

HIV/AIDS As an Object of Social Representations: a Bibliometric Study

REVIEW

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Abstract

Objective: Map scientific production on HIV/AIDS as an object of Social Representations.

Methods: This is a bibliometric research carried out in the ISI Web of Knowledge/Web of Science, in the temporal cut between the years 1989 and 2015, using the following search strategy: ("social representation*") and (HIV) or ("social representation*") and (AIDS). The data were analyzed considering the annual evolution of the publications; the journals with the greatest number of records; the authors with more publications; the articles with the greatest impact and the institutions with the greatest number of publications.

Results: There are 122 articles published in 74 different journals. These articles were written by 301 authors of 165 Institutions of Higher Education in 34 countries. The 18 articles with the greatest impact were published in the period from 1996 to 2011. The Theory of Social Representations was used in the studies to seek the representation of the phenomenon by different groups. It is a theoretical methodological reference used in several areas of knowledge to know the created and transformed subjectivities about HIV/AIDS. These studies can serve as subsidy for the adoption of preventive practices from the perspective of social being with focus on actions.

Conclusion: The Theory of Social Representations is well applied in HIV/AIDS investigations, in several academic spaces distributed throughout the world with emphasis on the United Kingdom, United States of America and Brazil, and has contributed to the development of knowledge on the prevention and treatment of HIV/AIDS and implementation of effective public policies around the world.

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Keywords

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Introduction

For more than three decades, HIV/AIDS has become a worldwide public health problem because of its morbidity, mortality and social stigma.

More than 34 million people live with HIV/AIDS, spread across all continents, most notably in Africa, especially Sub-Saharan Africa, which accounts for 71% of the total number of people living with HIV, being the highest concentration of HIV in Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Uganda, United Republic of Tanzania, Zambia and Zimbabwe [1].

Since the beginning of the epidemic, until the middle of 2015, Brazil has reported 798,366 cases of AIDS. Initially the problem was concentrated in the main capitals of the South and Southeast. Currently the scenario changed and presents huge expansion for the entire national territory, with significant increase in the North region. However, the South and Southeast regions still concentrate the largest contingent of infected people [2].

HIV/AIDS, as a complex phenomenon, cannot be restricted to the particularities of rational logic and influences of a sociocultural nature should be considered. In this context, investigating the panorama of scientific production on HIV/AIDS as a psychosocial phenomenon becomes relevant to know the international trends on the subject.

In this sense, and understanding the Theory of Social Representations as "modalities of practical knowledge oriented towards communication and understanding of the social, material and ideational context in which we live" [3], and understanding that it is engaged in investigating the process of formation, evolution and transformation of social phenomena that can be triggered by multiple factors, such as the disease health process [4], the objective of this study is to map the scientific production on HIV/AIDS as an object of the Social Representations.

Methods

It is a bibliometric, descriptive and exploratory study carried out in the ISI Web of Knowledge/Web of Science. This type of study allows the researcher to map the scientific production of a certain area of knowledge and identify the theoretical contributions on given subject [5]. It was decided to carry out the bibliometric in ISI Web of Knowledge/Web of Science (Web of Science – SSCI Social Sciences Citation Index) by its relevance, international recognition and the number of journals covered [6].

For the accomplishment of the study, six steps were followed: delimitation of the problem; choice of database; data collect; representation and analysis of data [7]. For the collection of data, the following search strategy was used: ("social representation*") and (HIV) or ("social representation*") and (AIDS).

After the data collection, the material was analyzed by exporting these data to the HistCite bibliometric analysis software package, in order to organize the information and facilitate analysis. The data were analyzed considering the annual evolution of the publications; the journals with the greatest number of records; the authors with more publications; the articles with the greatest impact and the institutions with the greatest number of publications.

In addition to these data, the relationships between the 18 articles with the greatest impact were analyzed. For such analysis, the work was divided into two groups: 1- Articles that received more quotations from other works throughout the ISI Web of Science (GCS) database, defined here as citations for all the indexed production in the database and the 2 - group of articles that received more quotations from the work of the selection group of this bibliometric study (LCS), defined as local citations because it involved only the 122 articles selected for the bibliometric analysis.

Results

The search resulted in 122 articles on HIV/AIDS and Social Representations. These articles are published in 74 different journals indexed to the database in question and written by 301 authors who have links to 165 institutions located in 34 countries. For the achievement of these articles, 3,816 references were used, with an average of approximately 31 references per article. In **Table 1** below, these results are presented.

Table 1. General Results of the Bibliometric Survey on HIV/Aids and Social Representations (1989-2015). Teresina, PI, 2016.

Bibliometric Data	Quantity
Publications (articles)	122
Indexed journals	74
Authors	301
Institutions (the authors' links)	165
Countries	34
References cited	3,816

Source: Own elaboration based on data from the Web of Science.

The first publication record, dated in 1989, with two records. In 2011, 11 records have been identified. In 2015, 13 articles were published on the subject, reaching 122 records in temporal studied cohort. These publications are distributed in **Figure 1**, as for the year of publication and number of records.

Figure 1: Distribution of publications on HIV/AIDS and Social Representations (1989-2015). Teresina, PI, 2016.

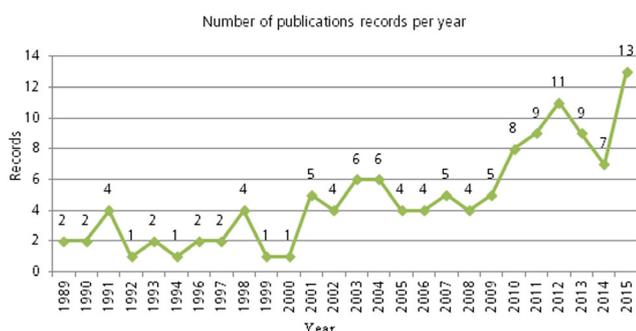


Table 2. Journals with more articles published (1989-2015). Teresina, PI, 2016.

Journals	Quantity of Articles	Citations	Citations/Quantity
Social Science & Medicine	11	273	24.81
Revista Latino-Americana de Enfermagem	7	19	2.71
Journal of Health Psychology	6	99	16.50
Aids care-Psychological and Socio-Medical Aspects of Aids/HIV	5	77	15.40
Journal of Community & Applied Social Psychology	5	164	32.8
BMC Public health	3	10	3.33
British Journal of Social Psychology	3	191	63.66
Social Science Information Sur Les Sciences Sociales	3	52	17.33
Ajar-African Journal of Aids Research	2	7	3.50
British Journal of medical Psychology	2	73	36.50

Source: Own elaboration based on data from the Web of Science.

The total number of publications was organized by corresponding journals evidenced in **Table 2**.

The journals with the greatest number of publication records are "Social Science & Medicine" and "Revista Latino-Americana de Enfermagem", with 11 and 7 articles, respectively. However, the impact of each journal has been verified by an index from the division of amount of citations, by the number of papers published, showing the "British Journal of Social Psychology" as the one with the highest index (63.66).

The authors with the highest number of publications are distributed in **Table 3**, below:

Among the 301 authors identified in the study, **Table 3** presents the 10 authors with the highest number of publications. The first two authors were Catherine Campbell and Hélène Joffe, with eight publications each. Catherine Campbell is Professor at the "Department of Psychological and Behavioural

Table 3. Authors with the highest number of publications (1989-2015). Teresina, PI, 2016.

Authors	Quantity of Articles	Affiliation (Link institution)	Country
Campbell C	8	London School of Economics and Political Science	United Kingdom
Joffe H	8	University College London	United Kingdom
Winskell K	6	Emory University	United States
Obyerodhyambo O	5	Emory University	United States
De Oliveira DC	4	University of the State of Rio de Janeiro	Brazil
Goodwin R	4	Brunel University	United Kingdom
Kozlova A	4	Petersburg University	Russia
Nizharadze G	4	Academy of Sciences	Georgia
Skovdal M	4	London School of Economics and Political Science	United Kingdom
Gomes AMT	3	University of the State of Rio de Janeiro	Brazil

Source: Own elaboration based on data from the Web of Science.

ral Science" of the "London School of Economics and Political Science", one of the greatest centers for the study of social psychology in Europe, with great scholars of the Social Representations Theory. Helen Joffe is Professor at the "University College London", affiliated to the department of psychology. This university is at the top of the UK ranking for research in Psychology.

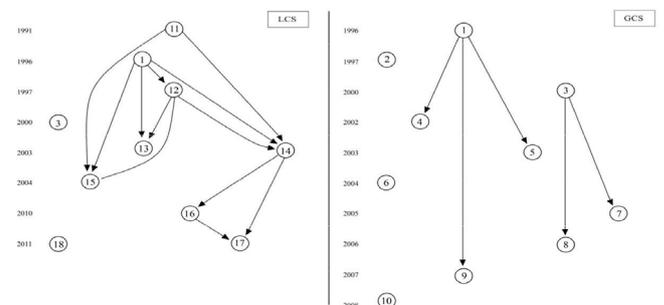
In **Table 3**, it is possible to identify four important research centers in the area: "London School of Economics and Political Science"; "Emory University"; "University College London" and a Brazilian center, the "Universidade do Estado do Rio de Janeiro" which has two authors.

Table 4. Number of articles by country of authors' origin (1989-2015). Teresina, PI, 2016.

Country	Quantity
United Kingdom	37
United States of America	20
Brazil	19
Unidentified country	10
France	9
Mexico	7
South Africa	6
Canada	4
Portugal	4
Spain	4

Source: Own elaboration based on data from the Web of Science.

Figure 2: Top 10 most cited articles in Web of Science (Global Citation Score) and most cited by the selected articles (Local Citation Score), from the selection set (1989-2015).



Note:

- Joffe H, 1996
- Breakwell GM, Millward LJ, 1997
- Campbell C, Jovchelovitch S, 2000
- Joffe H, Haarhoff, 2002
- Joffe H, 2003
- Washer P, 2004
- Campbell C, Foulis CA, Maimane S, Sibiya Z, 2005
- Howarth C, 2006
- Joffe H, Staerkle C, 2007
- Sibley CG, Liu JH, Duckitt J, Khan SS, 2008
- Paez D, Echebarria A, Valencia J, Romo I, Juan Cs, Vergara A, 1991
- FifeSchaw C, 1997
- Joffe H, 2003
- Joffe H, Bettega N, 2003
- Goodwin R, Kwiatkowska A, Realo A, Kozlova A, Luu LAN, Nizharadze G, 2004
- Campbell C, Skovdal M, Mupambireyi Z, Gregson S, 2010
- Winskell K, Obyerodhyambo O, Stephenson R, 2011
- Gomes AMT, Silva EMP, Oliveira DC, 2011.

Source: Own elaboration based on data from the Web of Science.

The distribution of articles by country of origin of the authors' liaison institutions is presented in **Table 4**

The predominance of the articles is British, followed by the United States and Brazil. These results agree with the list of authors with the highest number of publications and their respective research centers located in the United Kingdom, United States of America and Brazil.

Figure 2 shows the relationship between the most cited articles, organized into two groups: 1- articles that received more quotations from other papers throughout the ISI Web of Science (GCS) database, named as global and 2- articles that received more quotations from the work of the selection group of this bibliometric study (LCS), named as local. The number of citations and the citation relations between these works (represented by lines connecting the circles) indicate the most representative studies on the subject, presenting seminal works and those later that were also very referenced.

Discussion

Although this research does not cover all the scientific production on HIV/AIDS as an object of the Social Representations, it was possible to search for documents of high scientific quality indexed in the Web of Science and have an overview of the world scientific production on the subject.

With regard to the annual evolution of the publication, it can be seen that in the period between 1989 and

2008, publications remained between two to six records, however, without significant growth. The publications were exacerbated in 2011 with 11 records and in 2015 with 13 records.

The Theory of Social Representations was created in 1961 by Serge Moscovici [8], understood as a "system of knowledge elaborated and socially shared, orienting behaviors and intervening in the definition of individual and social identity, and in the

construction of objects [9]. It is applied in studies of different areas of knowledge, especially of psychology, anthropology and healthcare, collaborating in the elaboration of new images and conceptions about social reality. It is an expanding theory in social sciences around the world.

It is important to note that, although most articles are published in foreign journals, a Brazilian journal, *Latino-Americana de Enfermagem*, stands out occupying the second place among the periodicals with greater number of articles published. This national journal has 7 publication records, getting behind only the *Social Science & Medicine* journal, which has 11 publication records. However, the greatest impact of publications in the scientific community is observed in the *British Journal of Social Psychology* which has only 3 publication records, but receives the highest number of citations per published work.

The *British Journal of Social Psychology* is originating in the United Kingdom, exists for more than 100 years and is specific to publications in the field of social psychology.

The Theory of Social Representations is inserted in the thematic field of social psychology and investigates social phenomena since its genesis, evolution and transformation [4].

This information becomes relevant in the process of construction of scientific knowledge, since it provides data that can support groups and research centers in the location of academic journals specialized in the topic with greater representation in both the number of articles published and in the quantity of citations received per study.

With regard to the authors with the greatest number of publications, two researchers from the United Kingdom stand out, with 8 registers each, Campbell C and Joffe H, which in addition to having the largest number of records, are also the authors who appear among the most cited articles, both from citations by the 122 records located, as in citations for works indexed throughout the Web of Science. In addition, the two authors remain over

the years among the most cited, from 1990 to 2010, indicating a thematic area of consolidated research.

However, among the group of 10 authors with the highest number of publications,

two Brazilian authors linked to the University of the State of Rio de Janeiro stand out, Oliveira DC and Gomes AMT, with 4 and 3 registers, respectively, both with undergraduate and doctorate degrees in nursing.

It is considered that the Theory of Social Representations has remained an important theoretical-methodological reference for researchers of the Brazilian nursing and its contribution is present in theses and dissertations defended in institutions of higher education distributed throughout the national territory [10].

As regards the relationship between the most cited articles in the Web of Science (Global Citation Score) and more those cited by the selected articles (Local Citation Score), among theselection set (1989-2015), we highlight the articles by Joffe H [11, 12, 13, 14, 15]. Among the 10 most cited in the Global Citation Score, the author has 4 records, being 3 of individual production and 1 constructed with the collaboration of 1 co-author. His article of 1996 is the most quoted in the relation between the 10 with the highest number of citations, however it is noted that the work only has this impact factor among the ten most cited articles by the occurrence of self-citation.

The same study published in 1996 [11] gains more relevance in the relation observed among the 10 most cited articles in the Local Citation Score. In this relation, the author's study, besides being among the 10 most cited, is one of the two most relevant in the list of citations among the 10 most cited articles, presenting itself as an authoritative article.

The study published in 1997 [16] is characterized as a transitional study, because it cites the article authority [11] and it is very quoted by studies carried out later [13, 15, 17]. The other studies are among

the 18 articles with the highest impact factor [18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29].

With regard to the 18 articles with the greatest impact identified in the study, whether from the origin of articles, periodicals or citations, the organization of such studies indicates that

HIV/AIDS has been well addressed as an object of relevant study of social representations and the participants of the investigations are from different groups, such as: young people in social vulnerability, people living with HIV/AIDS, heterosexual, homosexual, black, white, rich and poor people, as well as other social groups.

The problem of HIV/AIDS reaches all spheres of today's societies and calls our attention to the need for a multidisciplinary approach in different groups on the prevention aspects [30].

Likewise, the fact that Social Representation Theory is used to seek the representation of the phenomenon by different groups and to be a theoretical and methodological reference of different areas of knowledge, it indicates that social psychology seeks, through its research approach, to know the subjectivities created and transformed on HIV/AIDS to serve as a subsidy for the adoption of preventive practices from the perspective of the social being with the focus on actions.

In fact, the theory was a relevant instrument in the construction of subjectivities at the beginning of the HIV/AIDS problem, in the 1980s, collaborating with the production of knowledge on the subject. Currently, it is believed that the Social Representation Theory still constitutes a theoretical reference of extreme relevance to approach HIV/AIDS considering the current transition of the epidemiological profile and the dynamicity of the theory and of the representations themselves that are formed and transformed according to the volatility of the phenomena and social interactions [4].

As for the institutions with the largest number of publications, the London School of Economics and Political Science and University College London,

both from the UK, presented the highest number of publications, with eight articles each, integrating work of greater impact factor. It is noteworthy that the State University of Rio de Janeiro, a Brazilian institution, also stood out with the publication of seven articles related to the theme.

Conclusion

The study allowed to observe the evolution of publications over 26 years of construction of scientific knowledge about HIV/AIDS as an object of Social Representations, as well as contributed to the identification of the most productive authors, as well as institutions with greater collaboration for the theme.

There are 122 articles published in 74 different journals indexed in the Web of Science, from 1989 to 2015. These articles were written by 301 authors of 165 Institutions of Higher Education in 34 countries. The 18 articles with the greatest impact were published in the period from 1996 to 2011.

It is noticed that the Social Representation Theory is applied in investigations on HIV/AIDS in several institutions of higher education distributed throughout the world, with highlights for the United Kingdom, United States and Brazil, contributing with studies especially in the areas of psychology and healthcare.

The scientific evidence on this subject can contribute to the development of new research to fill gaps in knowledge about HIV/AIDS prevention and treatment and implementation of effective public policies around the world.

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