

ANALYSIS OF THE INTERNATIONAL SCIENTIFIC PUBLICATIONS ON STUTTERING

Análise da produção científica internacional sobre gagueira

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ABSTRACT

Purpose: to describe the international scientific literature on stuttering published between 2005 and 2010. **Method:** selection and analysis of *online*, peer reviewed publications. The organized data highlighted the following characteristics: 1) number of publications per period; 2) addressed themes; 3) epistemological affiliation of contributors; 4) methodological procedures, and 5) age group of the subjects studied. **Results:** 339 articles found in 76 journals were analyzed. The *Journal of Fluency Disorders* was the most frequent contributor (94;27.73%). Two themes stood out: *Characteristics of Stuttering*, with 150(44.25%) articles, and *Treatment of Stuttering*, with 106(31.27%) articles. The research method most used was *Survey* (157; 46.31%). The majority of research featured the *Positivist* (324;95.57%) paradigm. The most studied age group was *Adult* (174;45.31%). **Conclusion:** there is a discreet growth in studies about stuttering, mostly featuring the *positivistic* approach. A significant development within the *Positivistic* studies is the emergence of studies that frame qualitative data in a quantitative mode, supporting the view of stuttering as a multifactorial phenomenon. Many studies have further refined the identification of aspects present in stuttering by distinguishing factors viewed simply as characteristic of stuttering from those viewed as possibly causative. Altogether, these findings endorse stuttering as a complex subject which poses a challenge to scientists, calling for new epistemological approaches in order to unveil these newly identified distinctions. There is need for more research on stuttering for preventive health and wellness promotion, as well as studies using *Clinical Case Study* as method of investigation, and also studies focused on adolescents.

KEYWORDS: Stuttering; Speech, Language and Hearing Sciences; Scientific Publication Indicators

■ INTRODUCTION

In a preliminary study¹ of Brazilian scientific reports on the subject of stuttering published between 1980 and 2008, a significant growth in production of articles, books, and book chapters was observed that correlated with other areas of Speech Therapy. This trend increased in the 90's and it was also noticed that starting in 2000, there was a period

of exceptional growth in the production of publications concerning stuttering, a five-fold increase compared to the sum of the two prior decades; this kind of growth was not observed in other areas of Brazilian Speech Pathology.

Regarding the characteristics of this scientific publications, the authors showed that most of the reports referred to issues related to clinical care; that the studies were distributed between the speech-pathology areas of Language and Oral Motricity, and the majority of works were produced in three epistemological paradigms: positivist, phenomenological, and dialectical-historical. Based on this distribution, the authors discussed the complexity of stuttering.

In the international scenario, several authors, with backgrounds in speech pathology, medicine, and psychology, reviewed the scientific knowledge published on stuttering. In the 2000's there are a

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large number of studies focused on the validation of experiences and protocols. Many of these works point to the best ways to measure evidence scientifically²⁻⁹. Besides those, additional studies questioned the adequacy of a purely scientific approach, in spite of its prestige, due to the multi-factorial nature of stuttering¹⁰⁻¹⁵.

Studies of published scientific reports show that journals have become the main source of formal diffusion of Science and the very means through which knowledge is disseminated; hence, is essential for its growth^{16,17}.

The value given to the published journals, whether in databases or in paper sources, is based on the fact that they are legitimized by the process of peer evaluation that selects the work, validates the applied methodology and ensures the quality and significance of the information, which is submitted for review. This formalization process is oriented by the notion of improvement according to standardized quality criteria¹⁶⁻²⁰. Thus, an efficient communication structure is consolidated through the exchange of specialized knowledge on a large scale, accelerating the study of this literature²¹⁻²⁴.

Scientific production studies facilitate the management of the abundant flow of publications via analysis and sorting the points of convergence that articulate the produced knowledge, guided by principles of synthesis, organization and reference²⁵. Therefore, scientific production studies corresponding to different periods inform altogether how the network of knowledge on a subject developed up to its current configuration^{20,24,25}.

Regarding these points of convergence, of critical importance is the selection of themes to be grouped together within a specific segment of publication, which allows one to observe the specific path of the focus area, as well as the contrast between this path and that of related areas^{16,17}.

In such a context, the purpose of this study is to describe the characteristics of the international scientific production on stuttering, published in journals during the period between 2005 and 2010.

■ METHODS

This is a descriptive documentary study that examines articles on stuttering published in international journals available online, in the period from 2005 to 2010.

The adopted technique was the content analysis technique proposed by Bardin²⁶, which allows the analysis of content of all kinds of messages (articles, books, memoranda, speeches, etc.) and is organized in three stages: (1) *pre-analysis*, (2)

exploration of the material, (3) *treatment of results, inference and interpretation*.

In the *pre-analysis* of the available material phase, journals were surveyed in all the international speech pathology databases available on the internet and also those related to speech pathology, namely: Linguistics, Education, Medicine and Psychology. The researched databases were: ERIC (*Education Resources Information Center*), PubMed/MEDLINE, PsycINFO and Scirus.

The consultation was made by means of an advanced form. On the item "word", a search was made through the entries *stuttering*, *stammering*, *fluency disorders*, *disfluency* and *perseverations*. In the item "language", the search was made in English and in Spanish. Further, articles on speech fluency disorders were selected.

With regard to the procedures for the *exploration of the material*²⁶, indicators were set forth which guided the characterization of the documents. For that purpose, the analysis of the publications was organized starting from the distribution of their frequency, taking into consideration: the period of publication; the distribution frequency by period; the theme addressed; the methodological procedure; the epistemological approach to which they belong; the age group of the studied subjects.

In order to organize the production around the thematic axes and the prevailing epistemological approaches, the articles were fully read.

The definition of the thematic categories met the scope criteria so as to encompass the largest number of works in each of them^{1,16,17,23,27}.

The thematic categories defined after initial evaluation²⁶ were: *Attitude towards Stuttering*, *Assessment of Stuttering*, *Cause of Stuttering*, *Characteristics of Stuttering*, *Judgment of Stuttering*, *Spontaneous Recovery from Stuttering*, *Stuttering and Quality of Life*, and *Treatment of Stuttering*.

The classification by the epistemological approaches was based on the three paradigms defined in the field of Scientific Philosophy at the end of the 19th century, namely: Positivism, Phenomenology and Dialectical-Historical paradigms²⁸. The positivist approach in the health science is characterized by the emphasis on the test of hypotheses and the search of generalizations, from the perspective of the relationship between the organism and the speech symptoms. The phenomenological approach is characterized from the perspective in what the researcher may have learned from the observed object defined by his perception. The dialectical-historical approach is characterized by the emphasis on the relationship between the subject of the study, his subjectivity and his story.

Regarding the age range, based on the production characteristics, five groups were organized: *Child*; *Adolescent*; *Adult*; *Not-specified* and *Not-Applicable*. As children were considered subjects up to 10 years and 11 months old; adolescents, subjects between 11 and 18 years old and adults, subjects above 18 years old²⁹. The *Not-specified* category includes articles that do not mention the age of the subjects and the category *Not-Applicable* includes articles of the bibliographic review kind.

As regard to the methodological procedure, the articles were classified as: *Experiment*, which refers to studies that show the influence between variables; *Survey*, which refers to studies that describe events, aspects or characteristics chosen randomly or intentionally; *Bibliographic Documentary Study*, which addresses the research questions by means of a survey of the published scientific literature or documents of medical records or anamnesis; *Clinical Case Study*, which refers to thorough empirical investigation of unique cases or few cases²⁸.

For the treatment of the results, the data were organized in tables that show the frequencies of distribution of the listed variables (addressed thematic categories, epistemological affiliation of contributors, methodological procedures and age group). The data were statistically examined based on the chi-squared test (X^2), taking 5% as significance level.

■ RESULTS

From 2005 to 2010, 339 articles were found, distributed in 76 international scientific journals available online.

The distribution of the journals according to time, considering absolute numbers, showed a small growth of publications on stuttering between 2005 and 2010. The year 2010 produced the largest number of publications, 72 articles (21.22%) as compared to the other years. Most publications were found in *Journal of Fluency Disorders*, 94 articles (27.73%), which is specialized in stuttering, followed by *Journal of Speech, Language and Hearing Research*, 42 articles (12.39%), and in third place the *International Journal of Language and Communication Disorders*, 29 articles (8.55%). In order to make the statistical calculation significant, journals with less than 9 articles, published throughout the studied period, were excluded, since the recursive partitioning of the chi-squared test showed this to be a good criterion to maximize the selected journals (Figure 1). Yet the growth of the research on stuttering along the studied period did not show a statistical significance (p -value=0.21). When using the linear regression method for the data studied by the chi-squared test, it is observed that there was an average growth of 2.7 publications per year (Figure 2). A Linear Regression Analysis using all the journals shows an average growth of 4.8 publications per year.

The distribution of the thematic categories in the journals showed that the main thematic categories were *Characteristics of Stuttering*, with 150 articles (44.19%) and the *Treatment of Stuttering*, with 106 articles (31.25%), which are concentrated mainly in the above-mentioned journals. Given the number of null occurrences, only the five first journals were considered for the statistical calculation of the chi-squared test (Figure 3). The difference in the distribution of the categories shows a statistical significance (p -value = 0.0007).

JOURNALS	2005	2006	2007	2008	2009	2010	Total
JFD	14	17	13	16	14	20	94
JSLHR	3	4	2	11	11	11	42
IJLCD	3	8	2	3	7	6	29
JCD	1	3	8	5	4	4	25
AJSLP	4	4	2	4	2	-	16
CLP	1	2	2	1	3	2	11
FPL	3	1	2	-	2	1	9
PMS	4	-	1	1	1	-	7
SSL	-	-	-	-	-	7	7

JFD= Journal of Fluency Disorders; JSLHR= Journal of Speech, Language and Hearing Research; IJLCD= International Journal of Language & Communication Disorders; JCD= Journal of Communication Disorders; AJSLP= American Journal of Speech-Language Pathology; CLP = Clinical Linguistics and Phonetics; FPL= Folia Phoniatica et Logopaedica; PMS= Perceptual and Motor Skills; SSL= Seminars in Speech and Language.

Figure 1 – International scientific publications on stuttering by period (2005 – 2010): distribution of the main journals publishing.

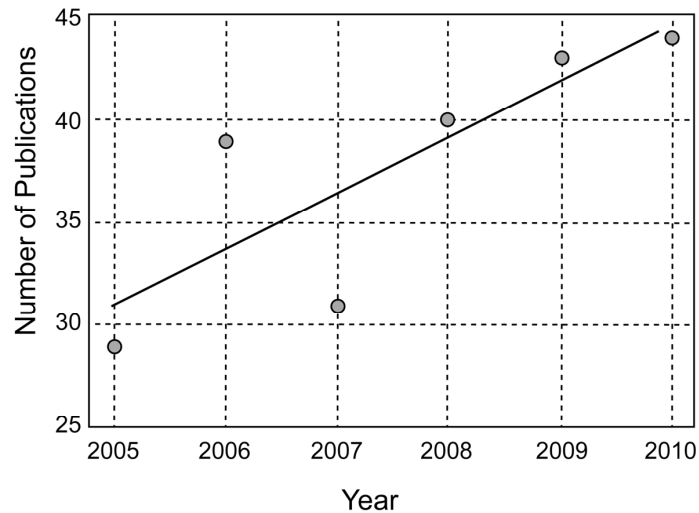


Figure 2 – Number of publications per year: linear regression of Table 1 data after chi-square analysis

JOURNALS (1)	THEMATIC CATEGORIES (2)								
	Charact.	Treat.	Attit.	Cause	Judg.	Q. L.	Assess	Rec.	Total
JFD	37	28	14	7	1	5	1	1	94
JSLHR	16	15	2	5	13	-	1	-	52
IJLCD	2	18	4	-	1	1	3	-	29
JCD	13	4	3	2	1	2	-	-	25
AJSLP	1	7	3	1	1	-	3	-	16
CLP	9	-	-	1	1	-	-	-	11
FPL	3	3	-	1	1	1	-	-	9
PMS	1	5	-	1	-	-	-	-	7
SSL	0	6	1	-	-	-	-	-	7

(1) JFD= Journal of Fluency Disorders; JSLHR= Journal of Speech, Language and Hearing Research; IJLCD= International Journal of Language & Communication Disorders; JCD= Journal of Communication Disorders; AJSLP= American Journal of Speech-Language Pathology; CLP = Clinical Linguistics and Phonetics; FPL= Folia Phoniatica et Logopaedica; PMS= Perceptual and Motor Skills; SSL= Seminars in Speech and Language.

(2) Assess. = Assessment of Stuttering; Attit. = Attitude toward Stuttering; Charact. = Characteristics of Stuttering; Cause = Cause of Stuttering; Judg. = Judgment of Stuttering; Q. L. = Stuttering and Quality of Life; Rec. = Spontaneous Recovery of Stuttering; Treat. = Treatment of Treatment.

Figure 3 – international scientific publications on stuttering (2005 – 2010): distribution of the main journals within thematic categories

By comparing the thematic categories with methodological procedures (Table 1), *Survey* is the most frequently used procedure in research, 157 articles (46.31%), followed by *Experiment*, 118 articles (34.8%). In view of the number of null occurrences, the statistical calculation considered only the four first categories and excluded the procedure *Clinical Case Study*. The difference in the distribution of methodological procedures has a statistical significance (p -value=0.0002).

Most publications were developed within the *Positivistic* paradigm, 324 articles (95.57%). This preponderance does not offer a base for the chi-squared test that, basically, compares proportions. Thus, the distribution of the thematic categories among the positivistic articles is shown by means of Figure 4.

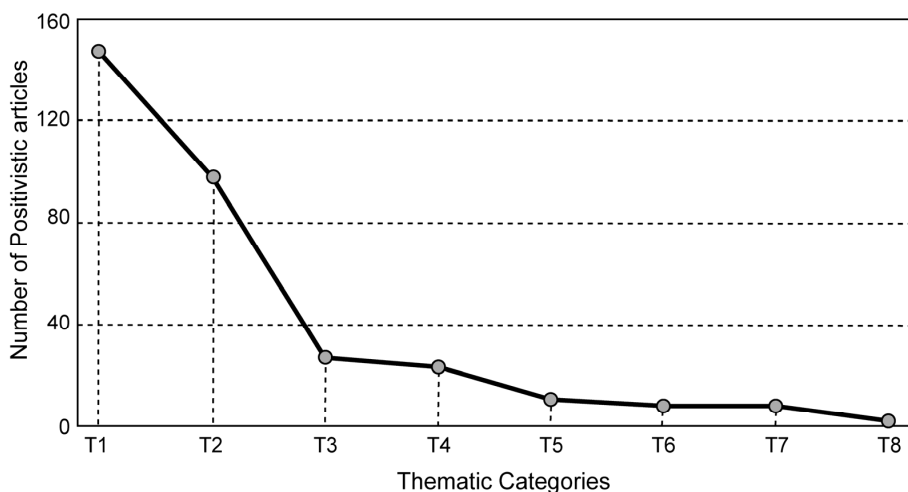
Table 1 – International scientific publications on stuttering (2005 – 2010): Distribution of thematic categories according to methodological procedures

THEMATIC CATEGORIES	METHODOLOGICAL PROCEDURES									
	Survey		Experiment		Bibliographic Documentary Study		Clinical Case Study		Total	
	N	%	N	%	N	%	N	%	N	%
Characteristics of Stuttering	78	23.01	47	13.86	20	5.90	5	1.47	150	44.25
Treatment of Stuttering	25	7.37	50	14.75	24	7.08	7	2.06	106	31.27
Attitude toward Stuttering	20	5.90	8	2.36	2	0.59	-	-	30	8.85
Cause of Stuttering	11	3.24	9	2.65	3	0.88	-	-	23	6.78
Judgment of Stuttering	8	2.36	3	0.88	-	-	-	-	11	3.24
Stuttering and Quality of Life	8	2.36	-	-	2	0.59	-	-	10	2.95
Assessment of Stuttering	6	1.77	1	0.29	-	-	1	0.29	8	2.36
Spontaneous Recovery of Stuttering	1	0.29	-	-	-	-	-	-	1	0.29
Total	157	46.31	118	34.80	51	15.04	13	3.83	339	99.99

$\chi^2 = 26.6$

degrees of freedom = 6

p-value = 0.0002 (< 0.05)



T1 = Characteristics of Stuttering; T2 = Treatment of Stuttering; T3 = Attitude toward Stuttering; T4 = Cause of Stuttering; T5 = Judgment of Stuttering; T6 = Stuttering and Quality of Life; T7 = Assessment of Stuttering; T8 = Spontaneous Recovery of Stuttering.

Figure 4 – Distribution of positivistic articles into thematic categories

By comparing the thematic categories with age groups (Table 2), the most researched group was *Adult*, 174 articles (45.31%), followed by *Child*, 120 articles (31.25%). Due to the same reasons explained above, the statistical calculation shows that there is no significance in this distribution (p -value=0.27). For a better visualization of this distribution Figure 5

was designed, which shows the preponderance of adults in the majority of the thematic categories and also that, in the categories *Judgment on Stuttering* and *Assessment of Stuttering*, in spite of the small number of studies, the preponderance was of children.

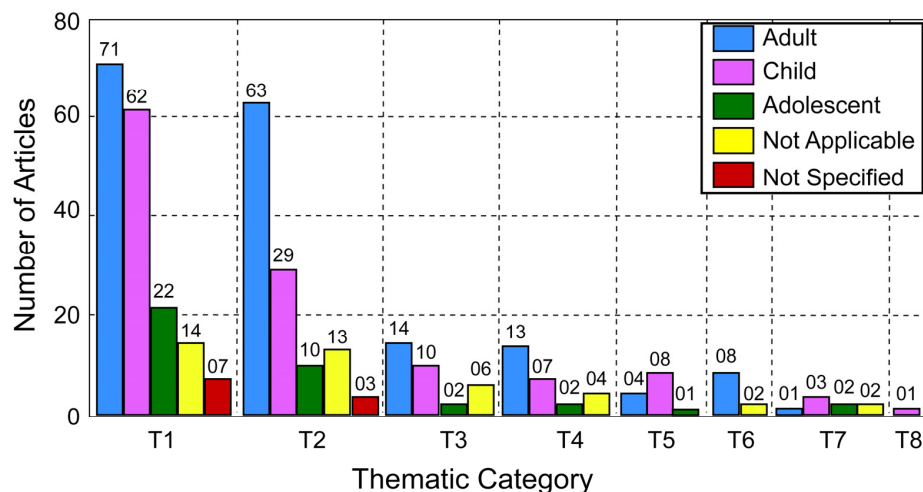
Table 2 – International scientific publication on stuttering (2005-2010): Distribution of thematic categories according to age groups

THEMATIC CATEGORIES	AGE GROUPS											
	Adult		Child		Not Applicable		Adolescent		Not-Specified		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Characteristics of Stuttering	71	18.49	62	16.15	14	3.65	22	5.73	7	1.82	176	45.83
Treatment of Stuttering	63	16.41	29	7.55	13	3.39	10	2.60	3	0.78	118	30.73
Attitude toward Stuttering	14	3.65	10	2.60	6	1.56	2	0.52	-	-	32	8.33
Cause of Stuttering	13	3.39	7	1.82	4	1.04	2	0.52	-	-	26	6.77
Judgment of Stuttering	4	1.04	8	2.08	-	-	1	0.26	-	-	13	3.39
Stuttering and Quality of Life	8	2.08	-	-	2	0.52	-	-	-	-	10	2.60
Assessment of Stuttering	1	0.26	3	0.78	2	0.52	2	0.52	-	-	8	2.08
Spontaneous Recovery of Stuttering	-	-	1	0.26	-	-	-	-	-	-	1	0.26
Total	174	45.31	120	31.25	41	10.67	39	10.15	10	2.60	384	100.00

$X^2 = 11.1$

degrees of freedom = 9

p-value = 0.27(> 0.05)



T1 = Characteristics of Stuttering; T2 = Treatment of Stuttering; T3 = Attitude toward Stuttering;
 T4 = Cause of Stuttering; T5 = Judgment of Stuttering; T6 = Stuttering and Quality of Life;
 T7 = Assessment of Stuttering; T8 = Spontaneous Recovery of Stuttering.

Figure 5 – Distribution of thematic categories by age groups

Figure 6 shows the increase of research on *Treatment of Stuttering* for children and adults over time. It shows that in 2006 the studies with adults were more than the double of that with children

and that in the following year, 2007, in an apparent compensation, the publications with children outnumbered those with adults.

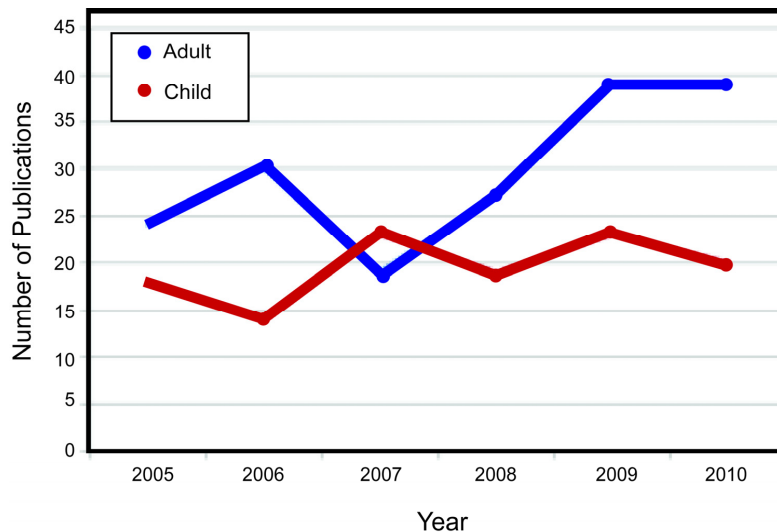


Figure 6 – Number of Publications (2005 – 2010) on treatment of stuttering: comparison between adult and child age groups

■ DISCUSSION

Our analysis of publications on stuttering revealed several emergent trends that characterize the growth in this field of speech pathology. Considering the international scientific literature, articles on stuttering were more frequently distributed in the journal specialized in speech fluency disorders, as expected, followed by journals dedicated to language disorders. Further interest for the subject was shown, dispersed mainly throughout medical journals, consistent with the understanding that stuttering is considered to be primarily an organic disorder from the etiological point of view.

We found there was a very discreet – yet effective – growth in international production of stuttering articles, of about 2 to 4 per year during in the six years here researched (2005 to 2010) (Figure 2). This differs from the results of a Brazilian article¹ that investigated the period from 1980 to 2008 and which showed that the greatest growth had happened in the 21st century.

Publications in the categories *Characteristics of Stuttering* and *Treatment of Stuttering* were the most frequent, and overall stressed the importance that a clinic, in order to be effective, needs homogeneity and co-variance among its four elements, namely: semiology, etiology, diagnostics and therapeutics³⁰. Thus, in a general sense, the majority of publications concerning the study of stuttering characteristics and its treatment emphasize the intent in building a consistent clinical perspective focused on the problems of speech fluency.

Characteristics of Stuttering stands out as to the most frequently researched category, represented in

150 articles, of which one third, 51 articles (34%) are focused on the neurological characteristics; then 40 articles (26.66%) which focused on linguistic characteristics; 20 articles (13.33%) relating to speech; 14 articles (9.33%) with a psychological or 10 articles (6.66%) with a genetic focus, with the remaining 16 articles (10.66%) spread among the other types of characteristics. Our findings differ greatly from the previous Brazilian study, in which the category *Characteristics of Stuttering*, as a whole, was the least frequent, with only 6 publications among the 131 surveyed.

Treatment of Stuttering was the second most frequent category, present in 106 articles. The largest group of these studies with 40 articles (37.73%) referred to the behavioral approach, basically describing strategies for fluency modeling. Most of these strategies concerned training for the control of stuttering intensity and frequency. Examples of these training proposals were the following: the *Lidcombe Program*, the *Camperdown Program*, *Coordinated Interpersonal Timing, Demand and Capacities Model*, and *Comprehensive Approach*. In second place, the studies referred to the use of *technological resources*, 25 articles (23.58%). These resources discussed the effectiveness of using support devices to increase speech fluency, with special emphasis on auditory feedback prosthetic devices: *Altered Auditory Feedback (AAF)*; *Delayed Auditory Feedback (DAF)*; *Frequency Altered Feedback (FAF)*, and *Masking Auditory Feedback (MAF)*. In the Brazilian study the category *Treatment of Stuttering*, referred to by the authors¹ as *Speech Pathology Clinic*, was the most frequent, found in 69 articles (57.5%) of the 131 publications surveyed,

although the types of treatment were not detailed by the authors. Within the category *Treatment of Stuttering*, 21 articles (19.89%) focused on the importance of measuring the efficacy of the treatments. This portrays a very current trend: to base the treatment on the results of evidence after data analysis. The Brazilian study did not refer to any articles of this nature.

Remarkably, in two of the main categories, *Characteristics of Stuttering*, 150 articles (44.25%) and *Cause of Stuttering*, 23 articles (6.78%), the understanding of stuttering was based on its linguistic, neurological, psychological, and genetic aspects. Such aspects were assumed either a cause, or a characteristic of the stuttering, with the latter prevailing. This assumption seems consistent with the lack of definition observed in the scientific literature concerning the exact origin of stuttering. In considering the purpose of different types of scientific research – descriptive, exploratory, and explanatory, the last two are the most compromising for the researcher, because they permit disagreements and controversies. In contrast, with descriptive research, as the name itself denotes, the study is limited to simply describe the object of the investigation without conjecture²⁹. Hence, the interpretation still remains a choice of the researcher. The majority of researchers chose to interpret the above aspects as characteristics of stuttering, and a minority explicitly took them as being its cause.

When the different thematic categories are evaluated for trends corresponding to the age of affected individuals, there is preponderance of studies on the *Characteristics of Stuttering* (150) in adults, 71 articles (47.33%). Although there are more studies with adults than with children, 62 articles (41.33%), both age groups were largely explored, showing great interest of researchers on them. It is possible that the prevalence of studies with adults stems from the fact that in this age group there are more options for controlling the variables.

When the *Treatment of Stuttering* category is evaluated across different age groups, the authors frequently question, in cases of research with children, whether good results were due to the treatment or to a spontaneous recovery. This makes it difficult to determine accurately the effectiveness of the treatment. With the adults, the conclusions were more often correlated with the efficacy of treatment, consistent with the greater number of adult studies.

The number of articles about adults revealed a tendency to consistently increase after 2007 (Figure 6), while those with children were generally half as frequent, more variable and did not show a steady increase. This is consistent with the fact that

it is easier to control variables in the research with adults.

Among the methodologies used, *Survey* and *Experiment* stand out as the most frequent. These studies are generally made with large or sample populations and, therefore, the results permit a greater degree of generalization. Significantly less frequent, the *Clinical Case Study* is performed with few subjects and leads to uniqueness. This suggests that the researchers have been more concerned about producing knowledge that may be generalized towards the purpose of reaching a consensus about the origin and the nature of stuttering that would guide and facilitate the research progress for an efficient treatment.

The prevalence of the *Positivist* epistemological paradigm, 320 articles (94.37%) shows that stuttering has been preferably studied from the organic and quantitative point of view. Such prevalence aligns the analyzed publications on stuttering within the worldwide hegemonic approach in health science, as the researcher updated with the scientific publications in this field can easily verify. As it can be understood, this is the consequence of the preponderance of the positivistic point of view either in the academic training of the researchers, either in the profile of articles preferably accepted for publication by the editorial boards, both at domestic and international levels.

As an illustration of the impact of this, the publications of 2010 (72 articles) display a prominent number of studies (28) pointing out the importance of conceiving stuttering in a holistic or multifactorial perspective, by considering its relation with issues of psychological, cultural, and social nature. However, this required the development of instruments to examine the qualitative data in a quantitative manner, that is, based on the positivistic pattern. These research efforts focused on aspects such as: the satisfaction of the client; the importance of the client's perception of the healing; the basis of the stuturer's identity; and the importance of the therapeutic alliance to obtain the best evidence of results. It was also noted that the studies that quantify quality measures had increased. It is valid to ask if the quantification of qualitative data will allow a more formal understanding of the holistic aspects of stuttering. Clearly, the observed increases in knowledge about the nature of stuttering emphasize the need for changes in the paradigms regarding its treatment.

In this sense, the low frequency of articles in the *Phenomenological* and *Dialectical-Historical* paradigms suggests there are few researchers educated in scientific paradigms other than positivistic training. It is possible that revitalization of these

non-hegemonic perspectives in future studies may shed light on unsolved aspects on the origin, nature and treatment efficacy of stuttering.

■ CONCLUSION

In absolute numbers, the survey and the characterization of the international scientific production on stuttering, between the years 2005 and 2010, has shown a discreet growth. From the epistemological point of view, this increase is prevalently within the scientific positivistic paradigm.

Our analysis revealed several themes in the stuttering literature. The *Positivistic* approach produces scientific studies that attempt to quantify qualitative data in order to frame stuttering as a multifactorial phenomenon. Linguistic, neurological, psychological, and genetic aspects of stuttering are sometimes interpreted as characteristics and other times as causes. Finally, exponents of the *Phenomenological* and *Dialectical-Historical* paradigms persist in the literature. Collectively,

these themes point to: 1. the complexity of stuttering; 2. the challenge that understanding stuttering has represented to researchers; and 3. the need to seek new epistemological paths to decipher it.

Furthermore, as noted in a prior Brazilian analysis, there is a deficit of studies on preventive medicine, publications featuring clinic case studies, and also studies focused on adolescents.

We hope that these aspects may guide the decisions about future research concerning stuttering.

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RESUMO

Objetivo: descrever as características da produção científica internacional sobre gagueira publicada em periódicos no período entre 2005 e 2010. **Métodos:** pesquisa documental em que se analisaram artigos *online*, considerando-se: 1) distribuição da frequência por período; 2) temática; 3) vertente epistemológica; 4) procedimento metodológico; 5) faixa etária. **Resultados:** foram analisados 339 artigos, distribuídos em 76 revistas, estando a maioria no *Journal of Fluency Disorders* (94;27,73%). As temáticas mais frequentes foram: *Características da Gagueira* (150;44,25%) e *Tratamento da Gagueira* (106;31,27%). O método de pesquisa mais utilizado foi *Levantamento* (157;46,31%). A maioria das pesquisas pertenceu à vertente *Positivista* (324;95,57%). A faixa etária mais estudada foi *Adultos* (174;45,31%). **Conclusão:** a produção internacional sobre gagueira apresenta crescimento discreto. Prepondera o paradigma *Positivista*. Dois fatos chamam atenção nos estudos positivistas: a emergência de pesquisas que quantificam aspectos qualitativos para olhar a gagueira como fenômeno multifatorial; os mesmos aspectos sendo tratados ora como característica, ora como causa da gagueira. Conjuntamente, esses fatos apontam para a complexidade do tema e para o desafio que a compreensão da gagueira tem representado aos pesquisadores, o que pode indicar a necessidade de se buscar novos caminhos epistemológicos para decifrá-la. Faltam pesquisas sobre prevenção e promoção de saúde; delineamentos de *Estudo de Caso Clínico*, e estudos sobre adolescentes.

DESCRIPTORIOS: Gagueira; Fonoaudiologia; Indicadores de Produção Científica

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