scientific-didactic staff external accumulation for a. y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics



Figure 4. Full-time scientific-didactic staff employed at UTM a.y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics

A particular analysis was carried out on the basic full-time scientific-didactic staff, registered for the academic year 2021/2022 compared to the academic year 2015/2016, which shows that the basic full-time staff has decreased by 32.64% (Figure 4) and the number of staff working part-time registered a growth trend of 19.74% (Figure 5).

The increase in the number of staff employed by external accumulation can be explained by:

- Scientific-didactic staff work simultaneously in several educational institutions;
- Attracting in the educational process specialists from the real sector.



Figure 5. Part-time scientific-didactic staff employed at UTM a.y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics

The analysis of the employment flow of the scientific-didactic titular staff classified by scientific grade for the academic year 2020/2021 compared to the reference period, we establish that the pace of change has not undergone great changes. The basic personnel with the scientific degree Doctor habilitate fell by 1.37% (Figure 6), and the basic personnel with the scientific degree Doctor of Sciences increased by 6.09% (Figure 7).



Figure 6. The basic staff with the scientific degree Doctor Habilitate in a.y 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics



Figure 7. Basic staff with a scientific degree doctor of sciences in a.y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics

If we refer to the qualified teaching staff, we can see that in the academic year 2021/2022 the academic staff with a teaching degree – university professor (the data do not include the management staff), increased by 1.39% compared to the reference year and mainly the staff is found in the position of university professor where the rate of change has also increased by 0.35% compared to the reference year (Figure 8).



Figure 8. Basic staff with a teaching title university professor a.y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics

The analysis of the academic staff with a teaching degree – associate professor (the data do not include the management staff), indicates that the change rate decreased by 13.94% compared to the reference year and mainly the staff is found in the position of associate professor where the change rate also increased by 0.47% compared to the reference year (Figure 9).



Figure 9. Basic staff with a teaching title associate professor a.y. 2021/2022 compared to a.y. 2015/2016

Source: developed by the authors based on the data provided by the National Bureau of Statistics

The examination of the basic teaching staff with a scientific degree for the academic year 2021/2022 allows us to identify the largest share of the total number of academic staff is held by doctors of sciences with 48.42%, followed by associate professors respectively with 37.06% (Table 3).

An overview of the basic staff separately according to the scientific degree and the teaching title in the university year 2021/2022 compared to the reference period, a negative dynamic was found for all categories, as follows:

- Doctor Habilitate with 25,12%;
- Doctors of Science with 8,04%;
- Associate Professor with 13,94%
- University professor with 23,80%.

Table 3 Basic staff classified by scientific degree and teaching title							
Basic staff with scientific	Acaden	nic year	Share, %				
degree and teaching title	2015/2016	2021/2022	2015/2016	2021/2022			
Doctor Habilitate	410	307	8,30	7,14			
Doctor of Science	2263	2081	45,81	48,42			
University Professor	416	317	8,42	7,38			
Associate Professor	1851	1593	37,47	37,06			
TOTAL	4940	4298	100	100			

Source: developed by the authors based on the data provided by the National Bureau of Statistics (including the management staff)

Discussion

As a result of the performed research, it was found that the HEI lacks teaching staff with a scientific degree. In the coming years, this problem is to be accentuated and to be a barrier in ensuring the prodigious development of the educational system in the Republic of Moldova.

In order to improve the existing situation, the algorithm reflected in Table 4 is proposed.

	Tabel 4								
	Providing academic staff in HEI: problems and perspectives								
	Problems		Priority	Perspectives					
1. 2. 3. 4.	The problem of occupying the position of assistant professor due to the failure to perform the psycho-pedagogical module. The problem of occupying the position of university lecturer because of not holding the scientific title of Doctor in the field. Insufficiency of scientific- didactic staff empowered with the right of doctoral supervisor. The exit from the system of people with pre-retirement and retirement age leads to a not insignificant shortage of teachers.	•	Adjusting the credit points obtained at the psycho-pedagogical module with the practical competences cumulated through the teaching experience. Financial support by granting paid creative leave, decreasing the teaching norm of the teachers involved in the doctoral school. The decrease of the teaching norm of the authorizing scientific- didactic staff with the right of doctoral supervisor. Attracting young specialists in the higher education system by providing social, financial, motivational facilities.	•	Increase in the number of university assistants hired through competition. Increasing the number of teachers who will support the doctoral thesis and will be employed through competition as university lecturers / associate professors. The increase of the interest of the scientific-didactic staff to be empowered with the right of doctoral supervisor will have a positive impact on the increase of the number of doctoral students and on the development of the scientific activity. Increasing the number of scientific-didactic and scientific staff with young age and increasing the research activity in HEI.				

Source: developed by the authors

Conclusion

According to the research carried out, it was found that the causes of the decrease in the number of scientific-teaching staff in the HEI of the Republic of Moldova are determined by a series of problems.

Among them we can mention:

- the number of those willing to practice a teaching career decreases drastically;
- demographic situation and economic instability;
- devaluing the image of a teacher, as a result of demining the importance of education in society;
- unattractive remuneration;
- migration of human resources abroad.
- The actions that can be taken to solve the identified problems fall within the:
- promoting the image and status of the teaching staff through mass-media;
- ensuring the flexibility of entry and return to the educational system of the specialists from the business environment by elaborating the normative framework;
- improving the process of career promotion of teachers with a focus on transparency and efficiency;
- ensuring an average salary for the teaching staff not lower than the level of the average salary in the economy and its correlation to be in accordance with the individual professional performance;
- saving and capitalizing on existing resources;
- raising the standard of living in the Republic of Moldova through:
- ensuring a favorable social, political, economic climate.
- the opening up and operation of small and medium-sized enterprises in the production sector.
- compliance with the law.

The actions listed above would allow to solve the problem of the lack of didactic-methodical staff by implementing long-term strategic personnel policies, namely by:

- developing a program for attracting and maintaining high-performing staff in the system, so that the average age of teachers in the education system to decrease;
- improvement of the salary system, which will influence the increase of the share of young staff in the educational system;
- attracting young specialists in didactic, scientific-didactic and scientific activity;
- increasing the standard of living and the quality of life;
- rejuvenation of the average age of the population;
- the increase in the birth rate;
- increasing the number of students in HEI in the Republic of Moldova.

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