# Relevance And Review Criteria For Theses In Education Established By Graduate Schools

 $^1$ Freddy Antonio Ochoa Tataje ,  $^2$ Noemí Mendoza-Retamozo ,  $^3$ César Antonio Barraza-Regalado ,  $^4$ Consuelo Del Pilar Clemente-Castillo ,  $^5$ William Eduardo Mory-Chiparra

#### **Abstract**

The research sought to address the relationship between the relevance and review criteria of theses in education established by graduate schools. For this purpose, the study was conceived from the perspective of the mixed approach; basic study type, with a non-experimental cross-sectional design and correlational level. Likewise, we worked with a sample of 100 theses extracted from the repositories between public and private universities, which were selected by means of probabilistic sampling. A predominant level was found for both relevance (52.0%) and review criteria (70.0%). In addition, there is a direct correlation (Rho = .570, p < .05) between relevance and review criteria of theses in education; this was confirmed by inferential statistics. It can be concluded that the results obtained lead to sustain that graduate schools in Education should put more interest in establishing evaluation criteria, indicators and quality criteria for the review of theses in order to guarantee their academic relevance due to their direct and significant association.

**Key words:** Relevance, Review criteria, Thesis, Education, Graduate Schools.

## I. INTRODUCTION

A peculiar feature today is the increasingly active role of science and technology in the activities of the knowledge society. (Bindé, 2005). This brings with it the importance of the production of new knowledge from research; that is, the generation of research knowledge for the new digital economy. (Santos-Assán et al., 2021). In this context, the thesis and its review criteria become relevant, seeking to address the study of the problem and find new solutions. (García-Marín, 2021).

Therefore, the research activities of universities and graduate schools become important

because they contribute not only to generate new knowledge, but also to propose original solutions to the analyzed problem. (Valle, 2021). Based on the above, training in graduate schools represents an opportunity researchers to apply the scientific method to the surrounding reality and to derive from it new knowledge and practical solutions. (Tarrillo Flores, 2022). This should be developed within the protocols established by the research tradition and the need to innovate in the original topics of the inquiry in order to contribute to the enrichment of the theoretical corpus. (Pérez Zúñiga et al., 2018).

<sup>&</sup>lt;sup>1</sup>Graduate School Research Work Design and Development Teacher, Universidad César Vallejo, Perú, <sup>2</sup>Teacher of Design and Development of Research Work at the Graduate School, Universidad César Vallejo, Perú.

<sup>&</sup>lt;sup>3</sup> Lecturer of Research Techniques and Instruments in the Formative Research Program, Universidad César Vallejo, Perú,

<sup>&</sup>lt;sup>4</sup> Research methodology teacher in the Graduate School, Universidad César Vallejo, Perú,

<sup>&</sup>lt;sup>5</sup>Teacher of Scientific Research Methodology in the Program of Formative and Teaching Research, Universidad César Vallejo, Perú,

In this sense, the research required in graduate schools and universities follows the current regulations established by the State. Therefore, theses are presented as a document that responds to a long process of maturity and elaboration of a research work; that is to say, it is the result of a continuous process of intellectual exercise in university classrooms in which the researcher tests his research knowledge (Revilla, 2017).

Likewise, graduate studies are considered to be of high cognitive level. That is why theses at that level must respond to the demands of university policy and systematized lines of research (Cañizares Luna et al., 2022) today more than before due to the fact that the scientific-textual construction must respond to transdisciplinarity and reflexivity as axes that must energize the writing of a thesis (Medina y Deroncele, 2019). In this scenario, it becomes necessary to evaluate the basic review criteria of graduate theses in Education considering their relevance and review criteria in an attempt to understand the relevance in their application criteria to the theses. (Valiente Sandó et al., 2018).

Addressing the relevance and review criteria arises from the increasingly evident nexus of creating new knowledge that is at the service of the academic community, society, business and the State; but, at the same time, increasing knowledge in relation to the thesis in its transdisciplinarity and for being a transversal axis to all the disciplines of human knowledge (Gómez-Luna et al., 2014). Likewise, with the purpose of stimulating the quality of the service provided by these schools, the relevance of theses has been evaluated due to an academic demand through the proposal of indicators and review criteria. This demand was already being discussed in the academic and educational policy spheres due to the urgency of the need for a reform based on new regulations. (Cardoso Espinosa y Cerecedo Mercado, 2011). Since the graduate thesis constitutes a type of public document, accessible and open to the opinions of other researchers (Cervantes Liñán et al., 2019), it is subject to verification by other researchers. In other words, it must contain evidenced information to meet the requirements of the criteria and canons of the context (Bazo y Poma, 2016). In this sense, the thesis, in its conception and revision criteria, should be continuously verified in order to be updated and

relevant in its innovation. From this point of view, it could be argued that the thesis is a research product; that is to say, it is a text created by a researcher. (Medina Coronado, 2018)In other words, it is a text created for the development of the written academic culture with an empirical or documentary support in which there is interaction between the author and the readers. The same that is supported and, therefore, must be made available to readers so that it can be subject to verification.

In such a sense, it could be said that a thesis contributes ideas. theories. conceptual perspectives, methodological orientations, results, conclusions and possible alternatives from the researchers' viewpoint (Torres-Frías et al., 2018). For all the above mentioned, conducting a study on the relevance of theses and their review criteria becomes valuable and important because in it there are criteria, experiences, normative theories. methodological orientations according to the current normative framework (Rodríguez, 2019).

Thus, the relevance and review criteria of the theses respond to being a topic of importance, contemporary and current. The same that is associated with its intrinsic justification as a research topic. (Sánchez y Murillo, 2021). It highlights its relevance according to the following criteria: a) convenience, whose interest is reflected in the question "What is the study for?"; b) social relevance, which refers to the social scope of the research; c) practical implications, which refers to whether the research will contribute to solving a real problem; d) theoretical value, that is, what new knowledge gap will be filled; and e) methodological utility, that is, does the research contribute to creating new measurement tools? (Hernández Sampieri y Mendoza Torres, 2018). In this sense, based on the above, we have sought to validate the hypothesis of the existence of a relationship between relevance and the review criteria for theses in education established by graduate schools.

# 2. **GENERAL OBJECTIVE**

The objective is to establish the relationship between the relevance and review criteria of theses in education established by graduate schools of private and state universities.

### 3. METHODOLOGY

The study was framed under the paradigm of the mixed approach, of basic type, cross-sectional scope and correlational level (Hernández y Mendoza, 2018). For this study, 100 master's theses in Education from the graduate schools of seven universities in Metropolitan Lima were considered, of which four were private and three were public. For the sample of theses, simple random probability sampling was considered, the same that were registered in the institutional repositories of the universities with open access.

The survey was used as a technique and two questionnaires were used to collect the information. In this sense, the instrument to evaluate the relevance of the thesis had a total of 10 items with a Cronbach's alpha reliability level of 0.941. Likewise, the thesis revision criteria questionnaire consisted of 8 items and had a Cronbach's alpha reliability level of 0.900. Therefore, both instruments used met the criteria of high reliability and relevance to collect the information in the study to be carried out. In order to process the data, the statistical program Spss 26 was used to verify the

descriptive data (distribution of frequencies and percentages) as well as the inferential data. In addition, the Kolmogorov-Smirnov test statistic was used to determine the distribution of the data. It was found that the data obtained did not follow a parametric distribution. It was considered convenient to use Spearman's correlation coefficient to measure the degree of correlation.

#### 4. RESULTS

According to the descriptive results of the relevance, the following can be pointed out: regarding the relevance of the thesis, the relevant level was predominant with 52.0%; regarding the background dimension with 52.0%, the not very relevant level; regarding the theoretical framework, 65%, the not very relevant level. In relation to the methodological aspect, the level of low relevance was predominant with 55%. In the discussion dimension, the level of low relevance predominated with 57.0%.

Table 1. Thesis relevance levels

	Relevance Background		Theoretical framework	Methodological aspect	Discussion
	%	%	%	%	%
Not very prevalent	35,0	52,0	65,0	55,0	57,0
Predominant	52,0	17,0	2,0	45,0	6,0
Highly prevalent	13,0	31,0	33,0	0,0	37,0
Total	100,0	100,0	100,0	100,0	100,0

Note. n = 100.

In general terms, there is a predominant level of 52% for the relevance of the thesis. However, in relation to the dimensions, the low predominant level stands out. This shows that the postgraduate theses always show levels of relevance, although their components are not very predominant in their relevance. In relation to the review criteria of the theses and the components considered, it was observed that, in the descriptive results for the review criteria,

the predominant level stands out with 70.0%; in relation to the cited publication component, it can be observed that the slightly predominant level stands out with 83.0%; in relation to the dimension use of citations, the predominant level stands out with 57.0%; in relation to the dimension expert judgment, the predominant level stands out with 67% and, finally, in the dimension references, the predominant level prevailed with 51.0% as shown below.

Table 2. Levels of thesis review criteria

	Review criteria	Publication cited	Use of quotations	Expert judgment	References
	%	%	%	%	%
Not very prevalent	22,0	83,0	4,0	27,0	18,0

Predominant	70,0	11,0	57,0	67,0	51,0
Highly prevalent	8,0	6,0	39,0	6,0	31,0
Total	100,0	100,0	100,0	100,0	100,0

Note. n = 100.

It is evident that the predominant level stands out in relation to the review criteria. While, for the components, use of citations, expert judgment and references, the predominant level stands out, although the cited publication component obtained as a result a low predominant level. When testing the association between relevance and review criteria in the theses, it was possible to confirm the existence of a direct and significant relationship (Rho=,570, p<,05) as detailed below.

Table 3. Relation of relevance and criteria for thesis revision

			Review Criteria
Spearman's Rho	Relevance of the theses	Rho	,570**
		p	,000
		$r^2$	,3249
		N	

Note: \*\*Rho = ratio; p = significance level;  $r^2 = \text{coefficient of determination}$ , N = sample size.

In sum, from the results found, the hypothesis of the existence of a direct and significant relationship between the relevance and the review criteria in the education theses in the Graduate Schools has been validated. This expresses that the relevance of the theses is associated with the review criteria established or regulated in the Graduate School.

## 5. DISCUSSION

A positive and moderate association between relevance and thesis review criteria was confirmed (Rho = .570 p = .000 < .05). This percentage highlights the need and importance of the study due to its timeliness and interest for the academic society and the research learning community. (Borges et al., 2022). Furthermore, the thesis is acquiring its weight for the knowledge society where new challenges arise (Bindé, 2005) because within learning organizations, universities and graduate schools allow their members to move from adaptive learning to generative learning, based on research creation and innovation. (Turpo et al., 2020).

In this context, universities in the 21st century acquire greater responsibility in the generation of knowledge through research documented in theses as an academic product (Cervantes et al., 2019). Hence, the relevance of theses represents

a point of continuity and tradition within the spiral of knowledge development. In this sense, the study of the master's degree guarantees the researcher a critical, constructive and innovative posture with the presentation of his research work. This evidences the acquisition of research and disciplinary competencies for the promotion of scientific progress. (Sanabria-Roias et al., 2015).

From what has been expressed, it is important to consider the relevance of theses as a significant contribution that produces new knowledge, which is why the depth of the application of this knowledge must be influenced. However, in order to guarantee good products, it is necessary to know the thesis review criteria, that is, to define the appropriate standards that can adequately measure the research work. It is necessary to evaluate the impact of the studies carried out through theses. (Ortiz Torres, 2015).

On the other hand, it was also detected that this finding disagrees with other scientific works and postgraduate studies in teachers at public universities (Bringas Abanto, 2015). Similarly, in another study, it could be concluded that most of the theses in Education carried out in universities in Metropolitan Lima between 2016 and 2018 did not evidence relevance (Hernández et al., 2019). However, there is

research conducted from the quantitative approach whose relevance in the theoretical body of the theses is of indispensable usefulness. (Álvarez y De la Riva, 2021).

Another singular aspect that should be pointed out is related to the attitude of graduate school students, who should be predisposed to determine the relevance of the study and appropriately handle the thesis review criteria for generating knowledge (Andrews et al., 2015). While it is true that these schools define their exhaustive protocols for the evaluation of theses as academic products of a long process of analysis, it was found, however, in a study, that the attitude towards scientific research in Latin American universities there is a wide gap of differences. (Ochoa Sierra, 2009). It was also found that scientific production in the field of education in Latin America is precarious. (Orozco Silva, 2010)Therefore, universities should improve their position in the Scimago Journal and Country Rank report, which would improve the attitude towards research. (Palacios Serna, 2021).

Likewise, from an evaluative perspective, the results may well be considered as benchmarks for organizations such as Sunedu, Concytec, graduate schools to delve into the evaluation of scientific quality, where a fundamental parameter is the relevance of the theses, for which it is necessary to establish standards around the productions of researchers, but also graduate schools and universities in general. (Santos, 2020).

So it can be seen that there are divergences in the review criteria and the relevance of theses in the master's degrees in Education. Perhaps this disagreement that underlies the university academy may be due to the fact that quality standards for theses have not been properly established in graduate schools. (Perdomo et al., 2020). This leads us to consider that the relevance and criteria for the revision of theses in these schools have not yet been exhaustively analyzed. The Peruvian State institutions have not yet established, from a normative framework, the criteria of rigor about what could really mean the relevance of the thesis and the pertinent evaluative criteria for the good development of the thesis. (Nyagadza et al., 2022).

# 6. CONCLUSIONS

Therefore, it can be concluded that, in graduate schools of Education, greater interest should be

placed in establishing the standards of relevance of theses and their review criteria. The quality of theses in master's degrees in Education is sought to be guaranteed within graduate schools due to the existence of the direct relationship between relevance and thesis review criteria. Therefore, the managers of research in these schools should be more interested in establishing quality standards and evaluation criteria for theses, guaranteeing their academic relevance, due to their direct and significant association.

Likewise, it is recommended that State institutions, universities and graduate schools should generate normative documents and/or methodological guides framed in quality, relevance and standardized criteria for the elaboration of Education theses; it was considered that such a document not only allows guaranteeing the obtaining of an academic degree; but also has an academic impact when it is disseminated through the institutional repository and is submitted to criticism, validation and review both nationally and internationally.

#### 7. REFERENCES

- 1. Adelet, M., Andrews, D., Criscuolo, C. and Nicoletti, G. (2015). The Future of Productivity, Joint Economics Department and the Directorate for Science, Technology and Innovation Policy Note. Paris, France: OECD Publishing.
- 2. Bazo, C. and Poma, L. (2016). Doctoral theses in education in Peru: A profile of academic production in the educational field. Revista Peruana de Investigación Educativa, 8(8), 5-40. https://doi.org/10.34236/rpie.v8i8.66
- 3. Bindé, J. (2005). Towards knowledge societies: UNESCO world report.
- 4. Bringas, D. (2015). Producción Científica y los estudios de postítulo y postgrado académico en los docentes de la Universidad nNcional de Cajamarca, sede Jaén. Universidad Nacional de Cajamarca.
  - http://repositorio.unc.edu.pe/handle/UN C/1546
- 5. Carayannis, E. and Campbell, D. (2012). Mode 3 Knowledge Production in Quadruple Helix Innovation Systems 21st-Century Democracy, Innovation,

- and Entrepreneurship for Development. Heidelberg: Springer Berlin Heidelberg.
- 6. Cardoso, E. and Cerecedo, M. (2011). Proposal of indicators to evaluate the quality of a graduate program in Education. Electronic journal of educational research, 13(2), 68-82. http://www.scielo.org.mx/scielo.php?script=sci\_abstractypid=S1607-40412011000200005ylng=esynrm=isoyt lng=es
- 7. Etzkowitz, H. and Leydesdorff, L. (2000). The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university-industry-government relations. Research policy, 29(2), 109-123.
- 8. García, D. (2021). Thematic agenda, methodologies and impact of misinformation research. Systematic review of the literature (2016-2020). Doxa Comunicación, 33, pp. 321-346.
- 9. Gómez-Luna, E., Fernando-Navas, D., Aponte-Mayor, G. and Betancourt-Buitrago, L. (2014). Methodology for literature review and information management of scientific topics, through its structuring and systematization. DYNA, 81(184), 158-163. https://doi.org/10.15446/dyna.v81n184.3 7066
- Hernández, R., Chávez, D., & Sotelo, W. (2019). Preferences Indicators of citation and reference evaluation in master's theses in education: A Peruvian sample. Apuntes Universitarios, 9, 18
- 11. Hernández, R., Fernández, C. and Baptista, P. (2014). Metodología de la investigación (6th edition). Mexico: McGraw Hill Education
- 12. Hernández, Y. (2021). Relevance of theses in education in graduate universities in Metropolitan Lima between 2016 and 2018 (Master's Thesis). Lima: Universidad San Martin Available Porres. https://repositorio.usmp.edu.pe/bitstream /handle/20.500.12727/8214/hern%c3%a 1ndez cpy.pdf?sequence=1yisAllowed=
- 13. Hurtado, I. and Toro, J. (2007). Paradigms and research methods in times of change: Models of knowledge that govern research processes and scientific

- methods exposed from the perspective of the social sciences. Caracas, Venezuela: CECSA
- 14. Medina, P. and Deroncele, A. (2019). Scientific-textual construction in graduate school: The challenge of transdisciplinarity and reflexivity. Teacher and Society, 16(4), 829-838. https://maestroysociedad.uo.edu.cu/inde x.php/MyS/article/view/5015
- 15. Mendoza, O. (2020). A proposal focused on the use of systematic reviews to assess scientific quality. Cultura Científica, 18, pp. 31-48. https://doi.org/10.38017/1657463X.682
- 16. Organisation for Economic Co-operation and Development, OECD (2002). Frascati Manual. Madrid: Fundación Española para la Ciencia y la Tecnología, FECYT.
- 17. Ortiz, E. (2015). The evaluation of scientific impact in educational research through a case study. Electronic journal of educational research, 17(2), 89-100. http://www.scielo.org.mx/scielo.php?script=sci\_abstractypid=S1607-40412015000200007ylng=esynrm=isoyt lng=es
- 18. Palacios, L. (2021). A systematic review: Attitude towards research in Latin American universities. Comuni@cción [online]. 2021, vol.12, n.3, pp.195-205. ISSN 2219-7168. http://dx.doi.org/10.33595/2226-1478.12.3.533.
- 19. Pérez, R. (2018). Knowledge society and information society as the cornerstone in educational technological innovation. RIDE. Rev. Iberoam. Investig. Desarro. Educ [online]. 2018, vol.8, n.16, pp.847-870. ISSN 2007-7467. https://doi.org/10.23913/ride.v8i16.371
- 20. Revilla, D. (2017). Expectations and tensions in thesis advising in the Faculty of Education at the Pontificia Universidad Católica del Perú. REDU. Revista de Docencia Universitaria, 15(1), 277-303.
  - https://doi.org/10.4995/redu.2017.6057
- 21. Rodríguez, A. (2019). The systematization of experiences as a research method for knowledge production. ReHuSo: Journal of Humanistic and Social Sciences, 4(1),

- 99-108. https://doi.org/10.33936/rehuso.v4i1.214
- 22. Sanabria, H., Tarqui, C. and Zárate, E. (2011). Quality of master's theses on public health topics: A study in a public university in Lima, Peru. Medical Education, 14(4), 215-220.
- 23. Sánchez, H. and Reyes, C. (2015). Methodology and designs in scientific research (5th edition). Lima: Business Support Aneth.
- 24. Santos, A., Díaz, F., Cruz, N., Balseira, Z., & Serrano, B. (2021). Digital economy: analysis of the scientific found in Sciencedirect between 2008-2018. Industrial Engineering, 42(2), 88-107.
- 25. Science Journal Ranking, Scimago Journal and Country Rank. (2018). SJR Scimago Journal & Country Rank report. https://www.scimagojr.com/countryrank.php?region=Latin%20 America&year=20%2018.
- 26. Senge, P. (2009). The fifth discipline. The art and practice of the organization open to learning (2nd. Edition). Buenos Aires: Granica
- 27. Solíz, D. (2019). How to make a scientific research project profile. Palibrio.
- 28. Tarrillo, M. (2022). Pedagogical strategies for the development of research competencies in teachers: Revisión sistemática (Doctoral dissertation). Lima: Universidad César Vallejo. Available at https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/85388/Tarrillo\_F MY-SD.pdf?sequence=1&isAllowed=y
- 29. Torres-Frías, J., Moreno-Bayardo, M., Jiménez-Mora, J., Torres-Frías, J., Moreno-Bayardo, M. and Jiménez-Mora, J. (2018). Contributions of doctoral thesis readers as pedagogical mediation in the training of research persons. Revista Educación, 42(1), 194-214. https://doi.org/10.15517/revedu.v42i1.22 970
- 30. Valiente, P., Salazar, M., Domínguez, L., Valiente, P., & Rodríguez, L. (2018). The quality of doctoral theses in pedagogical sciences: Vision from a sample of opponency reports. Cuban Journal of Higher Education, 37(3). http://scielo.sld.cu/scielo.php?script=sci\_abstractypid=S0257431420180003000

- 03ylng=esynrm=isoytlng=pt. http://scielo.sld.cu/scielo.php?script=sci\_abstractypid=S0257431420180003000 03ylng=esynrm=isoytlng=pt
- 31. Valle, A. (2021). Educational research: problematic and multidisciplinary character. Theoretical and philosophical reflections. Praxis & Saber, 12(29), e11469.
  - https://doi.org/10.19053/22160159.v12.n 29.2021.11469