

The scientific article and the thesis report, a dichotomy

Beder Bocanegra Vilcamango [<https://orcid.org/0000-0002-4157-265X> 233]

Universidad Nacional Pedro Ruiz Gallo, Lambayeque, Perú
bbocanegra@unprg.edu.pe

Resumen. This research is the very relative and almost non-existent academic exercise in the Peruvian university, as is the process of scientific dissemination. There is a relative and biased conceptual perception between the thesis report and the scientific article. The study starts from the objective: to propose the scientific article as an alternative to graduation either in undergraduate and postgraduate studies. The documentary research method has been used considering the contribution of eight universities in Latin America and the diversity of proposals to graduate in undergraduate and postgraduate studies. The study has been complemented with the narrative-biographical method, which includes the scientific contribution of: Koch, Pasteur, Kohlberg, Vygotsky, Piaget, Freud, Newton, Faraday, Darwin, Freudenberger, Maslach, Diamon and Broock. The synergy of the documentary investigative method with the narrative-biographical allows to evaluate the validity of the scientific article as an instrument of scientific dissemination. The strength of the IMRAD structure in the structural origin of the scientific article to disseminate knowledge.

Key words: scientific article, thesis report, research.

1 Introduction

The scientific article has historical roots that gave light to empirical knowledge, considering that the methodology of experimental scientific research of Koch and Pasteur gave rise to the structure, until today used; in other words, it is still valid: introduction, methodology, results and discussion (IMRAD). Considering this background, which is also part of Newton, Faraday, Darwin, Kohlberg, Vygotsky, Piaget, Freud, etc., the research aims to raise the scientific article as an alternative graduation, either in undergraduate and graduate studies. The documentary research method has been used, with emphasis on the narrative-biographical method. The finding is based on 13 attributes of the scientific article that are similar and compatible with the thesis report.

2 Theoretical frame

The dichotomy between the thesis report and the scientific paper offers the possibility to discern about the differences and similarities. Camps (2007) points out that the contribution of Gutenberg (1455) marked the beginning of the history of the scientific

article, it appeared as a calendar in 1457 and in 1660 the Royal Society of London For Improving Knowledge is recognized as the scientific society of the United Kingdom. From that moment, the debates were recurring and in 1665 the first journal *Journal des Sçavans* appeared; however, the discussions did not have printed support, so the first writings by the Minutes arose. Consecutively, the monthly publication *Philosophical Transactions* (Monday of each month) is published. This time, it was the platform for Newton, Faraday and Darwin. This journal was submitted to the peer review of the Society Council (pp. 2-4). The care of content forms was always a concern for the academy at the time. The origin of the article placed the document in a state very prone to disclosure of the findings, it can be deduced, enough, that the scientific article, since always, fulfilled the purpose of making known the new advances; on the other hand, the thesis report is restricted exclusively to university spaces. While Diamond supported his thesis; however, he dealt with the hypothalamus through an essay. This background allowed Broock to take care of her through an article. Then, in 1985, Diamond herself indicated that Einstein's brain had more glial cells per neuron. Later (2007) he published an essay, in which he reflected on the studies of the brain of rats (https://www.bbc.com/mundo/noticias/2015/04/150417_finde_extrano_viaje_cerebro_albert_einstein_ac recogido el 7 de julio de 2023). The evidence favors the role of research and the possibility of publishing it through an essay, because the need to know the findings has always been a human recurrence and scientific articles were always the best and only academic manifestations. The scientific article is "the main form of communication of science; it is not the only one, but it is the most valued: it experiences a peer review process" (Lopez, 2013, p. 6), at the same time, it is about "a written and published report describing original research results" (Day, 2005, p. 9). Finally, "new syntheses, new ideas and theories and even new paradigms emerge from the best review articles" (Day, 2005, p. 13).

3 Method

The study analyzes the history of the scientific article considering the contributions of Koch, Pasteur, Kohlberg, Vygotsky, Piaget, Freud, Newton, Faraday, Darwin, Freudenberg, Maslach, Diamond and Broock. The analysis of sources of consultation has invoked the evaluation of the qualitative approach as the inductive mode that allows analyzing, conceptually, the scientific article as very own and particular discourse. The narrative-biographical method has been very important for the development of the content. Information from eight universities in Latin America. Research development during professional training must arise in parallel with research-oriented courses, enabling the development of the training approach, but in order to graduate and the scientific article become the demonstration of skills and abilities to create knowledge, either in pre or post-graduate.

4 Results

The following similarities can be determined between the scientific article and the thesis report. See table n.º1.

Table n.º1. Similarities between the scientific article and the thesis report	
Origin	Research, without considering the approach.
Structure	Abstract, introduction, theoretical frame, discussion, results, conclusions, bibliography.
Abstract Introduction Theoretical frame Discussion	Obligatory and current requirement to the IMRAD scheme.
Title	Brief title, there are suggestions in both cases.
Key words Bibliography	Obligatory requirement.
Depth, level of research	It is evident in both, since the arguments are expressed synthetically in the scientific article.
Assessment process	There are expert assessors in both cases (double-blind, peer reviewers)
The objective	It's the same in both cases, publicize the findings.

Research development during professional training must arise in parallel with research-oriented courses, enabling the development of the training approach, but in order to graduate and the scientific article become the demonstration of skills and abilities to create knowledge, either in pre or post-graduate.

5 Discussion

The similarities between the scientific article and the thesis report allow us to redefine the concept of the article as antithesis to the research process by assuming any approach. The implicit and express relationship between the scientific article and the thesis report has been defined over time, where writing a thesis report is not so complex as a scientific article, this for a question of distorted perception of similarities. The scientific article is the synthetic demonstration that defines not only the research capacity, but redefines the role of human language skills.

6 Conclusions

There are 13 attributes that highlight important similarities that allow us to place the scientific article as sufficient demonstration of the rigorous research process and of immediate disclosure. The scientific article is the representation of the capacity of synthesis of the structural form of knowledge analogous to the thesis report and defines the linguistic ability of the students.

7 Limitations and future research

It can be considered that the anchoring of the thesis report does not allow to diligently discriminate the similarity with the scientific article. The thesis report is a very traditional mechanism that prevents the evaluation of the scientific article as a high impact option in the scientific community.

References

- Aldana-Zavala, J. (2020). Investigación y aprendizaje: Retos en Latinoamérica hacia el 2030. *Alteridad*, 16(1), 78-91. <https://alteridad.ups.edu.ec/index.php/alteridad/article/view/1.2021.06>
- Benavides Benalcázar, M. M. (2019). Reflexiones sobre la investigación educativa y la investigación formativa en la universidad peruana. *Revista Conrado*, 15(70), 444-454. <http://scielo.sld.cu/pdf/rc/v15n70/1990-8644-rc-15-70-444.pdf>
- Bosio, I. (2005). El informe de investigación. En L. Cubo de Severino (Coord.). *Los textos de la ciencia. Principales clases del discurso académico-científico*. Comunicarte, 305-322
- Camps, D. (2007). El artículo científico: desde los inicios de la escritura al IMRYD. *Archivos de Medicina*, 3(5). <https://www.redalyc.org/pdf/503/50330503.pdf>
- Casimiro Urcos, W., Casimiro Urcos, C., & Casimiro Urcos, J. (2020). Los posgrados 2020 y la investigación científica en las universidades peruanas. *Mendive. Revista de Educación*, 18(1), pp. 155-169 <http://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/1876>
- Day, R. (2005). *Cómo escribir y publicar trabajos científicos*. Organización Panamericana de la Salud.