

Scientific and Applicative Value of the PhD Thesis in the Educational Process of Research and Innovation

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Abstract

The process of elaboration a PhD thesis in the third cycle of superior studies includes a scientific research regarding theoretical and practical results obtained both national and international level.

The work includes a study about the applicative and scientific value of the PhD thesis in Republic of Moldova, so important for the development of the scientific collaborations between our country and European ones, and not only. The applicative value represents the author main result in a particular field of research, in the same time, contributing in solving current scientific problems. The results presented are obtained from the investigation of PhD thesis from the different areas of research and how they increase the scientific level of research and innovation. .

Keywords: innovation, scientific research, applicative value, PhD thesis.

1. Introduction

The educational process in the third cycle of studies implies a broader research level, creating the foundation for a new field of analysis. With the introduction of the concept of research and innovation by adopting the Strategy of research and development of Republic of Moldova until 2020, which aims is the developing of an efficient environment for work in research and development activity, creation of necessary conditions for implementation of innovational technologies in real sector of economy - key elements in Moldova to establish a genuine knowledge-based society and economy [1], was wanted to be created a more efficient and progressive mechanism for the entire educational system.

As an example is the adoption of the Strategy for Research and Innovation at Moldova State University for the period 2015 - 2020, that has the aims to promote the state policy in the sphere of fundamental sciences and applied according to the strategic directions development of science and consolidate from the interconnection between science and education; training of undergraduate, postgraduate and doctoral research, supporting young scientists; the conduct of collaboration of national, regional and

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international research, innovation and technology transfer [2].

The whole process of scientific research in the development of a doctoral thesis involves several steps need to be taken into consideration and determine the applicability and novation of the subject investigated. Thus, thorough conducted a study in a particular field of research, enhances scientific development, both at the legislative concept, and at the practical level approach. The totality of scientific news causes a certain degree of knowledge and possibility of putting into practice the novation researched subject in the light of the whole evaluation process. Considering the above, we can notice that the subject wanted to be analysed, namely, scientific and applicative value of doctoral theses, is a part of the proposed results to be solved after performing an advanced study in a particular field of research.

2. Terminology and concept

The term of value, according to the Dictionary of the Romanian Language, means property of what is important, valuable, worthy of appreciation [3]. In terms of scientific, value is not a given, but an act, in the experience of value intervene also desires, feelings, will and knowledge, which is a report of an object (good material, spiritual creation, basically, behaviour) and a subject that considers the object, is a relationship of appreciation, means that social relationship, between subject and object, expressing his love for a person or corporate objects or facts, material or spiritual, by virtue of their ability to meet the needs, desires, human aspirations, historically conditioned by social practice, to contribute to the progress of man and society.

In terms of axiology discipline, as a distinct branch of philosophy, this is a consequence of dissociation the generic value from the special values studied by particular sciences. One of the value categories is - scientific values, which occupies a sui generis place in the constellation of cultural values of the contemporary world. This privileged position, in K. Popper's view, is due to the capacity of science to ensure the progress of human knowledge, to provide tools for this knowledge, to apply its results in practice [4].

To know the exact results obtained from determining the value of a particular field of research, it is effective to specify which are the social functions of this values. Thus, values have the following social functions:

1. is a factor of historical progress - ensuring cohesion and social order; determining continuity and dynamic social systems or by the conflict, either by adhesion and promotion, are an indicator of the degree of civilization and culture;
2. normative and educational function - motivates human action, underline human personality;
3. cumulative-communicative function – accumulates knowledge and human

- experience and ensure communication between generations and communities;
4. adaptation and integration function - is the human condition and gives meaning to life, because human life is conducted in the values horizon [5].

Therefore, the practical value means those results obtained from scientific research, which represents a social interest to be used in practical aspect. Of all mentioned definitions, we can say that according to conceptual aspects, the terms of scientific value and practical value are those results obtained after carrying out a detailed research and analysis in a particular subject area, reflecting those priorities and effects need to be used and implemented in any social approach.

3.Regulation of the evaluation mechanism of the applicative and scientific value of the research

The entire process of elaboration a PhD theses involves several steps regulated by the law in force. One of the main provision is the Regulation on the organization of higher education doctoral, third cycle, developed by the Ministry of Education and approved by the Government Decision [6]. This Regulation is the regulatory framework governing the organization and conduct programs of doctoral studies in Republic of Moldova, the third cycle of higher education in the structure of the European Higher Education Area (EHEA/ Bologna), corresponding to the level 8 of the National Qualifications Framework (NQF) and European Qualifications Framework (EQF) and the education Code of the Republic of Moldova no.152 of 17 July 2014. Doctoral studies represent the first stage of the scientific career.

Also, the Code on science and innovation of the Republic of Moldova, in article 18, point d) provides that in the introduction of PhD thesis should appear the theoretical importance and the scientific value of the work. The same, art. 19 stipulates that the content of the PhD thesis so as to expose convincingly demonstrate the value of the results of investigations, their place in the context of scientific research from the country and the world [7].

Another important provision that contains stipulations about the necessity to mention about the scientific and applicative value of the PhD thesis is the Guide on perfecting PhD thesis and self-referencing. As we know, the PhD thesis contains some compulsory parts and in some of them we must write about the scientific and applicative value, like in annotation, introduction and general conclusions and recommendations [8].

The Regulation on formation and the activity of the scientific seminar profile provides that during the scientific seminar meeting, the claimant to submit scientific degree presents a detailed report where:

- inform the audience about institution were the research has been developed; the team of researchers who collaborated; scientific and technical basis used;

personal contribution, presenting (if necessary) all materials that confirm the copyright and authenticity of the results presented in the thesis;

- exposes the thesis, highlighting the actuality, scientific novelty, theoretical significance and the applicative value of the work, approving the results and their place in the context of research from the country and the world, conclusions and recommendations, publications on the topic of thesis. Also, the scientific seminar profile members examines materials of the thesis, impartial express their objections and views on the value of the thesis [9].

In compliance with the same Regulation, in Annex number 7 – The main elements of the scientific board meeting program specialized for the public defense of the PhD thesis, in point 5, is mentioned that scientific secretary read the objections and suggestions presented ...regarding on the scientific value of the thesis.

Also, in point 13, the President in the presence of board members and officials announce publicly the results of voting. The scientific secretary read the draft decision regarding the novelty and scientific and practical value of the results obtained in the thesis and the scientific degree awarding asked, that board members approve by open vote.

In conclusion we can mention that each PhD thesis must contain parts we is mentioned about the thesis value, both scientific and applicative. As we saw in each step for supporting the PhD thesis is important to indicate the results and conclusions that lead to the application into practice from a valuable point of view.

4.Comparative analysis of the applied and scientific value in various fields of research

Next we will try to determine which are the most significant results obtained by researchers, regarding the scientific and applicative value from various fields of research. In our analysis we research some of the PhD thesis, from a whole of 144 PhD thesis elaborated in 2015[10].

So, from 11 PhD thesis form the field of Physics and mathematics, we can mention that in this area the researches:

- elaborates new methodologies, concepts that led to solving concrete issues;
- determine new research methods and establish general principles;
- developing new technologies with broad application in the field;
- systematization ensure continuity of education research problems;
- results are useful for designing new materials and can be adopted for interpretation of experimental results by researchers in the field.

From 2 PhD thesis in the Chemistry field we notice that conclusions made in this papers will further streamline guide providing valuable information to generate alternative materials. Also the practical significance is the development, validation and

implementation procedures and practical recommendations are based on results of work for manufacturers to eliminate the problems in the future.

In the field of History were analysed 4 PhD thesis that contains the following aspects regarding the applicative value, such us:

- the research can be harnessed in educational and interactive aims to develop summarizing studies;
- the content of the works can be a source of information for lectures and special courses;
- basic conclusions can be used in the development of curricula to institutions of higher education;
- the research results are useful in practice every day of state building in relations between leaders and subordinates in the higher spheres of state power.

After consulting 16 thesis from the Pedagogy field we can mention that:

- the studies of advanced experience in the country and abroad gives the opportunity to promote the concept of education in Moldova and making recommendations to Moldovan trainers and trained in various similar projects;
- the process of optimization gives opportunities for professional development of teachers by engaging in a comprehensive programs;
- the results can be really useful for teachers, school psychologists in general-secondary educational institutions;
- practical recommendations can be sold in initial and continuing training of teachers.

Regarding Political Science, from 2 PhD thesis, we can indicate that the research results, conclusions and recommendations can be widely used both by theorists who will continue investigations in this field, and decision makers, who over solving problems will assess the main threats, risks and vulnerabilities in the development of policies efficiency. Also the researches contains several recommendations hierarchy that can be used by government authorities.

About the thesis from the Medicine field we investigated 25 of them and this are the conclusions:

- the researched results bring new strategy to the diagnosis, to a medical algorithm, optimization and prevention of the diseases;
- in the adjustment and development institutions contracting issues regarding different types of medical institutions;
- some results of the studies and launch concepts were used in drafting and amending of some decisions of the Moldovan Government and a number of Order of the Ministry of Health and Health Fund.
- results obtained in the studies specialized doctors knowledge supplemented with reference to onset, development, diagnosis and treatment of certain diseases.

Finally, we try to determine which are the main results regarding applicative and scientific value of the thesis from the Law field and for this were searched 24 PhD thesis and the conclusion are:

- the value of the work is manifested in its importance to students, master and PhD students, lecturers in training courses, lectures and academic development of scientific disciplines and regulations to improve the work of regional international organizations.
- the studies are intended for scientists, national judges, employees of the justice system in Moldova
- certain theses and pioneering ideas can be taken over for possible changes in legislation,
- the practicality of this thesis finds there reflection in: 1) scientific activity - interpretations and doctrinal definitions belonging to scientists in the country and abroad, but, equally, their own interpretations and analyzes will help develop new directions of development in law; 2.) teaching - conclusions and recommendations presented in the papers can be used in teaching at institutions of higher education in law in the context of initial training; 3) legislative activity - elaboration and founding new proposals and amending and supplementing legislation in force;
- practical value of the studies by demonstrating the fact that this research is based largely on the study of jurisprudence foreign being revealed many aspects of interpretation and application of the rules of law in respect of circumstances concrete were identified and proposed solutions for cases that go beyond standard situations;
- the conclusions and proposals may be useful in the improvement of legislation and in teaching process in the Faculties of Law from Republic of Moldova;
- the works, through their proposals and recommendations, have beneficial contributions on the connection of Moldova's legislative framework in Europe Union, through requirements and standards.

5. Conclusions

After a detailed study about how in our country is regulated the modality of researching of a scientific field and how the researches from the Republic of Moldova determine the scientific and applicative value of the PhD thesis, we can mention that this part of the thesis influence a lot the possibility to pass or not the supporting of the PhD thesis.

As it was specified, one of the reasons why somebody is doing a scientific research is that the results and the innovational aspects to be implemented in practice.

Bibliography:

- Strategy of research and development of Republic of Moldova until 2020, Annex no. 1 of the Government Decision nr.920, from November 7, 2014.
- Strategy for Research and Innovation at Moldova State University for the period 2015 – 2020, approved at the Senate meeting of March 31, 2015.
- Dictionary of the Romanian Language, Romanian Academy. Institute of Linguistics "Iorgu Jordan". Edition II. Bucharest: Univers enciclopedic, 1998.
- Value theory. [Online], Available from: <https://tonyss.wordpress.com/2007/11/08/teoria-valorilor/> [Accessed:16 of March 2016].
- Value theory. [Online], Available from: <https://tonyss.wordpress.com/2007/11/08/teoria-valorilor/> [Accessed:16 of March 2016].
- Government Decision no. 1007 of 10.12.2014 approving the Regulation on the organization of higher education doctoral third cycle; published: 12/26/2014 in the Official Gazette no. 386-396.
- Code on science and innovation of the Republic of Moldova No. 259 from 15.07.2004, published in the Official Gazette no 125-129 from 30.07.2004.
- Guide on perfecting PhD Thesis and self-referencing. Approved by the Decision of the Commission for Certification of CNAA, Nr.AT03 / 11 of 23 April 2009.
- Regulation on the establishment and activity profile scientific seminar. Approved by the Commission's determination attestation of scientific and scientific-pedagogical personnel of CNAA, 21 December 2006 (minutes no. 7).
- Thesis, 2015 [Online], Available from: <http://www.cnaa.acad.md/theses/2015/>, [Accessed: 17 of March 2016].