Behavioral Intervention as Strategy for Treating Psychological Disorders in Children and Adolescents

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Abstract

This descriptive research was carried out on the documentation registered in Scopus database on the variable Behavioral Intervention in Children and Adolescents focused on the strategy designed for treating psychological disorders in this population, with the purpose of knowing the impact of knowledge generated through scientific publications during the decade between 2010 and 2020 by Ibero-American authors and institutions. The scientific production was analyzed from a quantitative approach with a bibliometric perspective as well as the main characteristics of the volume of published research papers, which were identified through different search parameters resulting in a total of 331 documents that were subjected to a qualitative study to define different positions of authors regarding behavioral intervention in child and adolescent patients as a strategy in the treatment of psychological disorders, and the main features of the scientific production regarding the above mentioned topic were analyzed from a qualitative approach.

Key words: Behavioral intervention, psychological treatment, children and adolescent phycology.

1. Introduction

There are many causes of psychological disorders in children and adolescents around the world, factors such as economic crises, domestic violence. insecurity, verbal, physical psychological abuse, among others, are the cause of many imbalances in the mentality of people, especially when their cognitive formation is still in early stages. In the case of Latin America and Ibero-America in general, violence within the family and school environments has been a determining factor that affects the mental health in the child and adolescent population (Perez, Fernandez, Rodriguez, & De la Barra, 2005). It is estimated that at least 35% of people under 15 years of age have suffered from this scourge, which can represent high levels of aggressiveness in their social and school life (Aarón, 2001).

In order to improve the quality of life of young population, there are psychodynamic, biomedical psychoeducational interventions models designed according to the patient's diagnosis (Mulas, Ros-Cervera, Millá, Etchepareborda, & Abad, 2010). In this classification of models, there behavioral interventions based on teaching patients new behaviors and skills through specialized and structured techniques such as Applied Behavior

Analysis (ABA), which seeks to remove undesired behaviors through the extinction of positive consequences to bad behaviors and to promote good behavior through positive reinforcement (Sos-Peña & Tortosa, 1992) based on principles of operant conditioning and functional behavior analysis.

This research is based on a quantitative analysis of the scientific production related to these intervention models applied to the child adolescent population, published in high impact journals indexed in the Scopus database, and classified according to their year of publication, taking into account that the data analyzed are within the time frame defined by the decade between 2010 and 2020, as well as their country of origin, specific area of knowledge, participating authors and type of publication. Likewise, a qualitative approach to the research is achieved by analyzing the literature through the perception of different authors. The aim of this study is to answer the question "How has the bibliographic production on the variable Behavioral Intervention in Children and Adolescents been during the period 2010-2020 in Ibero-American countries?

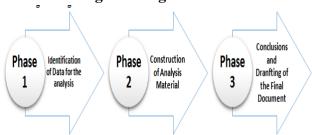
2. General Objective

To analyze from a bibliometric and bibliographic perspective, the production of high impact research papers on the variable Behavioral Intervention in Children and Adolescents during the period 2010-2020 in Ibero-American countries.

Methodology

A search for information was carried out through the Scopus tool, which yielded a total of 331 research papers published in high impact journals, which will be subjected to a quantitative analysis considering the parameters explained in the methodological design, as well as a qualitative analysis to determine the authors' position on behavioral intervention in children and adolescents with psychological disorders.

3.1 Methodological design



3.1.1 Phase 1

Phase 1 identifies the research papers that will be subjected to the analysis proposed in the methodology, using the *Search* tool available on the Scopus platform web page, where the information is searched for using different selection parameters such as:

- ✓ Published papers whose study variables are related to the analysis of Behavioral Intervention in Children and Adolescents.
- ✓ Research papers published during the period 2010-2020.
- ✓ Publications by authors and institutions of Latin American origin.
- ✓ Without distinction of type of publication.

✓ Without distinction of area of knowledge.

Once the above search parameters were applied, a total of 331 research papers were obtained that meet the characteristics required by this phase and that can be analyzed by means of the methodology explained in Phase 2.

3.1.2 Phase 2

Under the fulfillment of phase 2, the classification of the data is carried out through the elaboration of graphs, tables and figures to facilitate their interpretation. The information will be classified according to the following aspects:

- ✓ Year of publication
- ✓ Country of origin of publication
- ✓ Participating Authors
- ✓ Knowledge area
- ✓ Type of publication

Once the information is organized according to the related order, the researchers proceeded with its subsequent interpretation, giving the study a qualitative approach, exemplifying different case studies with the purpose of establishing the relevant characteristics in some investigations and the position of their respective authors regarding the subject under study.

It should be noted that the tools used for the elaboration of the study material were Excel and VOSviewer, which were elaborated from data provided by Scopus through its *Analyze search results* tool.

3.1.3 Phase 3

Once the information was identified, organized and interpreted through the completion of phases 1 and 2, the

conclusions are drawn and the final document is drafted.

4. Results

4.1 Bibliometric analysis

the first instance, in order to contextualize the present research, it is necessary to know the relationship that exists between the different keywords in the bibliography identified through phase 1 of the methodological design. Figure 1 indicates the co-occurrence of words within the samples, which may give an idea of the different thematic order related to the analysis of the different research related to behavioral intervention in adolescents children and with psychological disorders. There evidence of a strong relationship with studies based on the study of the human profile, abuse, eating disorders, emotional difficulties. behavioral disorders topics related to psychological imbalances according to the authors identified. An example of the above is the paper entitled "Emotional and behavioral difficulties and prosocial behavior in adolescents: an analysis of latent profiles" Ortuno-Sierra. (Fonseca-Pedrero, & Perez-Albeniz, 2020)., which, through the analysis of latent profiles adolescents with emotional difficulties, manages to create homogeneous subgroups of this population with the purpose of relating their behaviors with similar diagnoses in terms of their mental health. The relationship of these profiles with the degree of adjustment to social and school life was also analyzed. An exploratory study was carried out with the application of a survey-type tool applied students identified in the to

aforementioned subgroups, resulting in 7.7% of the adolescents obtaining risk scores for mental health problems, which were grouped into 3 groups called low risk, externalization and internalization. This designation allows for the design of plans and programs for the care of this population that will allow for more effective treatment. since the identified characteristics are more specific, as well as their diagnosis.

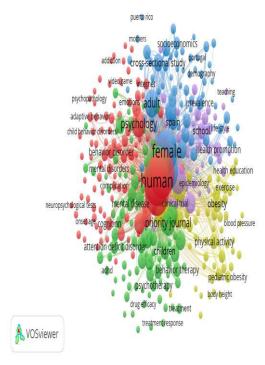
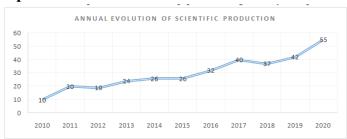


Figure 1. Co-occurrence of words. **Source:** Own elaboration (2021); based on data provided by Scopus.

Behavioral therapies, mental imbalance, prevalence, psychotherapy, neuropsychology tests, among others, are also topics addressed in the study of theories related to behavioral intervention.

4.1.1 Distribution of the production of research papers according to their year of publication.



Graph 2. Annual evolution of scientific production.

Source: Own elaboration (2021), based on data provided by Scopus

The decade between the years 2010 and 2020, shows through graph 2, that the production of research papers on the topic under study has had a significant growth since 2010 when a total of 10 documents were registered and 2020 when it reached the highest peak with 55 units. among which the paper "Psychological interventions for people with hemophilia" stands out (Palareti, Melotti, Cassis, Nevitt, & Iorio, 2020) aiming at studying the mental conditions in hemophilia patients, as well as strategies for intervention in early stages of their mental health, thus improving their self-perception and self-esteem, affected by this diagnosis. Demonstrating that interventions at the hands professionals, undoubtedly improve the balance of patients mental with psychological affectations, and that the success of such intervention lies in the identification of the problem, detecting the source of that which harms the emotional stability of people and that there are multiple causes. In the case of the paper mentioned above, the diagnosis of a hitherto incurable pathology.

44 research papers were published in 2017, being this year the second of the

with the highest scientific decade production. highlighting the paper "Regulation of attachment and emotions in substance addictions and behavioral addictions" (Estevez, Jauregui, Sanchez-Marcos, Lopez-Gonzalez, & Griffiths, 2017). , which also proposes behavioral intervention and its different strategies for the treatment of addictions not only of substances (alcohol and drugs) but also of harmful behaviors, such as risk behaviors (addiction to video games, gambling, among others). As a result, importance of an accurate and timely management of the diagnoses is recorded after analyzing the results of the tool applied to the students under analysis, and also highlights the importance of the findings in this type of research and its contribution to the management of different pathologies through which preventive interventions can be proposed.

4.1.2 Distribution of scientific production by country of origin

Figure 2 shows the correlation between authors from different countries in the production of research papers on behavioral intervention in children and adolescents with psychological disorders, and helps to understand the interaction between institutions ofdifferent nationalities in the creation of new knowledge on the topic mentioned above, which implies an important contribution to the treatment of patients with different diagnoses in terms of their mental health.

Spain and Portugal show a higher frequency of publications within the Ibero-American community, as well as Brazil, in terms of joint works on the

above-mentioned topic, as shown in the "Effectiveness of scene-based psychodramatic family therapy (SB-PFT) in adolescents with behavioral problems", which shows this type of multifamily intervention as an excellent alternative in treatment of adolescents the behavioral problems, and which always aims to promote the wellbeing of patients (Maya, Hidalgo, Jimenez, & Lorence, 2020). , which shows this type of multifamily intervention as an excellent alternative in the treatment of adolescents with behavioral problems, and which always aims to promote the welfare of patients. The aim of the paper is to analyze the impact that SB-PFT has on emotional intelligence, attachment to family and peers, as well as on antisocial behavior in a total of 216 young people. This study demonstrates that SB-PFT is a potentially effective intervention youth with behavioral problems and prioritizes the importance of maintaining healthy emotional intelligence.

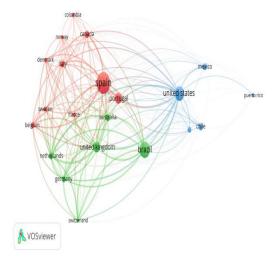


Figure 2. Countries participating in the bibliographic production.

Source: Own elaboration (2021), based on data provided by Scopus.

Table 1 shows the volume of production for each participating country, limited, as stated in the methodological design, only to countries belonging to the Ibero-American community.

COUNTRY	DOCUMENTS	COUNTRY	DOCUMENTS
Spain	156	Bolivia	3
Brazil	89	Dominican Republic	3
Portugal	41	Peru	2
Chile	18	Uruguay	2
Mexico	18	Aruba	1
Argentina	13	Costa Rica	1
Colombia	8	Ecuador	1
Puerto Rico	6	Paraguay	1

Table 1. Distribution of scientific production by country of origin.

Source: Own elaboration (2021), based on data provided by Scopus.

Spain. with 156 registered documents, is the Ibero-American country with the highest production of research papers in the area of study, followed by Brazil and Portugal with 89 and 41 publications, respectively. Argentina occupies the sixth place with 13 records, among which the paper "Strategies of planned physical activity in autism: Systematic review" was analyzed, which aims to identify the strategies used in intervention for autism (Fessia, Manni, Contini, & Astorino, 2018) with the purpose of identifying the strategies used in intervention through physical activity that have been scientifically documented, as well as the results in the application of these strategies. The analysis performed on papers published between 2006 and 2016, and had as object of study the behavioral intervention treatment on patients with autism. The research had to include some type of physical activity

within the strategies used in the treatment of this diagnosis, resulting in the identification of six different intervention strategies for autistic children through physical activity, concluding that these strategies achieve positive results in the population studied in terms of their mental health and well-being and play an important role in the prevention of misbehaviors.

4.1.3 Distribution of scientific production by participating authors

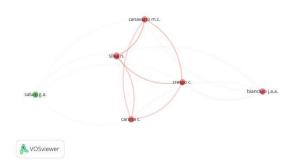


Figure 3. Author co-citations in scientific production.

Source: Own elaboration (2021), based on data provided by Scopus.

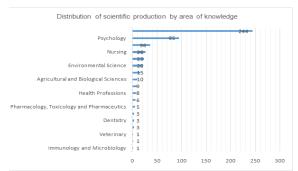
Figure 3 shows the co-citations between the authors involved conducting research related to behavioral intervention in the treatment psychological disorders in children and adolescents, where a core group is evidenced, made up of the authors Silva, N; Canavarro, M.C; Crespo, C and Carona, C., who registered works related to each other, as in the case of the first two authors cited above who published the entitled paper children/adolescents aged 8 to 18 years with chronic physical health conditions have a worse health-related quality of life

than their healthy peers? a meta-analysis of studies using the KIDSCREEN questionnaires" (Silva, et al., 2019) aiming at identifying significant deficits between the quality of life of patients diagnosed with physical or emotional healthy children deficits and adolescents. Concluding that indeed a physical or mental disorder has a direct impact on the quality of life of this population, suggesting that behavioral intervention both in the process of disease accompanying the and preventively, achieves in patients a higher perception of quality of life than those who do not receive any treatment, increasing levels of self-esteem and selfconfidence that allow them to incorporate more easily into social life.

The author Salum, G.A. is part of this group of authors with the highest volume of publications in the area of study of the present work with 4 documents in total where he cites, on several occasions, authors mentioned in the previously mentioned nucleus through papers such as "Dysfunctional family environments and child psychopathology: the role of psychiatric comorbidity", which had the objective of making a comparison in the family environment of four groups of children: children with typical development; children with anxiety disorders only; children with externalizing disorders only; and children with anxiety and externalizing disorders, achieving this with a total of 4 documents (Flores, Salum, & Manfro, 2014)., to emphasize the high relationship between the diagnoses related above, with family environments framed in both physical and

psychological violence, thus suggesting that children with these characteristics are candidates prioritized in family intervention for the solution of this type of conflicts and thus ensure a successful accompaniment and treatment within their process.

4.1.4 Distribution of scientific production by area of knowledge.



Graph 3. Distribution of scientific production by area of knowledge. Source: Own elaboration (2021); based on data provided by Scopus.

Medicine is the area of knowledge with the highest number of contributions in the production of research papers in the area of behavioral intervention in patients with psychological disorders, showing a difference wide margin of Psychology, which is in second place. In total, Medicine has 244 published papers and Psychology 95. It should be noted that the difference between the total number of papers identified in Phase 1 of the methodological design and the total number of records shown in Graph 3 is due to the fact that a published document can add up to the production of two or more areas of knowledge, given the interdisciplinary nature of the subject treated. Social Sciences and Nursing occupy third and fourth place with 36 and 26 records, respectively, of which the

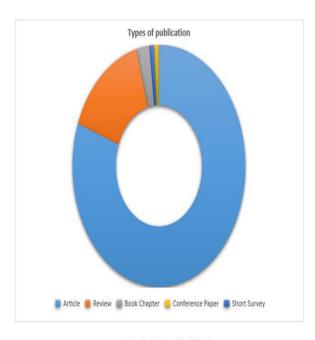
paper "Intervention in social skills and bullying" stands out (Silva, et al., 2018) whose objective is to analyze the impact that the improvement of social and emotional skills has on the reduction of victimization in an environment framed by bullying in sixth grade students. A cognitive-behavioral intervention based on social skills was carried out with the intervention group, concluding that the social skills developed or potentiated through cognitive-behavioral intervention, generates an anti-bullying effect as it strengthens tools for the interaction of students who have manifested to be victims of bullying by their peers, in the achievement of selfconfidence which motivates this population to participate more actively in social activities. bringing as a consequence the improvement in the quality of life of children and adolescents.

Following Nursing, Neurosciences occupies the fifth place with publications, among which the "Effect of exercise training in water versus on land as a component of a multidisciplinary intervention program for overweight and adolescents" obese stands out. understanding that obesity and overweight are diagnoses that can become determinants in a psychological disorder that prevents good social performance (Lopera, et al., 2016) understanding obesity and overweight as diagnoses that determinants become in can psychological disorder that prevents a good social performance.

This paper aims to compare the results in terms of behavioral intervention with physical activity through aquatic and

terrestrial exercises to measure the degree of efficiency that each of them represents. They find that both activities help significantly to improve the physical conditions of patients but their most important finding lies in the increase of self-esteem as a determinant in a good incorporation into social environments, so they suggest a plan of accompaniment during the intervention and that this is multidisciplinary to prepare young people not only physically but psychologically.

4.1.5 Types of publication



Graph 4. Type of publication.

Source: Own elaboration (2021); based on data provided by Scopus.

Table 2. Distribution of scientific production by type of publication.

TYPE	DOCUMENTS	%
Article	267	80.7%
Review	50	15.1%
Book Chapter	8	2.4%
Conference Paper	3	0.9%
Short Survey	3	0.9%

Source: Own elaboration (2021), based on data provided by Scopus.

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Researchers worldwide, regardless of the area of knowledge of their specialization, have different alternatives for their publications. In the scientific production identified through phase 1 of the methodological design, 80.7% of the publications were journal papers, while 15.1% were documentary reviews. Of the 331 documents identified, 8 were book chapters, i.e., 2.4% of the total, among which the one entitled "Antisocial behavior in schools: primary characteristics and intervention strategies" stands out, which aims to contextualize the context of antisocial behavior in schools: primary characteristics and intervention strategies (Estevez & Cava, 2017) which aims to contextualize the reader with respect to the predominant characteristics of children and adolescents who suffer from some type psychological disorder derived from inappropriate practices such as bullying, as well as examples of what is considered bad behavior in society, including bullying physical and verbal and aggression. The contribution that this book chapter makes, is precisely the identification of the source that may be

the cause of inappropriate behavior for its subsequent treatment suggesting in the same way the behavioral intervention not only in aggressors but also in victims of this scourge so common in the school environment.

Conclusions

Within the Ibero-American community, Spain leads the bibliographic production of documents referring to the study of behavioral intervention in children and adolescents suffering from some type of psychological disorder, followed by Brazil and Portugal, which allows inferring that the studies carried out in the vulnerable population of these countries are mostly accompanied by government policies in states with a better quality of life according to economic data, since investment in mental health is greater than in countries whose economies are still emerging.

The level of publications on the topic mentioned above has been in remarkable growth in the last decade from 2010 to 2020 being precisely the latter year in which the largest number of bibliographic records were made in the Scopus database, so it is concluded that increasingly this type of population is being studied thanks to the defense of fundamental rights and the search for equality in social conditions in different sectors such as health, education, culture and others. In this way, the aim is to reduce the high rates of discrimination and turn the scientific gaze to the search for strategies that allow the improvement of the quality of life of patients suffering from psychological disorders. Precisely most of the authors cited in this research,

agree on the importance of behavioral intervention through different strategies, whether multidisciplinary, family, cognitive, physical, among others, to ensure the proper performance of patients with a psychological disorder in society, and that their inclusion is not only by government policies but precisely by a correct training of society in general for the sake of a balance in terms of the living conditions of all actors in it.

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