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NORMALIZATION TRENDS OF AUTHORS' NAMES IN SCIENTIFIC PUBLICATIONS

*[Tendencias en la normalización de nombres de autores en
publicaciones científicas]*

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Abstract

We analyze current normalization trends of authors' names. We review the advantages of using a single bibliographic name as well as the most common naming recommendations so that each author can choose which to follow..

Keywords

Academic journals; Internationality; Scientific communication; Impact; Citations; Author.

Resumen

Se analizan las tendencias actuales sobre normalización de los nombres de autores. Se revisan las ventajas de utilizar un nombre bibliográfico único y se revisan las recomendaciones más habituales para que se elijan los de cada autor.

Descriptores

Revistas académicas; Internacionalidad; Publicación académica; Comunicación científica; Impacto; Citas; Autor.

Over the last few years, we have been experiencing a substantial increase in the internationalization of academic production. This is particularly true in the Spanish sphere and specifically in education magazines (Aliaga & Suárez-Rodríguez, 2007; Hernández Pina & Maquilón, 2010). There are many factors that can influence this, which include:

- The regulations for evaluating scientific research staff (ANECA, CNEAI, etc. in Spain or institutions such as CONACYT in Mexico, CAICYT in Argentina or Colciencias in Colombia, to name a few in the Latin-American sphere).

- Various impulses and guidelines which favor the improvement and professionalization of the scientific edition, with practical help such as Román's texts (1981) or those of Delgado López-Cózar, Ruiz Péres and Jiménez Contreras, (2007), the last of these within the ARCE project: (Support for the *Scientific Spanish Journals*), from the Spanish Foundation for Science and Technology ([FECYT](#)).
- The development of new evaluation tools of quality and/or impact, such as [Latindex](#) or [In-RECS](#).
- The birth and drive of virtual and directory newspaper libraries, all geared to provide the reader with the simultaneous

consultation of a large number of journals (we will cite projects as interesting as [Redalyc](#), [e-revistas](#), [DOAJ](#), etc.).

- The negotiations of FECYT with respect to the unified management of the relations with ISI-Thompson-Reuters about its data bases.

In this context, it will produce a much greater access to journals, even journals with predominately regional interests (such as Latinas), to international databases (Rodríguez Yunta, 2010). On one hand, it is producing an accelerated incorporation to the *Web of Knowledge* databases (ISI-Thompson-Reuters) that traditionally have ignored the productions of Social Sciences from the non-Anglo-Saxon cultural areas. The gradual commoditization of the *Institute of Scientific Information*, created by Garfield, used to increase the complexity of the market (with the emergence of competitive initiatives), has substantially modified the commercial policy (therefore affecting the scientific) of said institution. On the other hand, it has also produced the progressive implementation of some of the emerging alternatives ([SCOPUS](#), [Scholar Google](#)), that include a number of noticeably superior journals compared to their competitor *Web of Knowledge*. These and other international databases, the majority of which have an Anglo-Saxon origin, are key elements to propitiate the spread of knowledge, thus promoting the diffusion of its journals and authors. They are therefore essential to increase the measured impact of the scientific activity.

However, the relative inexperience of many academics in this new international context propitiates some problems that affect the visibility of their work in these databases. Furthermore, the difficulties caused by the cultural differences must be taken into account between the creators of these databases (like we have said, fundamentally Anglo-Saxon) and the diverse national contexts to those that protect the expression of their glo-

balization. Thus, a large quantity of disagreements and errors which affect the quality and effectiveness of the codification processes and the recovery of information are produced.

One of the principle sources of these errors is the special idiosyncrasy of the author's names in certain countries. A well known fact, the Anglo-Saxons (and many other European countries) predominately use the surname of the father to name the child, along with one, or in some cases, several individual or given names. This system, although it propitiates overlaps (and therefore identity confusion), is relatively simple to use. Being that, the surname or family denomination is easily identified in any text: one only has to search for the last word (*last name*) of the name. However, this system presents some problems for the usage, slightly in retrogression, when the wife adopts her husband's surname (generally losing her own), resulting in some problems for the identification of the authors (Goldin & Shim, 2004).

Other cultures use specific but different forms of identification, which implies complications not considered (or resolved) with the system that we have previously made reference to and that we have termed, in order to simplify, Anglo-Saxon. Thus, in the case with countries such as Korea, 22% of its citizens have the surname Kim (as their only surname). Therefore, it is not unusual to find identity names between hundreds and even thousands of people (according to data from 2004 from the *National Statistical Office* of the Republic of Korea). In the case of China, even prestigious magazines like *Nature* have shown, alarmingly, the serious problems of identification resulting from the current naming system. Thus, 85% of the Chinese population (about 1,100 million people) share the 129 most common surnames, which gives a small idea about the huge amount of overlaps that are produced (cfr. *Nature*, 2008). The variations between name-surname and surname-name, as well as the syllabic separa-

tions (or not) of the names, are added to these problems, among others, according to different customs. Other related problems occur in zones such as the south of India (in which they don't use a surname, substituting it instead for the first name of the father) or the Slavic countries (where the children use a patronymic name, taken from the father's first name, and to which is added an ending).

In the case of the Hispanic or Iberian denomination (which also includes the Portuguese cultures), the majority of cases are inherited as much from the surname of the father as from that of the mother, in addition to having one, or more frequently several, personal or given names. This system causes frequent confusion when it is included with the authors in databases created with an Anglo-Saxon mentality. The last name in the sequence is taken as the identifying surname (when looking for the surname and identifying it as the surname of the subject), which in our case is not the used surname, but rather the secondary one. Therefore, it is normal for the same text to appear to have different authors depending on whether we look for them in 'Hispanic' databases or the 'Anglo-Saxon' databases, being that in the former the first surname is used to identify the authors and in the latter the second is used.

So that we can calibrate the importance of this topic, we will keep various studies (Costas y Bordons, 2007; Ruiz-Pérez, López-Cózar y Jiménez-Contreras, 2002) in mind that formed the basis of most international data, the ISI-Thompson-Reuters (SCI, SSCI and AHCI). The percentage of Spanish authors that appear under two or more distinct names varies from 20% to 40%, making it difficult to find their works and calculate their works' impact (for example, how to calculate indexes such as H index).

With this in mind, an author ought to carefully think about as well as maintain how they sign their name on articles. This name decision, or lack thereof, consequentially

affects the authors' visibility and identifiability, which is very important in regards to the dispersion and recognition of their work. The necessity to properly establish the author's name (in the past called the 'pen name') is a relevant decision for the authors. This topic is so important that the Spanish Foundation of Science and Technology (FECYT) published a manual (FECYT, 2007), ask EC3 group (which was responsible, for example, for In-RECS), a manual about "Recommendations for help in the standardization of authors' names and institutions in scientific publications". These recommendations are applicable to all authors that use Hispanic or Iberian names, especially in Latin American countries. In RELIEVE, we choose to support the FECYT manual recommendations, which favor a suitable cataloging index and create a greater impact for our publication and its authors. However, in the end, we will always respect the authors' wishes.

To begin, we have to make an initial observation that this topic would not be necessary to stress if the problem did not show up so frequently. We're trying to make a system in which it is not necessary to search the full and exact name as it appears in the civil registers. The researchers can choose between searching one or both last names (as is done in everyday life, according to how the author uses their name). The researcher can also search the first name or several names. The purpose of this is to properly identify authors, not directly follow the birth certificate. Moreover, we need a strong presence of the name used in the searches so that it will be processed through distinct databases (Hispanic, Anglo-Saxon and others) because different search engines could potentially elicit very different results.

Look at some basic recommendations about name use that Hispanic authors ought to follow according to FECYT (2007):

1. Always sign all scientific and/or academic work with the same name. Frequently, a researcher will sometimes use

one last name, other times two last names, in others a different name and, on occasion, use initials to shorten their name. These different signatures only lead to confusion and make it difficult to find the particular author's work. It ought to be instilled in the minds of authors that if they properly name themselves they will reap as many personal benefits from properly named work as the academic community

will. Investing a little time to choose a good 'pen name' at the start of a career will pay off in the long run. However, we are all guilty of using different names, showing that this text is a base of information that can usually detect Hispanic names (*ISOC – Human and Social Sciences*, created by the High Advisor of Scientific Spanish Investigations) and another of Anglo-Saxon origin (*Google Scholar*).

Table 1 – Authors' name versions in different databases

Data base	Versions of name	Versions of name
ISOC	Aliaga, Francisco Aliaga, F. Aliaga, Francisco M Aliaga Abad, Francisco M. Aliaga Abad, Francisco	Correa, Ana Delia Correa, Ana-Delia Correa, Ana D. Correa Piñero, Ana Delia
Scholar Google	FA Abad FMA Abad F Aliaga FM Aliaga F Aliaga Abad FM Aliaga Abad	AD Correa AD Correa Piñero ADC Piñero ANADC PIÑERO Correa Piñero, Ana Delia AD Correa-Piñero C Piñero ADC <i>Piñero</i>

2. In general, the most recommended name format is "First Name + Middle Initial (Optional) + First Last Name." This option is for authors that do not have a common last name (that are not García, González, Sánchez). The proposed format would not satisfy the identification requirement for the author with a common first last name, because his/her name could already be confused with many other authors who they share a common last name with. In regards to first names, one has to avoid confusing the middle name

with one of the last names. For the middle name, we can opt to:

- a. use only the initial,
- b. Omit the less used name or
- c. Put them together, but with a dash to show that there is a connection between the two names, creating something like one name. This option would be preferable when the names are very common and prone to a lot of confusion. This is also the case for an author who does not want to give up any of the names he/she has, although it will make the citation more complicated..

Table 2 – Applied Recommendations – Distinguished Last Name

Recommendation	Full Name	Suggested Name
2	Tomás Escudero Escorza Eduardo Backhoff Escudero	Tomás Escudero Eduardo Backhoff
2a	Francisco Miguel Aliaga Abad Ana Delia Correa Piñero	Francisco M. Aliaga Ana D. Correa
2b	Francisco Javier Tejedor Tejedor María Natividad Orellana Alonso	Javier Tejedor Natividad Orellana
2c	Ana Delia Correa Piñero José Antonio Téllez Muñoz	Ana-Delia Correa José-Antonio Téllez

3. For authors with common last names, they should use both last names, in order to reduce the probability of confusion with other people with similar names. However, they should avoid thinking that the last name has the last word. In these cases, we recommend that the authors connect their last names with a dash. This option

could also be used for authors without a common first last name, but who want to maintain a more complete identification or reduce their probability of being confused with another person. These names should follow the same recommendations found in the previous section.

Table 3 – Applying the recommendations – Common Last Name

Recommendation	Full Name	Suggested Name
3	Gregorio Rodríguez Gómez Manuel López Torrijo	Gregorio Rodríguez-Gómez Manuel López-Torrijo
3a	Jesús Modesto Suárez-Rodríguez,	Jesús M. Suárez-Rodríguez
3b	Víctor Benito Álvarez Rojo Jesús Modesto Suárez-Rodríguez,	Víctor Álvarez-Rojo Jesús Suárez-Rodríguez
3c	Miguel Ángel Gómez Ruiz, Rosario Leticia Dominguez Guedea	Miguel-Ángel Gómez-Ruiz Rosario-Leticia Dominguez-Guedea

4. The grammatical terms (articles, prepositions) in authors' names have generally stopped being a problem, since some databases already respect the grammatical terms' positions, while others do not take the grammatical terms into consideration at all during the search.

a. In the first names: We recommend to eliminate the grammatical terms for reasons that you already know too well and also to avoid adding singularity to a particular grammatical word.

b. In these last names: Grammatical terms (articles, prepositions, etc.) create confusion about whether the articles should be understood as part of the last name or something completely separate. Therefore, it is best to avoid articles entirely. Yet, many people wish to keep their name in its entirety, including the grammatical terms, in order to stand out more. In this case and in order to create one cohesive unit of reference, the author ought to link all the words of their last name with dashes.

Table 4 – Applying the recommendations – Grammatical terms

Recommendation	Full Name	Suggested Name
4a	María del Carmen Jiménez Fernández María del Pilar Sepúlveda-Ruiz	Carmen Jiménez [o Jiménez-Fernández] María-Pilar Sepúlveda [o Sepúlveda-Ruiz]
4b	Rakel del Frago Arbizu Arturo de la Orden Hoz	Rakel Frago o Rakel del-Frago Arturo de-la-Orden

5. Abbreviations: There are some abbreviations that, since they're very common in the Hispanic context, are a manner of habit, they do not generally create problems and are understood well. However, the fact that Hispanics can usually understand these abbreviations no longer applies in international databases. Thus, abbreviations should be

avoided and the whole word should be either written out or eliminated entirely. The abbreviation's source and the extent of the abbreviation's use needs to be taken into consideration as well when used in an author's name. It is better to avoid using the abbreviations, or at least to always sign the name the same way every time.

Table 5 – Applying the recommendations – Name Abbreviations

Recommendation	Full Name	Suggested Name
5	M ^{ra} del Carmen Jiménez M ^{ra} Ángeles Rebollo Catalán	María-del-Carmen Jiménez [o Carmen Jiménez] Mari-Ángeles Rebollo [o Ángeles Rebollo]

6. Accents are the last problem that need to be addressed before choosing a definitive and consistent form of signing Spanish names. Accents are a symbol that is not used in English, and some databases are unable to interpret them, making it harder to search for an author and his/her texts. Other databases simply eliminate the accents entirely and just leave the letters without accent marks. Lastly, there are some (generally, but not only, Hispanic) databases that can respect the accent marks on names. To write a word in Spanish without an accent mark would generally be considered a spelling error, therefore some authors choose to keep the accents in their name, while others put their work first and remove them.

However, as we have said all along, the golden rule for authors is to always maintain the same format for their signature and that this 'pen name' let's us clearly identify the authors without confusion.

Since RELIEVE, as we previously mentioned, respects the wishes of each author, sometimes the same name is written different ways, even though it is part of the same publication (for example, Salmerón-Pérez, Gutierrez-Braojos, Fernández-Cano & Salmeron-Vilchez (2010).

Many initiatives have emerged supporting the standardization of authors' names in scientific literature. One of these initiatives is a

Spanish initiative (supported by the FECYT) called [IraLIS](#) (International Registry of Authors-Links to Identify Scientists). Their five-fold purpose is declared on their web site:

- 1) To make scientific authors aware of the importance of his/her signature so he/she can be cited correctly, and can easily recover his/her bibliography throughout their live careers.
- 2) To write signature's standard criteria to
 - a) be indexed properly in databases and
 - b) be distinguished from other authors with the same or similar name.
- 3) To produce a database with all the signature variants used by each author.
- 4) To carry out automatic literature searches using all signature variants.
- 5) To be the authority list of the [E-LIS](#) repository authors names.

The system created by [IraLIS](#) allows an author to write his/her full name as they wish and then creates a list of various names, according to standard Hispanic terms, for the same author. Thus, each author can choose his customary signature and register it in [IraLIS](#). The system will then add the other name variations that could be possibly used during a search. This makes it much easier to find an author's publications. The IraLIS has created a commendable and unselfish service for Spanish authors.

Search IraLIS names

IraLISID: **ESEDOC972**
Registered name: **Francisco Miguel Aliaga Abad**
Registered iralis: **Francisco M. Aliaga**
Preferred form: **Francisco M. Aliaga (2005-)**
Subject area ANEP: **Education sciences**
Subject area JCR: **EDUCATION & EDUCATIONAL RESEARCH**
Date: **07-11-2009**

MADS format
google · scholar · oaister

Figura 1 - IraLIS Records Example

The problems with the correct identification of the authors worry more than just those involved. Large companies that administer the principal bibliographic databases also want to reduce the number of errors and develop tools that allow for more specific searches. For example, the database formerly known as ISI (included in Thompson-Reuter's *Web of Knowledge*) tried to contribute to the author identification process by developing and putting into service *ResearchID* in 2008. They worked on an initiative that set out to give a numeral identification to each researcher. A system like this would avoid confusion (*disambiguate*) and carry out bibliographic searches without identity

confusion. They tried a controversial and minimally structured system (there were no attempts to coordinate with other similar projects). However, given the strength of the company that promoted it, it had a good chance of succeeding. We also must not forget other, potentially interesting, initiatives created by other institutions, such as the 'author profile' and 'Author Identifier', both of which were created by Scopus, the database developed by the powerful Elsevier. Cross-Ref, a coalition of more of two thousand scholarly publishers, wants to introduce a Contributor ID, similar to its digital object identifiers (DOIs) for electronic content .

ResearcherID
A Global Community Where Researchers Connect Home My Researcher Profile Refer a Colleague Logout Search EndNote

Aliaga, Francisco M Get a Badge ResearcherID Labs Your labs page shows only your public data. Manage Profile Preview Public Version

ResearcherID: **B-1106-2011**
Other Names: **Francisco Aliaga; Francisco Aliaga Abad; Francisco M. Aliaga Abad**
E-mail: **Francisco.Aliaga@uv.es**
URL: **http://www.researcherid.com/rid/B-1106-2011**
Subject: [Enter a Subject](#)
Keywords: [Enter a Keyword](#)
Description: [Enter a Description](#)
My URLs:

My Institutions (more details)
Primary Institution: **University of Valencia**
Sub-org./Dept:
Role: **Faculty**
Joint Affiliation:
Sub-org./Dept:
Role:
Past Institutions:

Figure 2 – Identification and number assignment record in Researcher ID

RELIEVE wants to contribute to the correct identification of our authors. Thus, for a few years, we have suggested that references from our articles include the full name of our authors, instead of just the initials. We are aware this does not align with the general APA format; however, as the sixth edition of the APA manual (2010) indicates, APA regulations are not directions, but rather a description of the typical citations used in scientific magazines. We believe that the usage of the authors' full names avoids confusion between people with the same last name. Also, the extra effort to include the full name is minimal enough that it is worth it to make this small modification to the suggest APA format.

We also must not forget other, potentially interesting, initiatives created by other institutions, such as the 'author profile' and 'Author Identifier', both of which were created by Scopus, the database developed by the powerful Elsevier CrossRef, an association of more than 2,000 scientific publishers, has also proposed *Contributor ID*, which would give a specific number to each author that would function as a DOI (digital object identifier) for computerized documents (Qiu, 2008), by means of [ORCID](#) (*Open Researcher and Contributor ID*).

As we have shown in the previous paragraphs, we are in a historical moment in which we are rethinking the main identification form of scientific authors. There are various possible solutions that have been explored. We strongly suggest the majority of these solutions to researchers who send their texts to RELIEVE.

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