

# The Qualis effect: comparative case study of the Brazilian rating system for peer-reviewed journals

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## ABSTRACT

In the recent years, Impact Factor scores have been criticized due to misuse. The growing acceptance of these scores in many Brazilian subject areas created this recent discussion, mainly because Brazil has its own rating system for journals: Qualis. The whole system follows governmental directions under the Ministry of Education, and is criticized as a monopolized evaluation system that accepts Impact Factor scores as tools for measuring quality. Despite being under ministerial instruction, each subject area adapts the system, applies Impact Factor scores as a valid measure, or does not accept the scores at all and utilizes other ways to measure journals' quality. This paper will suggest changes on the system and discuss that the Brazilian system is more complex than previously thought. It also advocates for the possible adoption of a rating system that does not follow a generalist metric system for rating journals. To conclude, it addresses the fact that what has to change in Brazil is the unrealistic use of Impact Factor scores, rather than the whole governmental system.

**Keywords:** San Francisco Declaration on Research Assessment. Brazilian rating system. Qualis. Impact Factor. Metrics. H-index.

## ***O efeito Qualis: estudo de caso comparativo do sistema brasileiro de classificação de revistas avaliadas por pares***

### RESUMO

*Nos últimos anos, a pontuação do Fator de Impacto tem sido criticada devido ao mau uso. A crescente aceitação dessa pontuação por várias áreas do conhecimento no Brasil criou essa recente discussão, principalmente por existir um sistema de classificação nacional para periódicos: o Qualis. O sistema inteiro segue diretrizes governamentais no âmbito do Ministério da Educação, e é criticado por ser considerado um sistema de avaliação monopolizado que aceita pontuações do Fator de Impacto como ferramenta para aferir qualidade. Apesar de estar sob instrução ministerial, cada área do conhecimento adapta o sistema, aplica pontuações de Fator de Impacto como medida válida, ou não aceita a pontuação de forma alguma e faz uso de outros mecanismos para aferir a qualidade dos periódicos. O trabalho sugere mudanças no sistema e discute sobre o fato de o sistema brasileiro ser mais complexo do que pensado anteriormente. Também defende a possível adoção de um sistema que não siga uma métrica tão generalista para classificar periódicos. Para concluir, aborda o fato de que o que precisa ser mudado no Brasil é o uso irrealista da pontuação do Fator de Impacto, em vez de todo o sistema governamental.*

**Palavras-chave:** *Declaração de São Francisco sobre Avaliação de Pesquisa. Sistema brasileiro de classificação. Qualis. Fator de Impacto. Métrica. Índice H.*

## ***El efecto Qualis: estudio de caso comparativo del sistema Brasileño de clasificación de revistas arbitradas***

### **RESUMEN**

*En los últimos años, la puntuación del Factor de Impacto ha sido criticada por su uso indebido. La creciente aceptación de esa puntuación por varias áreas del conocimiento en Brasil crearon esa reciente discusión, principalmente por existir un sistema de clasificación nacional para revistas: el Qualis. El sistema entero sigue directrices gubernamentales en el ámbito del Ministerio de la Educación, y es criticado por ser considerado un sistema de evaluación monopolizado que acepta puntuaciones del Factor de Impacto como herramienta para medir la calidad. A pesar de estar bajo instrucción ministerial, cada área del conocimiento adapta el sistema, aplica puntuaciones de Factor de Impacto como medida válida, o no acepta la puntuación de ninguna forma y usa otros mecanismos para medir la calidad de las revistas. Este trabajo sugiere cambios en el sistema y discute el hecho del sistema ser más complejo que inicialmente pensado. También defiende la posible adopción de un sistema que no siga una métrica tan generalista para clasificar revistas. Para concluir, aborda el hecho de que lo que necesita ser cambiado en Brasil es el uso poco realista de la puntuación del Factor de Impacto, en vez de todo el sistema gubernamental.*

**Palabras clave:** *Declaración de San Francisco sobre Evaluación de Investigaciones. Sistema Brasileño de clasificación. Qualis. Factor de Impacto. Métrica. Índice H.*

## INTRODUCTION

Following the recent movement started by the San Francisco Declaration on Research Assessment (DORA), many researchers intend to fight against the unmerited acceptance of Impact Factor (IF) scores as a direct consequence of quality (EDITORIAL, 2005; “THE SAN FRANCISCO DECLARATION ON RESEARCH ASSESSMENT [DORA]”, 2013; BREMBS; BUTTON; MUNAFÒ, 2013; MARKS et al, 2013). Some Brazilian researchers have recently published a critical review of the Brazilian governmental system of rating journals, pointing out their primary problems: government intervention and the acceptance of IF scores as an indicator of quality (by all *Qualis* fields) (Ferreira et al, 2013). Years ago, the editor of *Clinics*, Mauricio Rocha e Silva, criticized the new Brazilian policy. According to Silva, the new system completely accepts the IF scores as indicators of quality in the field of medicine (ROCHA-E-SILVA, 2009a, b, c, 2010; METZE, 2010; ANDRIOLO et al, 2010). Therefore, this paper intends to discuss the Brazilian system of rating journals, analyze the governmental role in this process, and suggest changes on *Qualis* system.

First, to fully understand the Brazilian system, it is necessary to take into consideration the entirety of Brazilian higher education, particularly the fact that all great universities in Brazil are public. Just like the US, Brazil is a federation; consequently, there are many universities that are supported by the federal government and others by the states in the federation. Also, the Brazilian system, known as *Qualis*, is a system not exclusively based on impact factor scores, as you will see below.

In Brazil, there are two federal research foundations – Capes, under the auspices of the Ministry of Education, and CNPq under the Ministry of Science, Technology, and Innovation – that not only fund research but also make strategies and rules applied to all institutions. CNPq deals more with the researchers, like the National System of Curriculums, *Plataforma Lattes*, while Capes focuses more on the evaluations of the institutions based on Brazilian policies, like graduate programs or the *Qualis* system for rating journals.

*Qualis* rates journals using eight different scores – A1, A2, B1, B2, B3, B4, B5, and C – with A1 being the highest and C being the lowest. Highly qualified journals are typically rated from A1 to B2, where “A” means international level, “B” means national, and C means scientific diffusion or no quality at all. Furthermore, the journal is rated only if some researcher in its particular category has published there before. In this sense, many influential journals are not rated in many categories in the *Qualis* system.

Nevertheless, the system is not monolithic because of the possibility for each category to determine its own priorities. Specialists in their subjects – but also lesser known researchers – comprise these rating committees supported by Capes. Each committee meet to update the *Qualis* system and to incorporate new journals or demote others. In the field of dentistry, specialists have decided to support the use of Impact Factor scores (*Journal Citation Reports*®, by Thomson Reuters) and *Cites-per-Doc* (SCImago; independent system, powered by Scopus®, an Elsevier product) rather than others indexes. Their criteria for highly qualified journals (from A1 to B2) is based on *IF/Cites*, where A1 requires an IF score greater than, or equal to, 3.52 (before was 3.15); A2 requires an IF score between 2.62 and 3.51; B1 ranges from 1.70 to 2.61; and B2 requires an *IF/Cites* score between 0.56 and 1.69 (before was 0.50 to 1.55). However, even with this complete submission to *IF/Cites* scores, specialists of the discipline evaluation committee “manually” selected the three most prominent Brazilian journals and gave them better scores. This tendency has been directly observed in the journals on dentistry, including *Brazilian Oral Research*, the *Brazilian Dental Journal*, and the *Journal of Applied Oral Science*; and it also occurred in public health journals, including *Cadernos de Saúde Pública*, *Revista de Saúde Pública*, and *Ciência e Saúde Coletiva* (CAPES, 2015).

In the field of history, however, the criteria are completely different. First, you will not see any recommendations on *IF/Cites* scores. The scores are based on other principles, such as the

international level of the Editorial and Review Boards. In the field of History, a B2 journal has to receive some financial support, be at least indexed by two different databases, and have authors from several other institutions (which means: publish more than 40% of its papers from authors of five different institutions). Likewise, to receive higher scores, it is always necessary for journals to achieve all previous requirements. The B1 journals have to publish at least 18 papers, of which 60% have to be from authors from four different institutions that publish the journal. Besides that, they need to be fully available online. The A2 journals, apart from the previous requirements, have to publish 75% of their total papers from five different institutions that publish the journal; they also have to have an advisory committee, in which at least 25% of its researchers must be from abroad. The A1 journals must demonstrate higher quality than the A2 ones do (CAPES, 2015). The same is applied to law and arts/music disciplines.

In sociology and social sciences, they also do not use Impact Factor scores. Rather, they require full access online to B1-A1 journals, and demote journals with no online access. In Management, Accounting and Tourism, they differentiate their journals from other ones. To be rated as A1, the journals need to meet an IF score greater than 1.4 and an *h-index* bigger than 24. A2 journals has to have an IF score between 0.7 to 1.4 and the *h-index* from 9 to 24. B1 journals classified as being of the discipline have to be classified at Scielo, having its impact factor score bigger than 0.01; or should have the IF score ranging from 0 to 0.7 and the *h-index* from 0 to 9. However, even the journals better rated, classified at JCR<sup>\*</sup> as being of a different discipline, were pushed down to a lower level; and this odd situation is found in A1, A2, B1, and B2 journals of this field. This means that a journal with a score relevant enough to be rated as A1 but classified at JCR<sup>\*</sup> as from other field will be sorted as an A2; a journal able to be rated as A2 will be listed as B1, and the B1 at the same situation will be sorted as B2. Based on this data, we can see that *Qualis* is not

unique, contrary to what Ferreira, Antoneli, and Briones (2013) have stated. Therefore, despite being a part of a governmental rating system, *Qualis* allows the journals from various academic disciplines to make their own choices based on what seems best for their respective fields.

## PROBLEMS AND ADVANTAGES

However, the main problem of *Qualis* is the restriction it creates for each research field. Imagine two different subject categories, such as medicine and history. A journal dedicated to the history of medicine could be rated in the “history” field as A1, but in “medicine” as B3 (which is not a highly-qualified score but, at the same time, not the lowest one). Consequently, the author would have a comprehensive review of his paper due to the level of the journal, but if the researcher is from the field of medicine, it will not be appealing to publish in that journal because the system does not take these differences into consideration. An example of this problem is the *Memórias do Instituto Oswaldo Cruz* (an influential Brazilian journal mainly in tropical medicine). It is a B3 in biological sciences I, II, and III but, at the same time, A2 in the interdisciplinary category and nursery. These different scores are a huge problem because biological sciences researchers who submit papers to *Memórias* are not submitting to a B3 journal, but to an A2. Consequently, the relevance of the journal in its discipline is not taken into consideration by the biological field.

This situation relates to another problem: researchers should publish in journals rated by their discipline. If some researcher publishes in a journal from another field, it's possible to ask for include this journal at its own field. Nonetheless, in ordinary situations, the academics usually only publish in journals already rated by its own field, because this “inclusion” would take much time or even be rejected and if so the publication will not be computed for the graduate program. This is not mandatory but, to receive financial aid like fellowships and other support grants, researchers need to follow these governmental

signals. Furthermore, Capes evaluate the graduate programs, and the impact of the researchers is one of the most important aspects to achieve good scores. Therefore, researchers often cannot escape publishing exclusively in journals rated by *Qualis* in their respective fields.

*Qualis*, nonetheless, is a good applied rating system, largely because of the Brazilian education system. Most Brazilian journals, even influential ones, are not part of *Journal Citation Reports*. Consequently, they do not have impact factor scores (and this problem is not only in the humanities field). As example we could name *Varia História*, an influential Brazilian journal, which is not classified at JCR or even on the SCImago list. Along with this one, *História, Ciências, Saúde – Manguinhos*, one of the most known journals in History and Philosophy of Science, has been rated as one of the best journals in its category by SCImago list. Nevertheless, it is not listed on the recent JCR. This journal appears receiving only 85 citations between 2014 and 2015 in the SCImago list. However, at Scielo (an original Brazilian database, now used in all Latin America and also Iberia), this journal received 511 total citations (not discounting self-citations). We know that an IF journal does not cover the complete impact of a journal (KRELL, 2012), but the Brazilian case is even worse.

In short, some journals have low impact factors largely because the majority of citations they receive are made by other journals (which are not at JCR list); consequently, their received citations simply do not count to JCR. *Dados*, a highly qualified Brazilian journal on social sciences, has received only 49 cites on SCImago list at the same period, 174 on IF score, yet having 422 on Scielo. Furthermore, this issue does not happen only in Brazil (NIGHTINGALE; MARSHALL, 2012, 2013). *Past and Present* – an international British journal – has an Impact Factor of a mere 0.588, despite the fact that all historians cite and use its papers. Pursuant to the condition of many Brazilian journals not included on the JCR list, it is important to observe the *Qualis* system as a viable alternative to journals not classified at JCR.

## CONCLUSION

To conclude, it would not be wrong to say that *Qualis* allows a balance between impact factors and the qualification of journals (independently of their scores). The system has its own problems, being the *Qualis* restriction the bigger one. Nonetheless, the acceptance of foreign indexes as a unique measure of quality is as limited to Brazilian science as *Qualis* is to different disciplines. Therefore, this paper does suggest the continuity of the *Qualis* system as it stands, but with a distinct way to score the different subjects. The *Qualis* bigger issue is that it turns problematic the publication in different disciplines because it evaluates differently the same journal. So, the liberation to publish in other areas would improve the system. Therefore, a two step decision should be put in practice: first of all, as it is at present time, the committees of evaluation decide their own scores to journals. Journals scored by just one discipline will stand as nowadays, but journals that received different scores will be discussed between those committees that evaluated the journal (doesn't matter how many committees will discuss the same journal). This joined meetings will be an opportunity to inclusions of different disciplines at the journal's review board which hasn't been there before: this scenario would be one like the history and medicine field committees discussing the introduction of their specialists in each other journals. Thus, the Brazilian journals would be qualitatively evaluated and become really interdisciplinary. Yet, if it persists disagreements, the journal will have the higher score. Therefore, at the end, the journals will have just one score that will apply for all different fields. Because the committees already have discussed not just a quantitative evaluation but (and even better) a qualitative one, everyone will be allowed to publish in a journal scored by *Qualis* no matter the discipline. This new *Qualis* system would respect choices of different fields as well as accept the authors publishing in journals really related to their research. The impact factors, which mostly do not respect the specifications of Brazilian science as shown above, would not be rejected but improved along with *Qualis*, and as a result, the evaluation of graduate programs would also become just a little less productivist and more qualitative.

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