

Fundamentación psicológica de la investigación educativa en un programa de postgrado

Psychological bases of the educational research in a postgraduate program

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Resumen: Los fundamentos teóricos de la investigación educativa se caracterizan por su enfoque epistémico interdisciplinar, donde se entrelazan elementos filosóficos, sociológicos, psicológicos, entre otros. El estudio tiene el propósito de aproximarse a los fundamentos psicológicos de la investigación educativa en las tesis elaboradas en un programa de postgrado para la obtención del título de Máster en Ciencias de la Educación Superior. Para conducir las indagaciones se escogió un diseño cualitativo documental con enfoque de estudio de caso. El resultado permitió algunas inferencias que pudiesen resultar de utilidad en relación con la sustentación psicológica de la investigación educativa.

Palabras clave: Teorías psicológicas; Práctica investigativa pedagógica; Interdisciplinariedad; Zona de desarrollo próximo

Abstract: The theoretical bases of educational research are characterized by their interdisciplinary epistemic approach, where philosophical, sociological, and psychological elements intertwine; among others. The study aims to approach the psychological bases of educational research in the master's thesis developed in a postgraduate program to obtain a Master's title in Sciences of Higher Education. In order to conduct the inquiries, a qualitative documental design was chosen with focus of study of case. The result allowed some inferences that could be useful in relation to the psychological support of educational research.

Keywords: Psychological theories; Pedagogical research practice; Interdisciplinarity; Zone of proximal development

Introduction

Every day it is more evident the approach between different disciplines that, in a continuous way, has been taking place under the action of the advances of the sciences. In the case of research in the field of education, this characteristic leads to the adoption of interdisciplinary conceptions as a requirement arising from the complexity of their object of study (Ortiz, 2012). Authors such as Palamidessi, Gorostiaga and Suáznabar (2012) believe that educational research is an extremely complex discursive-intellectual field, given that

the specialized production of knowledge in education is developed by agents linked to academic production activities, in universities and research centers , and also people who are involved in educational-administrative and pedagogical practice are linked to it; conditions that turn educational research into an area of very imprecise and changing contours.

Smeyers and Depaepe (2009) recognize the complexity of argumentation in education and consider necessary changes in educational discourse that involve a variety of criteria, within which educational researchers are. In any field of science the construction of the theoretical foundation of research is a complex activity that is part of the research process and that constitutes a central concern within it. Despite its undeniable value it could be said that in the case of educational research its psychological foundation is an aspect that, due to its complexity, non-psychologists and novice researchers would like to avoid, however, it is necessary to have a theoretical corpus that takes account the psychological bases of the educational process, it is necessary to know the man before educating him. (Yaroshevski, 1985)

In the light of the changes that the entrance to the 21st century has brought, this need has been more evident in all areas of educational research. Díaz, Hernández, Rigo, Saad and Delgado (2006) consider that: "The Psychology of Education recognizes and intends to develop an inter and intradisciplinary work for a better approach to the realities and educational phenomena" (p.15). These authors believe that the Psychology of Education is a bridge discipline, responsible for promoting an interdisciplinary work for a better approach to the educational phenomenon. Gómez (2010) reflects on the urgency of a complex scientific paradigm more in tune with the current world.

In view of the changes in the current educational landscape, the study or approach of the subject of education is no longer considered appropriate or appropriate from an exclusively individual level, but a more holistic, systemic or ecological vision is required, which links it to the family context , school or community that surrounds it, and with the educational and development promotion programs in which it participates. In this way, today we see the attempt to "overcome the individualizing approach in the methodological and interventionist

planes" (Díaz, Hernández, Rigo, Saad, and Delgado, 2006, p.17) that has been dominant in psychological evaluations, of health, learning, and child and human development in general. A characteristic feature of contemporary educational research is the infinity of psychological theories and currents used for its foundation: Behaviorism, Psychoanalysis and Humanism, in addition to the influence of cognitive orientation as a result of the development of Cybernetics and Information Theory, and the historical cultural approach (EHC).

Serrano and Pons (2011) consider that since the end of the twentieth century it has been psychological constructivism that has come to lead the psychological foundation of educational research, and assume a classification of constructivism that takes Piaget's cognitivist proposal into account, the cultural history of Vygotsky, and the social constructionism of Berger and Luckmann, since these "differ in essential epistemological questions such as the more or less external character of the construction of knowledge, the social or solitary character of said construction, or the degree of dissociation between the subject and the world "(page 3). Despite the above, as a common denominator there is still a tendency in educational research to dissociate the individual from the social, posing the challenge of finally reaching an integrating vision "among endogenous constructivisms (particularly the Piagetian and the cognitive) with the exogenous constructivisms (the sociocultural and some discursive constructionist versions "(Díaz, Hernández, Rigo, Saad, and Delgado, 2006, p 18).

With no infrequency, educational researchers affirm that they assume the postulates of one or another psychological theory, however, in practice they only remain at the level of an intentionality that cannot be concretized either in the theoretical foundation, or in the contributions elaborated as result of the investigation, possibly due to inaccuracies in the knowledge of the postulates of the assumed theories and the consequences of their use in educational practice. The current state of the question suggests the need for a psychological foundation of educational research that has a real coherence between the theoretical paradigm assumed, the interpretations of the psychological processes that are carried out from that model, and its application to the teaching and learning processes. Learning that

occurs in the classroom (focus on education), taking into account that, as Muñoz and Garay (2015) state: "Research in education is an increasingly essential process to renew and transform school environments, teaching and learning, achieving quality in education "(p.390).

Based on the usefulness and interest of this topic, the study presented aims to conduct a search aimed at the psychological foundation of educational research developed as a result of the postgraduate program for obtaining a Master's Degree in Educational Sciences and , on this basis, draw some conclusions about the problems related to the assumed theoretical paradigm that are manifested in these investigations, and the scope and limitations of the proposals that are made based on the declared grounds.

Development

For the design of the research presented, it was considered appropriate to choose the qualitative paradigm in a documentary study with the study of descriptive cases as a strategy from which to approach the main aspects related to the psychological support of educational research. This allows an understanding of the problem in a natural and interactive way. As stated by González and Mitjáns (2016), in relation to the quantitative and qualitative paradigms of research: "the essential difference between both types of research is epistemological: both in the processes of obtaining information and in the processes of construction of that information "(page 9).The use of case studies as a research strategy is due to the possibility of obtaining a holistic view of the object of study, reflecting its reality from a faithful description and an in-depth understanding of a complex phenomenon, both in itself and in relation to its broader context. Taking this into account, the analysis of the theses was carried out, complementing the information with individual focused interviews, and interpreting the information obtained through content analysis in order to reach conclusions.

Assuming what was proposed by González and Mitjáns (2016) with respect to "subjective configurations and subjective senses are constructions of the researcher on hypothetical indicators that are related in the course of research" (p.10), it is considered important

dialogue, and the constructive-interpretative nature of knowledge and the consideration of the singularly symbolic for the generation of scientific knowledge. The questions that led to the inquiry into the topic were: what are the paradigms assumed by researchers for the psychological foundation of their research? What are the problems related to the assumed paradigm that are manifested in the researchers studied? What scope and limitations in the use of the assumed paradigm are observed in the proposals resulting from the research under study?

After having had direct contact with professors who are members of the cloister of the "Máximo Gómez Báez" University of Ciego de Ávila, recognized for their results in educational research, and a review of the scientific literature on the subject under study, it became clear the existence of different positions related to the scope and transcendence of the psychological foundation of educational research currently developed in the university context. A bibliographic review on the subject was then carried out with the objective of establishing the initial categories that would guide the search process and the definition of own positions in front of the problem discussed. The documentary search of scientific references on the psychological foundations of educational research was carried out in the 120 approved theses of the Master's Program in Sciences of Higher Education of the "Máximo Gómez Báez" University at the end of the third edition. This master's degree was chosen because it is recognized within those that contribute a large amount of research results in the area of education within the University.

Collaterally, 19 subjects were interviewed, of whom six are teachers of the program, six are graduates of this program, and seven are in their fourth edition. The selection of key informants was intentional, considering that they were tutors of theses of each of the editions, students and graduates of these, all with criteria of voluntariness in their participation. Taking into account the implicit intrusive nature of the researcher, the management of the master's degree was asked for authorization and collaboration to be integrated into its dynamics. The first days in the field constituted a period, in which the researcher tried to make the subjects feel comfortable, dispelling any idea that the focus of

the research would be intrusive. Informal contacts were established using the "wandering" technique (Goetz and LeCompte, 1984).

Once the grouping of the theses by editions of the postgraduate program was carried out, a theoretical sampling was carried out (Schettini and Cortazzo, 2015), which allowed the identification initially of the subjects investigated. Then the review of the abstracts of the works was carried out, which allowed selecting fragments suggestive of the assumed psychological paradigm. Later, the body of work was consulted, which includes such a grouped procedure based on the declared psychological foundations, the proposal, its corroboration and the final results. The consequence of this process allowed the codification and the creation of the documentary base for the analysis. Finally, it was possible to identify elements that explicitly declare the psychological foundation of the research in 26 thesis works, which assume Vygotsky's EHC as a paradigm. In the theoretical foundation of the remaining works it was not possible to identify a dominant paradigm, detecting a tendency to eclecticism in some cases, and a total non-observance of the psychological aspect in the structuring of research in others.

Possibly this finding is related to the fact that in the specific case of Cuba the application of the knowledge of psychology to educational research follows the same universal logical course, but with the distinction of adapting at all times to the demands and conditions historical-concrete of Cuban society, whose psycho-pedagogical scenario for many years received the influences of the so-called Socialist Pedagogy, typical of the formerly socialist countries of Eastern Europe, which gave high value to the historical cultural postulates. Although in recent years there has been a gradual process of structuring psychological theories for certain areas of personality education, as expressed by Valera (1999), there is no consciously directed project to study and systematize the scientific-theoretical production of the pedagogical psychology in Cuba and even less to perform an epistemic construction of this science in the country, a possible consequence may be that the errors of assimilating psychological theories for their practical application, orthodox or not, to the problems of education and pedagogy as a science

In this phase, and using the content analysis, coding operations were performed for the work with the selected documents. The coding corresponds to the processing of the data. Subsequently, the appropriate interpretations were offered, elaborating the estimated conclusions of the study. The interview was also used to reinforce the data obtained from the documentary study. The content analysis was used with the objective of facilitating a conscious, oriented, pertinent and effective process in the treatment of the data that is what assigns the valid and reliable character to the results of the study. It was achieved with the determination of content units the register and context that would allow to divide the relevant data into categories to be able to give a description and / or interpretation of the reality taking into account the objective of the investigation. For the treatment of the data obtained, the interpretative model proposed by Krueger (1991) was adopted, based on illustrative citations followed by their opportune interpretations from previously defined categories that favor the content analysis, which is carried out above all as a technique of investigation that allows to synthesize the information.

The following are taken into account: the frequency of appearance, since the repetition of the presence or absence of a unit contributes to the identification and facilitates the interpretation of the central ideas of the document; and the evaluative direction that refers to the favorable valorative form of the information with respect to the issues addressed.

Table 1. describes the units of analysis, categories and indicators used:

Table 1. Unidades de análisis, categorías e indicadores para el análisis de contenido

Analysis unit	Category	Indicators
Determination of psychic development	Relation of the external and internal.	- The external determines the internal - The internal determines the external - The internal conditions are refracted through the internal ones (Favorable)
	Appropriation of culture.	- Linear appropriation.

	Role of education. Relationship of time with development.	- Internalization through the mediation of signs and tools (Favorable) - Precede and direct development (Favorable) - It adapts to development - The psychological functions have a genetic progression (Favorable). Do not have a genetic progression.
Potentials of psychic development	Zone of proximal development	- Consider the potentialities (Favorable) - Does not consider the potential

Source: self-elaboration

A first and necessary analysis allows an approximation to the conceptual framework within the EHC on which revolve the 26 theses in which intentionality was identified in its application, as can be seen in the second table.

Table 2. Summary of the thesis with references to the EHC

Categories	Total	Percent
Relation of the external and the internal.	4	15.38
Appropriation of culture.	4	15.38
Role of education.	19	73.07
Relationship of time with development	1	3.84
Zone of proximal development	4	15.38

n= 26

Source: self-elaboration

As can be seen in the previous table, when performing the content analysis, the most frequently found category in the theses with a frequency of 19 (73.07%) was the role of education in psychic development, applied with a favorable sense in 17 (65.38%) of the theses. It should be noted that important categories such as the relation of time to development were scarcely identified, an aspect that is also observed in the appropriation of culture and the relationship of the external and the internal. When looking for practical proposals developed in the thesis, its application was not evident, despite being declared within the psychological foundations of the same. For example: in one of the theses a strategy for the development of oral expression in students of a career is elaborated and applied, and differentiated actions for the different years of the same one are not presented, which can mean that it is not had in tells the relationship of time with development.

This inconsistency in the application to the educational practice of the EHC affects the quality of the elaborated proposal and minimizes its positive effects in the educational practice. In the process of studying and analyzing the data obtained from the application of the interview to teachers, the following results were obtained:

Table 3. Results of the interview with teachers

Analysis units Categories				Frequency of appearance Price management			
				Present	Absent	Favorable	Unfavorable
Determination of psychic development.	Relation of the external and the internal.	6		-		6	-
	Appropriation of culture.	1		5		1	5
	Role of education.	6		-		6	1
	Relation of time with development.	1		5		1	5
Potentials of psychic development	- Zone of proximal development	6		-		6	-

N=6

Source: self-elaboration

The teachers thought that three of the five categories considered are taken into account in the educational research of the master's degree that is carried out at the University of Ciego de Ávila. They also reasoned that these categories are treated favorably in these investigations. In spite of this, when asking for examples in the theses they direct, four of the teachers could not explain how the EHC was applied in these investigations, while the other two offered criteria that do not relate to the EHC categories.

In a general sense, it was observed that teachers avoided referring to their own categories of determining psychic development, offering answers of more clarity in relation to the zone of proximal development. Teachers raise the potential of the use of EHC in educational research its extension to various research topics that were previously supported in other paradigms such as behaviorism, for example: the use of educational mediators, and teaching methods and their applicability in different situations educative taking into account the needs of their protagonists, and how they develop in different sociohistorical moments. Within the limitations consider that the knowledge that researchers, teachers and students have about this paradigm and the possibilities of its application in the university context is still insufficient.

They also believe that although there is an intention to consider the EHC as the foundation of educational research, it has a very formal character, and that researchers should be allowed to articulate other psychopedagogical foundations and be coherent with them. In some answers it is appreciated that the psychological foundations of research continue to be seen as the exclusive responsibility of psychologists. This could be indicating that there is still no inter or transdisciplinary vision of the educational problem. These results were evidenced through answers like the ones presented below: In the process of study and analysis of the data obtained from the application of the interview to current students of the master's degree and graduates of it, the following results were obtained:

Table 4. Results of the interview to graduates and students of the masters

Analysis units Categories		Frequency of appearance Price management			
		Present	Absent	Favorable	Unfavorable
Determination of psychic development.	Relation of the external and the internal.	13	-	13	-
	Apropriation of culture.	-	-	-	-
	Role of education.	11	2	13	-
	Relation of time with development.	-	13	-	-
Potentials of psychic development	Zone of proximal development	13	-	13	-

N= 13

Source: self-elaboration

The results of the interview focused on the current students and graduates of the master's degree do not coincide with the results of the interviews with the teachers. In this case, the most identified categories are the relationship of the external and the internal, and that of the zone of proximal development, both recognized by the totality of the subjects (13). According to González, Rodríguez and Hernández (2011), the zone of proximal development constitutes the EHC category most used in education and shows how the conditions of activity and communication can be manipulated in order to operationalize a wide-ranging educational influence. The development of the learner. Venet and Correa (2014) consider that this concept can be used as a tool for self-reflection on the teaching practice itself.

In this interview with the current students and graduates of the master's program, a critical view was observed about the treatment of the EHC, which has been produced in the research of the master's program and that even exceeds it because it also affects the subjects

they receive. A reiteration can be seen regarding the consideration of the Zone of Near Development within the concepts most taken up within the EHC, however, it could be questioned with a view to a future deepening in the subject if a certain dogmatization of the concept is taking place, given that, as stated by Ruiz (2015), Vygotsky himself could not complete the spectrum of application of this. The current graduates and students of the master's degree think that there is still insufficient knowledge about the EHC in our environment; both by students and teachers, and that this often leads to their misrepresentation. From the aspects raised by the students it can be understood that inconsistencies are occurring that are noticed by the students in both conceptual and procedural aspects of the EHC that lead to paradigmatic inconsistencies.

Interpreting the described elements, it can be stated that there are scopes to which one can aspire in relation to the use of the EHC in the educational research carried out as part of the Master's program in Higher Education at the University, within them: its dialogical fusion or integration with other theoretical views on human development, the extension of the application of its main categories, principles and laws to different contexts and historical moments, and the approach to its essence of those who declare their followers, to avoid their misrepresentation or inconsistencies assume it as psychological support of the pedagogical investigative practice.

Conclusions

As educational researchers who move in a context of high complexity and rapidly changing make a well-argued psychological research foundation, with an appropriate and consistent use of the principles and categories of the assumed psychological paradigm, it must have an impact on the quality of the results and contribute to what should be the highest aspiration of all research in this area of knowledge: the improvement of the educational process and the subjects whose development promotes education. The focus on the research of the Master's program in Educational Sciences could form a vision of what may be happening regarding educational research in the University itself, or in similar contexts with respect to insufficient paradigmatic incursions that from the psychological point of view contribute to

the theoretical foundation of investigations, inconsistencies in their use, and finally their limited use for educational practice.

The aforementioned was evidenced in the specific case of the EHC, however, taking into account the results obtained, the insistence on this aspect would be redundant, and it seems more appropriate to appropriate these references to proceed with the introduction of the necessary transformations in the research practice that really lead to the coherence between the assumed psychological theory, the interpretations of the psychological phenomena that are made from that paradigm, and its application to the teaching and learning processes that occur in the classroom.

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