

Twenty-five year history of the journal *Psicothema*

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Abstract

Background: There is a growing interest in evaluating the contents of scientific Psychology journals and therefore, to mark the twenty-fifth anniversary of *Psicothema*, we aim to provide an insight into its historical evolution. The objective of this study was to carry out a bibliometric analysis of the articles published from 1989 to 2012, in order to provide information regarding different parameters related to production and quality. **Method:** The data analysed were the evolution of the articles throughout the analysed period, languages of publication, index of authorship, countries according to author affiliation, subject matter, the ten most cited articles, Top Ten journals in which *Psicothema* is most cited, and the evolution of the Impact Factor, amongst others. **Results:** A total of 2,163 articles were analysed, of which the majority (96.16%) are original articles, published in Spanish (80.07%) and with predominantly two authors (28.34%). The journal has published work by authors from 32 different countries according to their affiliation. **Conclusions:** The results support the multidisciplinary character of the journal and a positive and constant evolution towards the advance in Psychology.

Keywords: *Psicothema*, bibliometric analysis, Web of Science, Journal Citation Reports, descriptive study.

Resumen

Veinticinco años de historia de la revista *Psicothema*. **Antecedentes:** existe un creciente interés por evaluar los contenidos de las revistas científicas de Psicología, por ello, con motivo del veinticinco aniversario de *Psicothema*, se pretende conocer su evolución histórica. El objetivo del presente estudio ha sido realizar un análisis bibliométrico de los artículos publicados desde 1989 hasta 2012, con el fin de proporcionar información sobre diferentes parámetros relacionados con la producción y calidad de la misma. **Método:** los datos analizados han sido la evolución de los artículos a lo largo del período analizado, idiomas de publicación, índice de autoría, países en función de la filiación de los autores, las temáticas, los diez artículos más citados, Top Ten de las revistas en las que más se cita a *Psicothema* y evolución del Factor de Impacto, entre otros. **Resultados:** se analizaron un total de 2.163 artículos, de los cuales la mayoría (96,16%) son artículos originales, publicados en español (80,07%) y con una autoría predominante de dos autores (28,34%). La revista ha publicado trabajos de autores de 32 países diferentes atendiendo a la filiación de los mismos. **Conclusiones:** los resultados apoyan el carácter multidisciplinar de la revista y una evolución positiva y constante a favor del avance de la Psicología.

Palabras clave: *Psicothema*, análisis bibliométrico, Web of Science, Journal Citation Reports, estudio descriptivo.

There is a growing interest in evaluating scientific production in general (Navarrete-Cortés, Fernández-López, López-Baena, Quevedo-Blasco, & Buela-Casal, 2010; Navarrete-Cortés, Quevedo-Blasco, Chaichio-Moreno, Ríos, & Buela-Casal, 2009) and that of journals, both in the area of Psychology (e.g., Quevedo-Blasco & López-López, 2010, 2011; Zych & Quevedo-Blasco, 2011) as in other disciplines (e.g., Ariza, Granados, Ramiro, & Gómez-García, 2011; Gómez-García, Ramiro, Ariza, & Granados, 2012), providing guidelines which help to achieve an improvement in their quality. Analysing the production of the journals indexed in the *Web of Science* (WoS), along with other indicators (Buena-Casal, Olivas-Ávila, Musi-Lechuga, & Zych, 2011; Musi-Lechuga, Olivas-Ávila, & Castro, 2011a, 2011b; Musi-Lechuga, Olivas-Ávila, Guillén-Riquelme, & Castro, 2011; Olivas-Ávila y Musi-Lechuga, 2012b) has also acquired great importance within

the scientific community, given that this database is known for the quality of its publications. The scientific production of researchers is also closely linked to the above, and this has also been analysed in the different areas making up Psychology (e.g., Olivas-Ávila & Musi-Lechuga, 2012a; Quevedo-Blasco, Ariza, & Raya, 2012; Quevedo-Blasco, Díaz-Piedra, & Guglielmi, 2010). According to Velasco, Eiros, Pinilla, & San Román (2012) this evaluation is necessary for a correct management of the resources destined to research. However, not only is it necessary to achieve quality in the research activity, but it is also important to attain quality in teaching (García-Berro, Colom, Martínez, Sallarés, & Roca, 2011; García-Berro et al., 2012). The objective is to improve the teaching-learning process, although as stated by Escudero, Pino, & Fernández (2010) this can be a complicated task, as the evaluation of teacher productivity is determined by external factors.

Nowadays, interest in the increase of the Impact Factor (IF) of scientific journals has led to the need to conduct bibliometric analyses, from which certain data can be determined, for example, information regarding their internationality (Buena-Casal & Zych, 2012a; Buena-Casal, Zych, Sierra, & Bermúdez, 2007; Zych & Buena-Casal, 2009, 2010) and the type of articles or subjects that are most cited (Buena-Casal, Perakakis, Taylor, & Checa,

2006; Buela-Casal et al., 2009; Granados, Ariza, Gómez-García, & Ramiro, 2011). Besides, the publication of articles in journals with a high IF has become a necessity. According to Buela-Casal & Zych (2012b) researchers feel obliged to do so, given the fact that this offers several advantages in terms of hiring, the awarding of grants and professional promotion through the granting of six-year research periods and projects, amongst others. Nevertheless, Villar (2011) maintains that the evaluation of research through the relevance of journals is not the only factor to consider.

On the occasion of the twenty-fifth anniversary of the journal *Psicothema*, we will analyse the features that have characterised this journal throughout its history and indicators obtained from its inclusion in the WoS (since 1993) and the JCR (since 1995). With this study we will gain an insight into the different aspects within its contents (e.g., languages of publication), such as the *top ten* most cited articles and subjects, the evolution of the IF in the JCR and the main journals in which *Psicothema* has been most cited, amongst others.

Method

Unit of analysis

The articles (empirical and theoretical revisions) published in *Psicothema* during the period 1989-2012 were analysed, using the following indicators (see Table 1).

Materials

The journal *Psicothema* (ISSN 0214-9915 printed version and ISSN 1886-144X online version) was founded in 1989 and is edited by the *Facultad de Psicología de la Universidad de Oviedo* and the *Colegio Oficial de Psicólogos del Principado de Asturias* (Spain). The periodicity of its publications has varied throughout its history. It published scientific articles on a six-monthly basis until 1993. From 1994 until 1998 it published articles every four months and from 1999 there are four issues per year. It occasionally publishes one or two supplements per year. The journal currently accepts theoretical and empirical articles related to all fields of

Psychology, written in English, although it sometimes publishes articles in Spanish. *Psicothema* allows an open access to its contents and it is indexed in highly prestigious databases on a national and international level: *Social Sciences Citation Index*, *Current Contents - Social and Behavioural Sciences*, *MEDLINE/Index Medicus*, *Index Copernicus*, *Psychological Abstracts*, *PsycLIT*, *PsycINFO*, *Family Studies Database*, *ISOC-Psicología*, *Redinet*, *Psicodoc*, *Scopus*, *Dialnet*, *IN-RECS*, *Latindex*, *Redalyc*, *Google Scholar*, *European Reference Index For The Humanities* and *DOAJ*. The editorial committee is made up of professionals from Spanish universities, as well as experts from countries such as Germany, Canada, the United States, Greece, the Netherlands, Portugal and the United Kingdom.

The *Web of Knowledge* (WoK) is formed, amongst others, by the *Web of Science* (WoS), that offers access to the highest quality articles in the world from any discipline, and the *Journal Citation Reports* (JCR), that provides bibliometric data regarding the performance of the best journals on a global level.

Procedure

It is a descriptive study carried out through the observation and analysis of documents. Hartley's recommendations (2012) were followed during the writing of the article. The procedure adopted to conduct the study was through a selection of original articles and revisions (theoretical), excluding, amongst other types of documents, the revision of books published in *Psicothema* throughout its history (1989-2012). The search was performed from the 23rd September to the 3rd October 2012 and for indicators susceptible to change, specifically, those related to citations, the search was performed from the 22nd to the 26th October in order to provide the most up to date information possible. Information was obtained from the online version of the journal, from the WoK from *Thomson Reuters* (WoS and JCR). Data analysis was carried out independently by two researchers, in order to achieve the most reliable results.

The articles selected, obtained from the WoS (information from the years prior to being indexed in this database was obtained from the *Psicothema* web page), were analysed using bibliometric

Table 1
Description of the indicators used for the analysis of *Psicothema* articles

Indicators	Description
Number of documents	Distribution of the number of articles published per year (1989-2012)
Language of publication	Analysis of articles published according to the language of publication
<i>Top Ten</i> and evolution by country	The first ten countries that have published most work, according to author affiliation. In the historical evolution we took into account the percentage of Spanish contributions in different years (1989-2012) and the number of countries making contributions
Index of authorship	Total percentage of contributions according to authorship (number of signing authors) in the journal and evolution by year (1989-2012)
<i>Top Ten</i> and evolution of subject matters	We analysed the ten most cited article subjects in the history of the journal and the most cited subjects each year since its inclusion in the WoS (1993-2012)
<i>Top Ten</i> citations	This refers to the ten most cited articles since the inclusion of the journal in the WoS. We analysed both the total number of citations and the average number of citations of each article per year
Evolution of the Impact Factor (IF)	Evolution of the journal's IF since it was indexed in the WoS (1995-2011)
<i>Top Ten</i> and evolution of citing journals	The ten journals in which <i>Psicothema</i> has been most cited (information from the JCR of 2011) and the evolution per year (1997-2011) taking into account the first three journals, according to the number of citations made
<i>Note:</i> WoS = <i>Web of Science</i> ; JCR = <i>Journal Citation Reports</i> ; IF (Impact Factor) = Number of citations in x number of articles published in the previous two years (x-1 and x-2), divided by the total number of articles published in x-1 and x-2	

indicators such as the distribution of articles per year, the index of authorship, the evolution of the institutional affiliation of authors by country or the language of publication. The WoS, which includes *Psicothema* contents since 1993, was used to create the citation *Top Ten* (a list of the journal's most cited articles was obtained and, using this indicator, the subject matter of the articles that received 13 or more citations in the WoS was attained) and the evolution of the most cited subjects per year. Information regarding the ten journals in which *Psicothema* is most cited, along with the development of the IF, was obtained from the JCR. In order to gain an insight into the historical evolution of the journals in which *Psicothema* is most cited, the first three journals of each year were considered.

Data analysis

In order to analyse the data regarding the journal's articles published from 1989 to 1992 descriptive statistical techniques

While checking the institutional affiliation of all authors published in *Psicothema*, the results show that there are contributions from more than 30 countries, mainly Spain, followed by the United States and The United Kingdom (made up of Scotland, Wales, England and Northern Ireland) (see Table 2).

Contributions are mainly from Spain in all years analysed, although there are differences between the first two decades and the last years of the journal. In the period from 1989 to 1998 the average percentage of authors affiliated in Spain is 94.03%, and 95.04% between 1999 and 2008. With regard to the issues published between 2009 and 2012 the average percentage of Spanish contributions falls to 87.60%. On the other hand, before the journal was included in the WoS, contributions were limited to four countries including Spain, the United States, the United Kingdom and Canada. In the year 2000 there were publications from 15 different countries, along with the aforementioned, from other European and Latin American countries. The number of contributions from different countries has increased in the

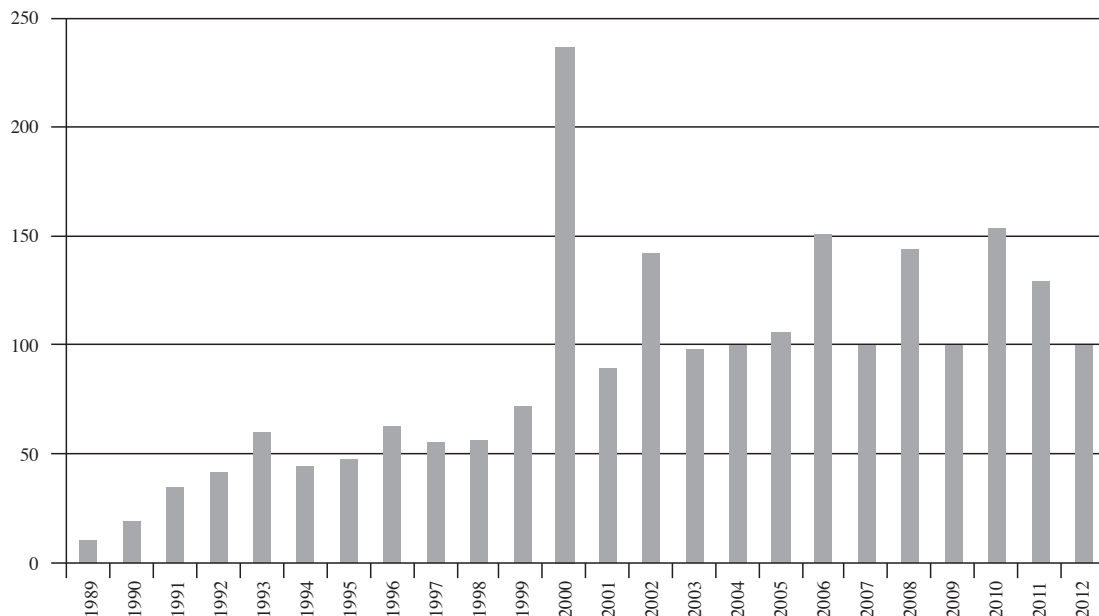


Figure 1. Number of articles published in *Psicothema* per year (1989-2012)

were used. The statistical package SPSS Statistics 19 was used for this. Taking into account that from 1993 the journal is included in the WoS, the analysis of documents from the period 1993-2012 was carried out using this database. The analysis of the contents from the last issue (four) of 2012 was carried out through SPSS, given that the articles were not incorporated in the WoS.

Results

A total of 2,163 articles (1989-2012) were analysed, of which 96.16 % empirical and 3.84% theoretical. Distribution per year can be seen in Figure 1.

Regarding the language of publication of the articles published from 1989 to 2012 (inclusive), the highest percentage of work was published in Spanish (80.07%), followed by English with 18.03%. A small percentage of the articles were written in French (1.57%), German (0.28%) and Italian (0.05%).

Rank	Countries	%
1.	Spain	86.09
2.	United States	3.61
3.	United Kingdom	1.39
4.	Portugal	1.31
5.	Mexico	1.27
6.	Chile	0.83
6.	Holland	0.83
8.	Germany	0.71
8.	Belgium	0.71
10.	Argentina	0.63

Note: The United Kingdom includes the countries of Scotland, Wales, England and Northern Ireland.

last years, with contributions from more than 12 countries in all volumes from 2006, except in 2007. There is also evidence of publications from other continents, besides Europe and America.

Regarding the index of authorship, there is a higher percentage of articles with two authors (28.34%), followed by work with three authors (26.86%). A lower percentage is formed by articles with one author (12.48%), four authors (15.77%) and five authors (9.25%). Contributions with six or more authors are insignificant. The development of the index of authorship per year can be seen in Table 3.

After analysing the journal’s most cited articles, Table 4 shows the most cited subjects from *Psicothema* articles in the *Web of Science* (WoS), where articles regarding “Instruments” stand out. To see the evolution per year see Table 5.

Following we specify the ten most cited articles in the journal in the WoS, where the article with the highest average of citations per year has 8.57 and it is the third article with regard to total number of citations (see Table 6). These articles all have an average higher than that of *Psicothema* in the WoS, which is 2.88 citations per document (taking into account the *Essential Science Indicators*).

According to data provided by the *Journal Citation Reports* (JCR), information regarding the IF of *Psicothema* can be seen in Figure 2, from its indexing in JCR (1995), to the current date (2011). The three highest scores in this indicator were obtained in the years 2008 (1.213), 2002 (1.098) and 2006 (1.083).

	Number of authors					
	1	2	3	4	5	6 or more
1989	72.7	18.2	9.1	0	0	0
1990	31.6	47.4	15.8	5.3	0	0
1991	25.7	51.4	14.3	8.6	0	0
1992	33.3	40.5	19.0	2.4	4.8	0
1993	10.0	20.0	13.3	30.0	21.7	5.1
1994	4.4	20.0	28.9	13.3	22.2	11.1
1995	6.3	27.1	18.8	25.0	8.3	14.6
1996	1.6	17.7	19.4	19.4	19.4	22.5
1997	3.6	17.9	33.9	21.4	3.6	19.6
1998	5.3	22.8	22.8	22.8	12.3	14.1
1999	12.5	29.2	20.8	9.7	15.3	12.5
2000	3.0	21.1	31.6	19.8	12.7	11.7
2001	2.2	18.9	27.8	27.8	14.4	8.9
2002	4.9	25.2	30.8	21.7	11.9	5.6
2003	7.1	26.3	37.4	13.1	6.1	10.1
2004	9.0	23.0	29.0	23.0	4.0	12.0
2005	8.5	34.9	21.7	14.2	14.2	6.5
2006	11.2	27.0	34.9	14.5	7.9	4.6
2007	13.9	38.6	23.8	10.9	7.9	5.0
2008	19.4	32.6	27.8	12.5	5.6	2.1
2009	10.9	29.7	41.6	10.9	5.0	2.0
2010	16.9	39.6	24.7	9.7	5.8	3.1
2011	26.4	30.2	23.3	14.0	3.9	2.4
2012	36.0	32.0	15.0	7.0	7.0	3.0

Finally, the journals in which *Psicothema* is most cited (according to information from the JCR of 2011), along with the corresponding Impact Factors (IF) are *Anales de Psicología* (87), *Spanish Journal of Psychology* (65) and the *International Journal of Clinical and Health Psychology* (45) (Table 7). They are journals of both a “multidisciplinary” and “Clinical Psychology” nature and from the “Education” field, amongst others, with homogeneous IF (and below one), with the exception of two journals that are over two (*International Journal of Clinical and Health Psychology* [2.787] and *Revista de Psicodidáctica* [2.667]). Of these, 80% are Spanish and 20% Colombian. See Table 8 for the historical evolution of this indicator for each year.

1. Instruments
2. Bibliometry and scientific production
3. Society and culture
4. Emotional intelligence
5. Autoconcept, motivation, self-regulation and learning
6. Personality
7. Violence and aggression
8. Anxiety and stress
9. Methodology and statistics
10. Drug addiction

Note: Subjects are ordered according to the number of citations received, taking into account articles with 13 or more citations. The search was conducted in the period from the 22nd to the 26th October 2012

Year	Subject	No. of citations
1993	Neuropsychology	10
1994	Violence and aggression	8
1995	Neuropsychology	9
1996	Instruments	19
1997	Neuropsychology	27
1998	Instruments*	79
1999	Instruments*	77
2000	Instruments*	44
2001	Drug addiction	19
2002	Bibliometry and scientific production	20
2003	Bibliometry and scientific production*	47
2004	Society and culture*	36
2005	Bibliometry and scientific production	23
2006	Instruments*	61
2007	Instruments	31
2008	Instruments	26
2009	Bibliometry and scientific production	13
2010	Bibliometry and scientific production	20
2011	Psychopathology	11
2012	Positive psychology	8

Note: The search was conducted in the period from the 22nd to the 26th October 2012.
* Article included amongst the ten most cited in the journal *Psicothema* in the *Web of Science* (WoS)

Table 6
The ten most cited articles of the journal *Psicothema* in the *Web of Science* (WoS)

Article title	Year of publication	No. of citations	Average no. of citations per year
1. The Bar-On Model of Emotional-Social Intelligence (ESI)	2006	61	8.71
2. Measuring emotional intelligence with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	2006	43	6.14
3. The PANAS scales of positive and negative affect: Factor analytic validation and cross-cultural convergence	1999	77	5.50
4. Reliability, validity, and normative data of the Beck Depression Inventory	1998	79	5.27
5. Evidence that emotional intelligence is related to job performance and affect and attitudes at work	2006	36	5.14
6. Predicting resistance to stress: Incremental validity of trait emotional intelligence over alexithymia and optimism	2006	33	4.71
6. Spanish adaptation of the Psychological Well-Being Scales (PWBS)	2006	33	4.71
8. Evaluating quality of articles and scientific journals. Proposal of weighted impact factor and a quality index?	2003	47	4.70
9. Consequences of the family socialization in the Spanish culture	2004	36	4.00
10. Psychometric properties of the satisfaction with life scale in adolescents	2000	44	3.38

Note: There articles are ordered according to the average number of citations per year. The search was conducted in the period from the 22nd to the 26th October 2012

Discussion

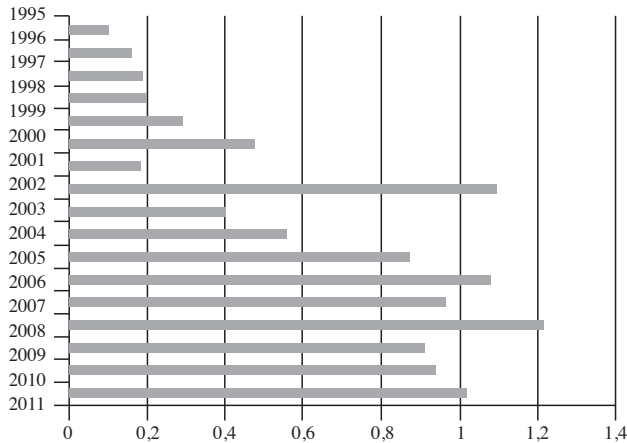


Figure 2. Impact Factor of the journal *Psicothema* since its indexing in the *Journal Citation Reports* (JCR, 1995-2011)

Table 7
The ten journals in which *Psicothema* is most cited (JCR 2011)

Rank	Journal	No. of citations	Journal's Impact Factor (2011)
1.	Anales de Psicología	87	0.568
2.	Spanish Journal of Psychology	65	0.740
3.	International Journal of Clinical and Health Psychology	45	2.787
4.	Revista de Psicodidáctica	37	2.667
5.	Universitas Psychologica	33	0.395
6.	Revista Latinoamericana de Psicología	29	0.642
7.	Psicología Conductual	27	0.683
8.	Revista de Psicología del Deporte	25	0.543
9.	Cultura y Educación	22	0.274
10.	Revista de Psicología Social	21	0.500

Note: The number of citations corresponds to that obtained in the JCR (2011), excluding auto-citation. The search was conducted in the period from the 22nd to the 26th October 2012

The objective of the study was to conduct an analysis of the features that have characterised the journal *Psicothema* throughout its history using a collection of indicators obtained both from the WoS, and the JCR. The results show that most of the articles have been published in Spanish (80.07%). This tendency has recently been modified by the journal so that the scope of the articles increases. Although only articles in English are currently being published in the journal, articles in Spanish could be accepted if their content justified so.

According to the development of author affiliation, there is evidence that the percentage of articles by international authors (non-Spanish) is gradually increasing, going from 5.97% in the journal's first decade to 12.40% in the last four years. This is a sign that the journal has gradually started to expand on an international level, which has given room to the publications of authors from countries throughout the world. According to the study by Narin, Stevens, & Whitlow (1991), in *Psicothema* one of the most cited articles is by researchers from more than one country.

Regarding the index of authorship, in Table 3 we can see that in the year 1989, 72.7% of articles have just one author, and there is no work with four or more authors. This trend changes in the 90s (1990-1999), where work with two authors holds the highest percentage (specifically in 1991 where the rate is 51.4%), although overall it is the period where more work is published with six or more authors, compared to other years. From 2000 to 2009 this trend changes once again with more articles signed by three authors, 2009 being the year where this percentage is highest (41.6%). In the last years (2010-2012), work by two authors predominates, as in the 90s. The Narin et al. (1991) clarifies that articles with multiple authors, by researchers from different countries, receive more citations than articles whose authors are from the same country. However, a high number of citations does not necessarily mean better quality research, according to Gómez & Bordons (1996). These authors maintain that the quality of work is also determined by other factors. In the case of *Psicothema*, for example, two of the five most cited articles in the WoS have just one author.

Regarding the most cited subjects, if analysed per year (1993-2012), it can be established that in seven years (1996,

Table 8
Evolution per year of the journals in which *Psicothema* is most cited

Rank	Journals*	No. of citations	IF (year of analysis)
2011			
1	Anales de Psicología	87	0.568
2	Spanish Journal of Psychology	65	0.740
3	International Journal of Clinical and Health Psychology	45	2.787
2010			
1	Spanish Journal of Psychology	63	0.704
2	Anales de Psicología	36	1.338
3	Revista de Psicología del Deporte	31	0.422
2009			
1	Spanish Journal of Psychology	55	0.835
2	Anales de Psicología	38	0.244
3	Revista Latinoamericana de Psicología	37	0.388
2008			
1	Anales de Psicología	48	–
2	Revista Latinoamericana de Psicología	35	0.435
3	Psicología Conductual	34	–
2007			
1	International Journal of Clinical and Health Psychology	36	2.946
2	Spanish Journal of Psychology	22	0.589
3	Revista Latinoamericana de Psicología	20	0.254
2006			
1	Revista Latinoamericana de Psicología	22	0.400
2	International Journal of Clinical and Health Psychology	20	–
3	Spanish Journal of Psychology	10	–
2005			
1	Revista Latinoamericana de Psicología	35	0.096
2	International Journal of Clinical and Health Psychology	21	–
3	Revista Mexicana de Psicología	9	0.114
2004			
1	Revista Latinoamericana de Psicología	8	0.150
2	Aggressive Behavior	6	1.096
3	Journal of Experimental Education	5	0.727
2003			
1	Revista Mexicana de Psicología	11	1.250
2	European Psychology	3	–
3	Cognition & Emotion	2	1.682
2002			
1	European Journal of Psychological Assessment	4	0.750
1	Revista de Neurología	4	–
3	Aggressive Behavior	3	0.950
2001			
1	Nefrología	3	–
2	Journal of Personality and Social Psychology	2	3.611
2	Social Science & Medicine	2	1.840
2000**			
1	Journal of Child Psychology and Psychiatry and Allied Disciplines	2	2.940
1	Behavioural Brain Research	2	–
1	Neurochemical Research	2	–
1	Psicología Conductual	2	–
1999			
1	Psicología Conductual	11	0.056
2	European Journal of Psychological Assessment	5	0.578
2	Medical Science Research *	5	–
1998			
1	Psicología Conductual	3	0.104
1	European Neuropsychopharmacology	3	–
1	Pharmacology Biochemistry & Behavior	3	–
1997			
1	Medical Science Research	6	–
2	Journal of Environmental Psychology	3	0.481
2	Pharmacology Biochemistry & Behavior	3	–

Note: IF = Impact Factor of the journals in the corresponding year; JCR = Journal Citation Reports.
 * Journals coinciding in the number of citations have been ordered according to the corresponding Impact Factor, and in the case that they do not have one, in alphabetical order.
 ** There are four journals, because all of them have the same number of citations and none can be ruled out by other criteria.
 The number of citations corresponds to that obtained in the JCR, excluding auto-citation. The search was conducted during the period from the 22nd to the 26th October 2012.

1998, 1999, 2000, 2006, 2007 and 2008) the most cited article was regarding “Instruments”, followed by “Bibliometry and scientific production” (during the years 2002, 2003, 2005, 2009 and 2010) and aspects related to “Neuropsychology” (1993, 1995 and 1997). This illustrates the multidisciplinary character of the journal.

For the analysis of citations, research has also been made according to the type of study. For example, in the work of Buela-Casal et al., (2009) it was established that theoretical articles receive more citations than empirical ones. In the journal *Psicothema*, of the total of theoretical articles, almost 80% have received citations and two of them are amongst the journal’s 30 most cited articles (in the WoS). In this context, in the study by Olivás-Ávila & Musi-Lechuga (2010) it is established that *Psicothema* is the first journal in which Spanish Psychology professors publish. Maybe for this reason, according to the results from this study, the journals in which *Psicothema* is most cited are Spanish’s (in 2011 the first journal is *Anales de Psicología* [87] - see Table 7), evidence of this can be seen from the year 2004 (Table 8).

If we analyse the number of articles published per year and the corresponding IF, we can state that after a certain number of articles, as this amount increases, the IF decreases. More specifically, in the year 2000 (the year in which more articles were published in the journal [237]), the IF was 0.473 compared to the rest of the years (see Figures 1 and 2). If we apply this affect to the formula to calculate IF (see note in Table 1), this number of articles (from the year 2000) had a negative effect on the IF of 2001, which dropped to 0.184.

Among the limitations of the present study, it is worth pointing out that the tool that we used (WoS) is a database in constant motion, due to continual update of the data. The JCR is updated every year, around September, so the information analyzed here has been the most updated. Therefore, the results presented are limited to specific time ranges. Furthermore, as it occurs in every on-line database, it could include some mistakes. Also, since we did not have all the journal information in the WoS, we had to manually combine the information from the database with the information taken from the journal website (from 1989 to 1992, and the last number [4] of 2012). The present work is a descriptive, bibliometric study focused on the indexes of interest. Therefore, we have to consider the limitations associated to this kind of study. For instance, a causal relation between variables cannot be established.

In conclusion, *Psicothema* has been the first Spanish journal of Psychology indexed in the WoS (1993). It has shown an increasing evolution since 1995 and it has maintained its position in the last years (Figure 2). This journal typically contains articles with authors affiliated to Spanish institutions. More than 50% of the articles are signed by two or three authors. Given the fact that *Psicothema* is a multidisciplinary journal, it has covered a wide range of topics. However, the most cited papers in this journal are related to “Psychological instruments” and “Bibliometrics/scientific production”. These two fields have experienced a constant evolution during the period 1993-2012 (since the journal was indexed in the WoS, to date).

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