

Article

Fifty Years of Spanish Research in Clinical Psychology through the Web of Science (1971-2020)

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ABSTRACT

A bibliometric study of the Spanish scientific production in Clinical Psychology published in international journals during a period of 50 years (1971-2020) is carried out. There are 3636 papers published in 130 Clinical Psychology journals, which contained 16135 author signatures, corresponding to a total of 8547 authors. 70.76% of the authors are temporary and only 2.01% have participated in the completion of 10 or more papers. It is observed that the increase in the number of Clinical Psychology studies carried out in Spanish institutions is related to the presence of a greater number of Spanish journals of this discipline in the Web of Science, which confirms the degree of maturity that Clinical Psychology has reached in Spain, which is manifested by the increase in the number of papers published in international journals and the increase in the number of Spanish Clinical Psychology journals in WoS.

Cincuenta años de investigación española en psicología clínica a través de la Web of Science (1971-2020)

RESUMEN

Se realizó un estudio bibliométrico de la producción científica española en Psicología Clínica publicada en revistas internacionales durante un periodo de 50 años (1971-2020). Hay 3636 artículos publicados en 130 revistas de Psicología Clínica, que contenían 16135 firmas de autores, correspondientes a un total de 8547 autores. El 70.76% de los autores son temporales y sólo el 2.01% ha participado en la realización de 10 o más trabajos. Se observa que el aumento del número de estudios de Psicología Clínica realizados en instituciones españolas está relacionado con la presencia de un mayor número de revistas españolas de esta disciplina en la Web of Science, lo que confirma el grado de madurez que ha alcanzado la Psicología Clínica en España, lo que se manifiesta en el aumento del número de artículos publicados en revistas internacionales y el aumento del número de revistas españolas de Psicología Clínica en WoS.

Palabras clave:

Psicología Clínica
Producción científica
Web of Science
Historia
España

Introduction

Publication practices in international scientific communication media are, in recent years, one of the hallmarks of research identity of Spanish scientists. These communication practices have led to the relevance of bibliometric studies and their usefulness to detect quality research (Weighman & Butler, 2011). In the Psychology field they are especially abundant, analyzing, among other issues, the degree of internationalization of a country's journals, the research activity of its scientists, the productivity of research in different countries or the situation of a certain specialty.

The interest in scientific production as an index of quality and as a criterion to compare the growth and development of a discipline or area of knowledge has led to the strengthening of bibliometric studies (Riffo, 2011). Bibliometry has been extended and implemented as an essential methodological technique for the evaluation of scientific production and of all the phenomena linked to the communication of science, becoming a fundamental tool to build and know the present and the history of research in various plots of science such as Medicine, Psychology or Education (López Ferrer & Osca-Lluch, 2009).

The scientific production of a given thematic area or field is a good indicator of the progression of research and the generation of knowledge. The analysis of scientific productivity is a need that is related to multiple aspects, such as the financing of universities, the evaluation and promotion of researchers, the financing of research, adaptation to the European Higher Education Area, etc. (Musi-Lechuga et al., 2005). Its bibliometric analysis allows an examination of the way it has been investigated and disclosed. The nature of scientific knowledge is very different according to scientific fields and even specialties. Evaluating the scientific product and the productivity of scientists is not an easy task. To describe the scientific contribution of an investigation, it is necessary to distinguish between quality, importance or relevance and current impact. Quality, per se, is indicative of how well the research may be carried out, either because of the knowledge it provides, because of its methodological correctness or because of the originality with which the project has been designed. Scientific importance or relevance is a quality that refers to the potential influence that research has or may have for the advancement of scientific knowledge and finally, there is the concept of impact, a quality that would interpret the supposed immediate repercussion of a research in a scientific communication system (Camí, 1997).

For the evaluation of the work that scientists do, an extended fact in most cases is to totally or partially reduce scientific activity to the publication of works in specialized journals, estimating the quality of a scientist based on the medium where he published. The impact factor is the most widely used bibliometric index at an international level to evaluate and compare scientific journals and scientific production. It is one of the indicators taken into account when evaluating the quality of a journal and for this reason it is also common, and especially in Spain, to use the impact factor as the main criterion for evaluating the quality of work scientific. Although originally created to determine the influence of scientific journals, today it is used not only as an indicator of their "quality", but is also applied to assess the research articles that they publish, the authors who write them

and the institutions in which they work (Jiménez-Contreras et al., 2010).

Within the field of Clinical Psychology, different bibliometric studies have been carried out that have analyzed some aspects of the Clinical Psychology journals published in Spanish (Agudelo et al, 2003), the one published in Spanish journals (Alcain & Ruiz -Gálvez, 1998), the analysis of some Spanish magazine or the most relevant Ibero-American journals related to Clinical Psychology and health (Ariza & Granados, 2012; Tortosa et al., 2019), knowing the state of the art in the field of Clinical Psychology in Latin America (Bregman et al., 2015) or the trend of published articles on Clinical Psychology in Chile, Latin America and Spain (Riffo, 2011).

The objective of this work is to analyze the international visibility and impact of Spanish research in Clinical Psychology published in international journals indexed in the multidisciplinary databases of the Web of Science (WoS) in order to know the characteristics and evolution of psychology Spanish clinic in the last 50 years and check if there are changes in the publication habits of its researchers, in its international aspect.

Method

To carry out the study, all the papers published in journals included in the thematic category of Clinical Psychology in the Web of Science databases were selected.

To identify all the Spanish scientific production in this discipline collected in these databases, a search strategy was developed through the combination of the selection of works carried out in Spanish institutions in each of the years analyzed and subsequently selecting those that are classified thematically as Clinical Psychology papers. In this way, the search was limited to the production of researchers whose work center affiliation will be associated with any Spanish institution and for a time window between 1971 and 2020. The search was carried out during the first week of July 2021. All records were exported to a Microsoft Access database. A total of 3,636 records containing 16,135 author signatures were retrieved. Next, the different variants of the authors were unified, checking the coincidence in the workplaces of the different variants.

Various indicators of scientific productivity, collaboration and impact were calculated. The main indicator is the number of published works, which has been applied to authors and journals. Finally, the Journal Citation Reports (JCR) databases were consulted in order to know the position of the journals most used by Spanish researchers in Clinical Psychology.

Results

Spanish scientific production in Clinical Psychology: Papers, authors and signatures

Researchers working in Spanish institutions have published over the period 1971-2020 a total of 3636 papers published in journals collected in any of the WoS databases and classified under the thematic area of Clinical Psychology. The papers contained a total of 16135 signatures corresponding to 8547 authors.

Figure 1 allows us to graphically observe the evolution of Clinical Psychology works published by decade.

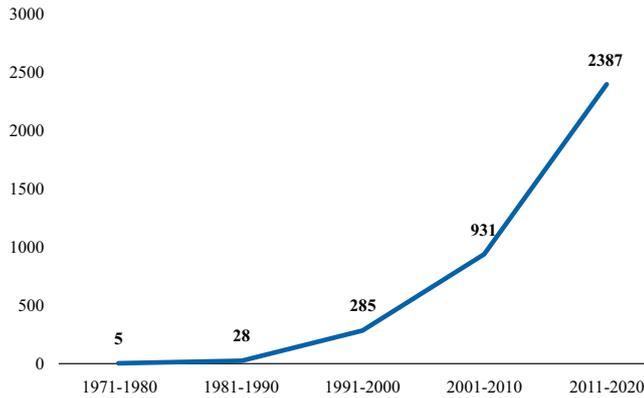


Figure 1. Evolution of the works published per decades.

Looking at the production for years, it is observed that the first work carried out with the collaboration of authors who work in a Spanish institution published in a journal of Clinical Psychology indexed in WoS was in 1966. It is the work entitled *Identification and leadership in group psychotherapy*, carried out by Martí Tusquets, J.L. (Universitat de Barcelona, Spain) and Moll, P. P. (University of Michigan, USA), which was published in the *International Journal of Group Psychotherapy*. It was not until 1977 that new Spanish papers published in Clinical Psychology journals indexed on the Web of Science (WoS) began to be published; however, it was not until 1987 when the number of 10 papers published per year was surpassed and it is from the year 2007 when it is possible to surpass the publication of more than 100 works per year. Table 1 shows the relationship of these first works, together with their authors, journal and year of publication. It should be mentioned that all the papers have been published in English except one that has been published in German.

Table 1. First Spanish works published in Clinical Psychology journals indexed in WoS between 1977 and 1987.

Authors and year	Title	Journal
López Ibor (1977)	<i>Some Characteristics of Depression</i>	<i>Zeitschrift für Klinische Psychologie und Psychotherapie</i>
Reynolds (1977)	<i>Authority, discipline and School principal</i>	<i>Individual Psychologist</i>
Vila & Beech (1977)	<i>Vulnerability and conditioning in relation to human menstrual cycle</i>	<i>British Journal of Social and Clinical Psychology</i>
Avia & Kanfer (1980)	<i>Coping with aversive-stimulation - The effects of training in a self-management context</i>	<i>Cognitive Therapy and Research</i>
Vila & Beech (1980)	<i>Premenstrual symptomatology - Interaction hypothesis</i>	<i>British Journal of Social and Clinical Psychology</i>
Carrobes et al. (1981)	<i>Shaping and generalization procedures in the EMG-Biofeedback treatment of tension headaches</i>	<i>British Journal of Clinical Psychology</i>
Paniagua & Baer (1981)	<i>A procedural analysis of the symbolic forms of behavior-therapy</i>	<i>Behaviorism</i>
Lobo et al. (1986)	<i>Validity of the scaled version of the general health questionnaire (GHQ-28) in a Spanish population</i>	<i>Psychological Medicine</i>
Arboix et al. (1987)	<i>Auditory ear extinction in lacunar syndromes</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Buigues & Vallejo (1987)	<i>Therapeutic response to phenelzine in patients with panic disorder and agoraphobia with panic attacks</i>	<i>Journal of Clinical Psychiatry</i>
De la Fuente (1987)	<i>Assessment of visual mental-imagery (VMI) in brain-damaged patients</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Junque et al. (1987)	<i>Speed retrieval of short-Term-Memory in Parkinson disease</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Junque et al. (1987)	<i>Reverdible left-ear extinction in normal-pressure hydrocephalus</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Litvan et al. (1987)	<i>Multiple memory deficits in multiple-sclerosis - Exploring the working memory system</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Mayor et al. (1987)	<i>Driving again after stroke - Influence of clinical-variables and reaction-Time performance</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Peña Casanova et al. (1987)	<i>Development and application of a basic and general neuropsychological battery - The Barcelona Test</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Poveda et al. (1987)	<i>Mental-Health-Care in Spain, 1960-1985</i>	<i>International Journal of Mental Health</i>
Vázquez Barquero et al. (1987)	<i>A community mental-health survey in Cantabria - A general description of morbidity</i>	<i>Psychological Medicine</i>
Vendrell et al. (1987)	<i>Auditory Agnosia - CT and anatomic findings (Study of a case)</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Vendrell et al. (1987)	<i>Written word recognition and word-picture matching in aphasic patients</i>	<i>Journal of Clinical and Experimental Neuropsychology</i>
Vizcarro Guarch et al. (1987)	<i>The role of perceptual laws in the Rorschach test</i>	<i>Journal of Personality Assessment</i>

It is observed that there is a constant rate of work production and an increasing increase in the publication of articles and reviews, especially as of 2010, reaching, in some cases, percentages that exceed 60 percent of all published works.

Documentary typology and Clinical Psychology Journals most used by Spanish authors between 1971 and 2020

In relation to the documentary typology, it is observed that 89.74% (3307 works) are articles and reviews. The original article is the one with the most frequency (86.47%, 3,144 works) and the reviews are revision or updating works, which are generally the most cited, surely due to their approach and the extensive bibliography they provide. The remaining 329 works are divided into 10 other documentary types, with conference abstracts (4.70%, 171 papers) and editorials (1.57%, 57 papers) being the most numerous, followed by letters to the editor (1, 29%, 47 papers), book reviews (.96%, 35 papers), corrections and notes with 6 papers each (.17%) and the remaining 7 papers (.19%) are distributed among others three types of documents: *new item, bibliography and film review*.

Throughout the 50 years analyzed, the 3636 papers were published in 130 different journals. The number of titles has been increasing each year, going from 5 titles in the decade 1971-1980 to 94 in the decade 2011-2020. As can be seen in [Figure 2](#), in general there has been a gradual increase in the number of different journals in which the works have been published, especially in the number of foreign journals, which exceed 5 publications in the period 1971-1980 at 88 in the period 2011-2020. The presence of Spanish Clinical Psychology journals is very limited, although a slight increase can be seen from the decade 1991-2000, going from a single Spanish journal to the 6 journals in the decade 2011-2020.

The scientific works of any discipline are not distributed evenly among a determined number of journals, but it is possible to detect in all subjects a higher concentration of articles in a limited set of journals. [Bradford \(1948\)](#) proposed the study of this phenomenon by arranging the journals in decreasing order of productivity, that is, according to the number of articles that each of them contributes to the discipline in question and trying to identify this distribution. This same distribution is also used to study in which journals researchers working in an institution in the area of Clinical Psychology concentrate their publications throughout the period analyzed. [Table 2](#) shows the list of Clinical Psychology journals where researchers working in Spanish institutions have published 50 percent of the papers during the period 1971-2020. In this case, we observe that the two publications most used by researchers in Clinical Psychology working in Spanish institutions are two Spanish journals, which together account for almost 24 percent of all Spanish production in Clinical Psychology in the last 50 years collected in the databases of the Web of Science (WoS). It is about the journal *Behavioral Psychology-Psicología Conductual*, edited by the Veca Foundation for the Advancement of Behavioral Clinical Psychology (in Spanish *Avance de la Psicología Conductual*) and directed by Professor Vicente E. Carballo (Universidad de Granada) and the *International Journal of Clinical and*

Health Psychology, edited jointly by the Spanish Association of Behavioral Psychology (*Asociación Española de Psicología Conductual* – AEPC, in Spanish language), the Colombian Association for the Advancement of Behavioral Sciences (in Spanish: *Asociación Colombiana para el Avance de las Ciencias del Comportamiento*, ABA-Colombia) and the Portuguese Association of Behavioral Therapy/Portuguese Society of Behavioral and Cognitive Psychotherapies (in Portuguese: *Associação Portuguesa de Terapia do Comportamento (APTC)/ Sociedade Portuguesa de Psicoterapias Comportamentais e Cognitivas*) and which is Directed by Professor Juan Carlos Sierra (Universidad de Granada).

However, if we stop to see the evolution of the publication habits of Spanish researchers in Clinical Psychology throughout the period, it is observed that the number of articles published in the different journals has been increasing over time and also the number of journals, but it must be taken into account that some of these journals have not been indexed from the same date in the WoS databases, but some have been incorporated later. When we analyze the Clinical Psychology journals indexed in WoS where researchers working in Spanish institutions have published over the different decades, it is observed that the number of journals used by Clinical Psychology researchers working in Spanish institutions increases, but some of them stand out especially for their contribution to the Spanish dissemination of Clinical Psychology throughout the period analyzed (see [table 2](#)). During the period 1971-1980, as we have indicated previously, Spanish researchers published 5 papers in indexed journals in the thematic category Clinical Psychology of the Web of Science (WoS). It is striking that these 5 works were published in 5 different magazines, 4 of them American and 1 German. However, during the decade 1981-1990, not only did the number of journals where the works have been published increase, but we also found that, of the 15 journals used, there are 2 publications that stand out for being the ones that agglutinate 50% of all production. Subsequently, during the decade 1991-2000, there is a significant increase in production compared to the previous decade, concentrating almost 50% of all production in the Spanish journal *Behavioral Psychology-Psicología conductua*. However, during the period 2001-2010, there is a change in the publication habits of researchers that is accompanied not only by a continuous increase in their production, but also by a greater dispersion in the publication journals, in this case being 6 publications that concentrate just over 50% of the works and among which are two Spanish publications, the *International Journal of Clinical and Health Psychology* (17.94%) and *Behavioral Psychology-Behavioral Psychology* (9.34%). This trend continues during the 2011-2020 decade, where it is observed that there are 9 publications that in this case contribute more than 50% of the Clinical Psychology works carried out with the collaboration of a Spanish institution and among which are 5 Spanish journals: *Behavioral Psychology-Psicología conductua* (12.02%), *International Journal of Clinical and Health Psychology* (8%), *Revista de Psicoterapia* (5.61%), *Clinica y Salud* (4.78%) and *Revista Clínica Contemporánea* (3.52%).

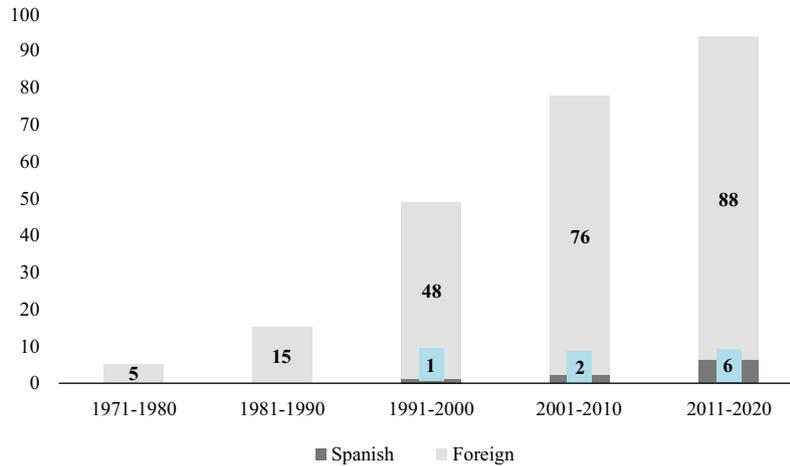


Figure 2.
Evolution of publishing journals.

Table 2.
List of journals most used by Spanish authors (1971-2020).

Journals	Countries	Number of works	%
<i>Behavioral Psychology-Psicología Conductual</i>	Spain	510	14,03
<i>International Journal of Clinical and Health Psychology</i>	Spain	358	9,85
<i>Revista Iberoamericana de Diagnóstico y Evaluación-E Avaliacao Psicologica</i>	Argentina	158	4,35
<i>Revista de Psicoterapia</i>	Spain	134	3,69
<i>European Eating Disorders Review</i>	United Kingdom	132	3,63
<i>Journal of Clinical Psychiatry</i>	United States of America	120	3,3
<i>Clinica y Salud</i>	Spain	114	3,14
<i>European Journal of Investigation in Health Psychology and Education</i>	Switzerland	107	2,94
<i>Revista Argentina de Clínica Psicológica</i>	Argentina	97	2,67
<i>Terapia Psicológica</i>	Chile	96	2,64

Table 3 shows the titles of the publications that account for 50% of all scientific production during the different decades, together with the percentage of their production throughout the different decades analyzed.

Psychology journals published in Spain are oriented towards concrete strategies and plans to improve their indexing, which has undoubtedly improved the professionalization of editorial activities with the aim of generating strategies and resources aimed at enhancing the visibility of journals (Tortosa-Pérez et al., 2020). This is observed in the data analyzed in this work, where it should be noted that in the WoS Clinical Psychology subject category there is an increasing presence of Spanish journals, which are achieving a higher degree of visibility, as a consequence of their incorporation into these databases and that it contributes to the dissemination of Spanish research in this discipline.

Autorship and scientific production

Regarding the authorship of the works, the analysis and standardization of the 16185 authorship signatures has allowed the identification of a total of 8347 authors, of which 4287 (51.36%) are men and 4009 (48.03%) are women. There is a total of 51 authors (.61%) that it has not been possible to identify due to lack of data for their identification, all of them being eventual authors, that is, they have only participated in the realization of a single work throughout the entire period analyzed (1971-2020).

Regarding the production of the authors, it is observed that during the study period 70.76% (5906) of the authors are temporary. Among the authors who have done more than one work (29.24% of the total), the most frequent is that they have participated in the realization of 2 works (13.77%, 1099 authors) or 3 works (5.62%, 469 authors). Only 2.01% of the authors (168) have participated in the completion of 10 or more papers during the period studied. If we focus on the individual production of the authors with the highest production, it is observed that there are 16 authors, 8 women and 8 men, who reach a high level of productivity with 30 or more works published in Clinical Psychology journals collected by WoS in the period under study (table 4).

There are 5 authors who stand out for having published more than 50 works. The most productive author over the years analyzed is Fernando Fernández-Aranda, doctor in Psychology, specialist in Clinical Psychology and director of the Eating Disorders Unit of the Department of Psychiatry of the Bellvitge University Hospital (Unidad de Trastornos Alimentarios del Departamento de Psiquiatría del Hospital Universitario de Bellvitge). In addition, he is a professor in the Department of Clinical Sciences of the Bellvitge Campus of the Faculty of Medicine and Health Sciences of the Universitat de Barcelona (UB) and scientific director of the Bellvitge Biomedical Research Institute (Instituto de Investigación Biomédica de Bellvitge -IDIBELL). He is a renowned researcher in the field of eating disorders, and is currently the principal investigator of the Neurosciences program at IDIBELL and group leader and coordinator of the Obesity Subprogram at CIBERobn.

Table 3.

Most used journals by Spanish researchers.

Period 1981-1990	Number of works (%)
<i>Journal of Clinical and Experimental Neuropsychology</i>	35.71
<i>Psychological Medicine</i>	14.29
13 journals	50.00
Total 15 journals	100.00
Period 1991-2000	
<i>Behavioral Psychology-Psicología Conductual</i>	47.72
<i>Psychological Medicine</i>	5.61
47 journals	46.67
Total 49 journals	100.00
Period 2001-2010	
<i>International Journal of Clinical and Health Psychology</i>	17.94
<i>Journal of Clinical Psychiatry</i>	11.60
<i>Behavioral Psychology-Psicología Conductual</i>	9.34
<i>International Journal of Eating Disorders</i>	4.62
<i>International Psychogeriatrics</i>	4.62
<i>Psychological Medicine</i>	3.87
72 journals	48.01
Total 78 journals	100.00
Period 2011-2020	
<i>Behavioral Psychology-Psicología Conductual</i>	12.02
<i>International Journal of Clinical and Health Psychology</i>	8.00
<i>Revista Iberoamericana de Diagnóstico y Evaluación-E. Avaluación Psicológica</i>	5.95
<i>Revista de Psicoterapia</i>	5.61
<i>Clinica y Salud</i>	4.78
<i>European Journal of Investigation in Health Psychology and Education</i>	4.48
<i>European Eating Disorders Review</i>	4.11
<i>Terapia Psicológica</i>	3.81
<i>Revista Clínica Contemporánea</i>	3.52
85 journals	47.72
Total 94 journals	100.00

Susana Jiménez Murcia, doctor in psychology, is Coordinator of the Pathological Gambling and Behavioral Addictions Unit in the psychiatry service of the Bellvitge University Hospital. She is a researcher at IDIBELL and Associate Professor at the Faculty of Medicine and Health Sciences of the University of Barcelona. Member of the research group of the Center for Biomedical Research in Network-Physiopathology of Obesity and Nutrition (CIBERObn) of the Carlos III Health Institute.

Roser Granero Pérez, doctor in psychology, is professor of Behavioral Sciences Methodology at the UAB Department of Psychobiology and Methodology. She is a researcher at the CIBERObn Group (Center for Biomedical Research Network on Obesity and Nutrition, Instituto Carlos III, Spain) and at the Department of Psychiatry of the Bellvitge University Hospital.

Cristina Botella Arbona is Professor of Psychology at the Department of Basic, Clinical and Psychobiology Psychology at the Jaume I University of Castellón. She is the director of the Labpsitec group and head of one of the groups belonging to the CIBER action "Physiopathology of Obesity and Nutrition". Director of the "Psychological Assistance Service" of the Jaume I University of Castellón.

Enrique Echeburúa Odriozola, is a professor of Clinical Psychology at the University of the Basque Country (UPV / EHU), a full-time academic at Jakiunde (Basque Academy of Sciences, Arts and Letters) and an elected member of the Spanish Academy of Psychology. He directs the research group in Clinical and Health Psychology (group A of the Basque

University System) and is a member of the Research Group in Mental Health and Psychiatric Assistance of the IIS Biodonostia (Neuroscience Group).

Susana Jiménez Murcia, doctor in psychology, is Coordinator of the Pathological Gambling and Behavioral Addictions Unit in the psychiatry service of the Bellvitge University Hospital. She is a researcher at IDIBELL and Associate Professor at the Faculty of Medicine and Health Sciences of the University of Barcelona. Member of the research group of the Center for Biomedical Research in Network-Physiopathology of Obesity and Nutrition (CIBERObn) of the Carlos III Health Institute.

Roser Granero Pérez, doctor in psychology, is professor of Behavioral Sciences Methodology at the UAB Department of Psychobiology and Methodology. She is a researcher at the CIBERObn Group (Center for Biomedical Research Network on Obesity and Nutrition, Instituto Carlos III, Spain) and at the Department of Psychiatry of the Bellvitge University Hospital.

Cristina Botella Arbona is Professor of Psychology at the Department of Basic, Clinical and Psychobiology Psychology at the Jaume I University of Castellón. She is the director of the Labpsitec group and head of one of the groups belonging to the CIBER action "Physiopathology of Obesity and Nutrition". Director of the "Psychological Assistance Service" of the Jaume I University of Castellón.

Enrique Echeburúa Odriozola, is a professor of Clinical Psychology at the University of the Basque Country (UPV / EHU), a full-time academic at Jakiunde (Basque Academy of Sciences,

Arts and Letters) and an elected member of the Spanish Academy of Psychology. He directs the research group in Clinical and Health Psychology (group A of the Basque University System) and is a member of the Research Group in Mental Health and Psychiatric Assistance of the IIS Biodonostia (Neuroscience Group).

Discussion

This work has allowed us to know the evolution of Spanish research in Clinical Psychology over half a century, as reflected in the scientific publications included in the databases of the Web of Science (WoS). The scientific production of a given discipline or subject area is a good indicator of research and the generation of knowledge. All scientific knowledge to be accepted as such must be subjected to scrutiny, validation and critical judgment of the scientific community itself. Furthermore, journals play a unique role in the institutionalizing process of any scientific discipline. Their existence or nonexistence, their number, their internationalization and their positioning in international rankings, help to explain degrees of institutionalization of countries, regions or continents (Tortosa-Pérez et al., 2020).

The results of this work show that the publication of works in journals indexed in the WoS in the category of Clinical Psychology and carried out in collaboration with researchers working in Spanish institutions has had an exponential growth throughout the entire period 1971-2020 and this has been motivated, in part, by the increase in the number of journals included in the WoS indexed in the category of Clinical Psychology in these databases. Until well into the 21st century, the presence of Spanish psychology journals in JCR was practically anecdotal, however, the data shows that the growth in the number of journals in WoS contributes to the visibility of Spanish research among the international community.

In relation to the publication habits of Spanish researchers in Clinical Psychology, it is observed that the number of works has been increasing progressively, especially from the decade 1991-2000, a period in which the Spanish journal Behavioral Psychology-Psicología conductual, plays a fundamental role, since it is in 1994 when their works begin to be indexed in the

WoS. However, during the years 2001-2006 the works published in this journal cease to be indexed in WoS and it is from the year 2007 when they are added to these databases again, where the journal Behavioral Psychology-Behavioral Psychology continues to be included. since then in the thematic category Psychology Clinical in the SSCI database. Since 2009, it has been in quartile 4 in the JCR database (except in 2012, 2013 and 2016, when it was in quartile 3). It currently occupies position 111 of the 131 journals included in the thematic category "Psychology Clinical" in JCR.

During the decade 2001-2010 it is observed that there is another journal that stands out for its contribution to the dissemination of Spanish research, it is the International Journal of Clinical and Health Psychology, whose works began to be included in 2005 in the WoS databases and that since 2007 has been occupying privileged positions in the JCR databases (quartiles 1 and 2). Since 2017, it occupies quartile 1 and is currently located in position 14 of the 131 journals included in the thematic category Psychology Clinical in JCR.

Finally, during the period 2011-2020 we see that these two publications, Behavioral Psychology-Behavioral Psychology and Journal of Clinical and Health Psychology, continue to be the two journals most used by Spanish researchers to publish their work, emphasizing once again Behavioral Psychology- Behavioral psychology as the publication where there is a greater number of published works by authors working in Spanish institutions, the second place being ranked by the International Journal of Clinical and Health Psychology and by journals Revista Iberoamericana de Diagnóstico y Evaluación-e Avaluación Psicológica, Revista de Psicoterapia and Clínica y Salud. It can be affirmed that this period is characterized by having a high number of articles published in Spanish and Latin American journals, but that, given that many of them have just been incorporated in recent years, their contribution when analyzing the entire period studied unnoticed. Certainly, the incorporation of more Spanish journals to WoS, together with a large number of journals from Hispanic countries, will contribute to improving the ranking of journals from these countries and will give greater visibility to their research and its position in the different rankings.

Table 4.
Most productive authors (1971-2020).

Authors	Institutions	Number of works
Fernández-Aranda, Fernando	Hospital Universitari de Bellvitge and Universitat de Barcelona	78
Jiménez-Murcia, Susana	Hospital Universitari de Bellvitge and Universitat de Barcelona	56
Granero Pérez, Roser	Universitat Autònoma de Barcelona and Hospital Universitari de Bellvitge	54
Botella Arbona, Cristina	Universitat Jaume I	53
Echeburúa, Enrique	Universidad del País Vasco	52
Vieta, Eduard	Universitat de Barcelona and Hospital Clínic de Barcelona	42
Caballo, Vicente E.	Universidad de Granada	41
Menchon, José Manuel	Hospital Universitari de Bellvitge and Universitat de Barcelona	41
Penelo, Eva	Universitat Autònoma de Barcelona	37
Treasure, Janet	Kings Coll London, Dept Psychol Med, London	36
Feixas, Guillem	Universitat de Barcelona	36
Sierra, Juan Carlos	Universidad de Granada	36
Baños, Rosa	Universitat de València	35
Calvete, Esther	Universidad de Deusto	35
Ballester Arnal, Rafael	Universitat Jaume I	35
García-Palacios, Azucena	Universitat Jaume I	30

If we focus on the production of the authors, the high number of eventual authors (70.76%) is striking and, on the other hand, it is also striking that, among the 16 authors with the highest production, it is observed that there is the same number of men as women. The role of the Center for Biomedical Research in Network-Physiopathology of Obesity and Nutrition (CIBERObn) of the Carlos III Health Institute should also be highlighted, since its members are among the researchers with the greatest Spanish production in Clinical Psychology.

For this reason, identifying the differences and similarities in the publishing habits of Clinical Psychology authors between large and medium-sized producers and finding out if there are significant differences based on the sex of the authors, will be the subject of future studies and an analysis of the topics of emerging lines of research, as well as the presence of Spanish authors on the editorial committees of the most prestigious clinical journals.

As a final conclusion, we can affirm that, according to the data provided by the WoS, Spanish Clinical Psychology is reaching a high degree of maturity, which is manifested not only by the increase in the number of papers published in international journals over time, but also due to the increase in the number of Spanish journals in these databases, which will contribute to the expansion of Spanish research in this discipline at an international level and to the recognition of the Spanish contribution to this discipline.

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Conflict of Interest

The authors of this article declare no conflict of interest.

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