# ASSESSMENT OF PSYCHOLOGICAL CAPITAL AND STRESS: IN UNIVERSITY STUDENTS

¹CECILIA ALEXANDRA PORTALANZA CHAVARRÍA ²GOMEZ RODRÍGUEZ VICTOR GUSTAVO, ³TOLOZANO BENITES SEGUNDA ELENA, ⁴DELGADO ALVAREZ NOEMI BARBARA, ⁵FERNANDO CEDEÑO-ALEJANDRO, ⁴ANDREA DOLORES ORDOÑEZ BALLADARES, プLUIS ALBERTO CHAUCA BAJAÑA

<sup>1</sup>Doctora en Ciencias de la Administración, Docente e Investigadora de la Universidad Espíritu Santo - Ecuador. aportalanza@uees.edu.ec

http://orcid.org/0000-0002-9782-5089

<sup>2</sup>Doctoren Ciencias Técnicas, Profesor Tiempo Completo, Universidad Bolivariana del Ecuador vgomez@ube.edu.ec

https://orcid.org/0000-0002-2248-7804

<sup>3</sup>Doctora en Ciencias Pedagógicas, Profesora Tiempo Completo, Universidad Bolivariana del Ecuador etolozano@ube.edu.ec

https://orcid.org/0000-0002-0186-3807

<sup>4</sup>Master en Ingeniería Industrial Mención Calidad, Profesora Tiempo Completo

Universidad Bolivariana del Ecuador

https://orcid.org/0000-0003-2693-7785

<sup>5</sup>Estudiante Doctorado en Educación, Universidad de la Habana. Docente e Investigador de la Universidad de Guayaquil - Ecuador.

fernando.cedenoa@ug.edu.ec

https://orcid.org/0000-0002-8973-9834

<sup>6</sup>Magister en Gestión Educativa. Especialista en Rehabilitaciónoral, Docente en Universidad de Guayaquil,

Universidad Bolivariana del Ecuador.

Andrea.ordonezb@ug.edu.ec

adordonezb@ube.edu.ec

https://orcid.org/0000-0002-6559-4597

<sup>7</sup>Periodontics and Implantology Oral Research. College Dentistry. Universidad de Guayaquil

luis chauk@hotmail.com

luis.chaucab@ug.edu.ec

https://orcid.org/0000-0002-8713-951X.

Abstract: A documentary review was carried out on the production and publication of research papers related to the study of the variables Psychological Capital and Stress at the Latin American level in university students. The purpose of the bibliometric analysis proposed in this document was to know the main characteristics of the volume of publications registered in the Scopus database during the period 2018-2022, achieving the identification of 37 publications. The information provided by this platform was organized through graphs and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics have been described, the position of different authors towards the proposed theme is referenced through a qualitative analysis. Among the main findings made through this research, it is found that Spain, with 14 publications, was the country with the highest scientific production registered in the name of authors affiliated with institutions in that country. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of Psychological Capital and Stress was Psychology with 17 published documents, and the Type of Publication most used during the period indicated above was the Journal Article with 34 documents of the total scientific production.

**Keywords:** psychological capital, stress, performance.

#### 1. INTRODUCTION

Due to its characteristics and its great intelligence, the human being is undoubtedly the species most studied by various areas of knowledge that seek to approach the causes that define its performance

in each of the situations that it faces daily, among which is Psychology, one of the most specialized sciences, which according to Dr. Porfidio Tintaya can be defined as follows:

Psychology is a science that studies the subjective life of the human being who lives in a socially structured and historically specific community, characterized by its social asymmetries and its general orientation to depersonalize the human being. It studies the way in which the human being, mobilized by his subjectivity, resists being subjected and desubjectivated by the social system, undermining the structures and mechanisms of discipline and, at the same time, creating spaces of freedom to build his personality, his identity and sense of life, his dignified participation in the life of the community. (Tintaya Condori, 2019)

From the construction of this personality derive some other aspects such as Psychological Capital, a term that has gained importance within Positive Psychology because it is based entirely on the conception that an individual may have about a specific situation which allows him to determine how he will face it taking into account the four dimensions raised by Luthans "effectiveness, optimism, hope and resilience." Here it is essential to bear in mind that not all situations will produce the same emotions in a person so it is possible to experience different feelings and attitudes towards them generating states that can negatively influence the achievement of objectives and / or performance in a certain function. (Laudadío & Mesurado, 2019)

It is there when we can mention Stress, defined according to the World Health Organization "as a state of worry or mental tension generated by a difficult situation. All people have a certain degree of stress, since it is a natural response to threats and other stimuli "that can affect the Psychological Capital of a person, (World Health Organization (WHO), 2023) for this reason and in order to fulfill our general objective that in this research article seeks to describe the main characteristics of the set of publications attached to the Scopus database and that are directly related with our variables, as well as the description of the position of certain authors affiliated with various institutions during the period between 2018 and 2022.

#### 2. GENERAL OBJECTIVE

Analyze from a bibliometric and bibliographic perspective, the elaboration of works on the variables Valuation of Psychological Capital and Stress, at the Latin American level, during the period 2018-2022.

#### 3. METHODOLOGY

This article is carried out through a mixed orientation research that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of Psychological Capital and Stress.

On the other hand, examples of some research works published in the area of study indicated above are analyzed from a qualitative perspective, starting from a bibliographic approach that allows describing the position of different authors against the proposed topic.

It is important to note that the entire search was performed through Scopus, managing to establish the parameters referenced in *Figure 1*.

#### 3.1 Methodological design



Figure 1. Methodological design Source: Authors.

#### 3.1.1 Phase 1: Data collection

Data collection was executed from the Search tool on the Scopus website, where 37 publications were obtained from the choice of the following filters:

assessment AND of AND psychological AND capital AND stress AND (LIMIT-TO (AFFILCOUNTRY, "Brazil") OR LIMIT-TO (AFFILCOUNTRY, "Chile") OR LIMIT-TO (AFFILCOUNTRY, "Mexico") OR LIMIT-TO (AFFILCOUNTRY, "Colombia") OR LIMIT-TO (AFFILCOUNTRY, "Peru") OR LIMIT-TO (AFFILCOUNTRY, "Argentina") OR LIMIT-TO (AFFILCOUNTRY, "Ecuador") OR LIMIT-TO (AFFILCOUNTRY, "Uruguay") OR LIMIT-TO (AFFILCOUNTRY, "Venezuela") OR LIMIT-TO (AFFILCOUNTRY, "Paraguay") OR LIMIT-TO (AFFILCOUNTRY, "Paraguay") OR LIMIT-TO (AFFILCOUNTRY, "Balivia") OR LIMIT-TO (AFFILCOUNTRY, "Bolivia") OR LIMIT-TO (AFFILCOUNTRY, "Bolivia") OR LIMIT-TO (AFFILCOUNTRY, "Honduras") OR LIMIT-TO (AFFILCOUNTRY, "Nicaragua")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2018)) AND (LIMIT-TO (EXACTKEYWORD, "Stress") OR LIMIT-TO (EXACTKEYWORD, "Psychological Capital"))

- Published documents whose study variables are related to the study of Psychological Capital and Stress.
- Limited to the years 2018-2022.
- Limited to Latin America.
- Limited to the keywords Stress and Psychological Capital.
- Regardless of type of publication.

#### 3.1.2 Phase 2: Construction of analysis material

The information collected in Scopus during the previous phase is organized and subsequently classified by graphs, figures and tables as follows:

- Co-occurrence of words.
- Year of publication.
- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

#### 3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, we proceed with the analysis of the results previously yielded resulting in the determination of conclusions and, consequently, the obtaining of the final document.

#### 4. RESULTS

### 4.1 Co-occurrence of words

Figure 2 shows the co-occurrence of keywords found in the publications identified in the Scopus database.

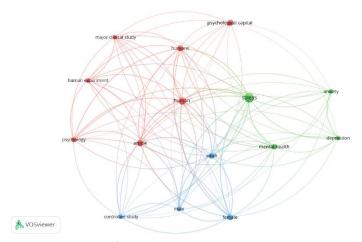


Figure 2. Co-occurrence of words

Source: Own elaboration (2023); based on data exported from Scopus.

The data in Figure 2, exported from Scopus, shows us our variables and their relationship with other terms which we will explain below.

Stress is a state experienced by a person facing a situation considered complicated or difficult which can negatively influence the achievement of their goals and / or the functions they perform within a community. It is precisely this that unites it directly with the Psychological Capital, characterized by the ability that an individual has to carry out their tasks and contribute to the granting of achievements and positive results but that when facing moments of critical stress can culminate in considerable damage to the point of suffering mental health problems, depression and anxiety which can completely alter a person's emotional state and decisiveness.

#### 4.2 Distribution of scientific production by year of publication

Figure 3 shows how scientific production is distributed according to the year of publication.

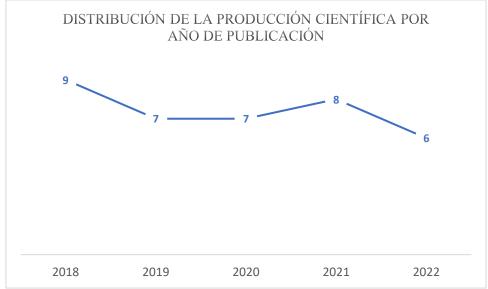


Figure 3. Distribution of scientific production by year of publication. Source: Own elaboration (2023); based on data exported from Scopus

In figure 3 we find the scientific production concerning the variables Psychological Capital and Stress during the period between 2018 and 2022 which resulted in the publication of 37 documents, in the Scopus database, containing the keywords. Likewise, it is evident that some changes were experienced throughout the period. We started with the year 2018 with 9 documents, a number that decreases considerably in the following years reaching the lowest number of publications in 2022. The article entitled "An explanatory model of emotional intelligence and its association with stress, burnout syndrome and nonverbal communication in university professors" sought to "define and contrast an explanatory model of stress perception, the dimensions of burnout syndrome, emotional intelligence and non-verbal communication in a sample of university professors" through mechanisms that allowed the measurement of stress, exhaustion, mood and non-verbal communication, determining that they are all directly related, although in some cases this association is negative. Finally, "the conclusions of the present study are that emotional intelligence and body language are two relevant factors in the prevention of burnout syndrome, and as a result can help ensure the mental well-being of university professors". (Castro-Sánchez, et al., 2018) (Castro-Sánchez, et al., 2018)

## 4.3 Distribution of scientific production by country of origin.

Figure 4 shows how scientific production is distributed according to the nationality of the authors.

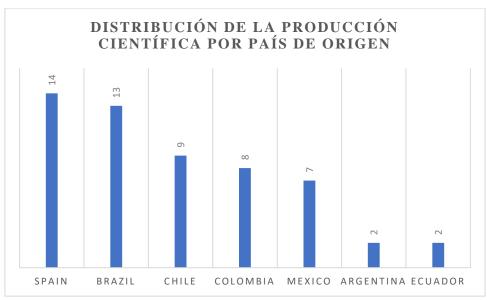


Figure 4. Distribution of scientific production by country of origin. Source: Own elaboration (2023); based on data provided by Scopus.

In the study of Psychological Capital and Stress, Spain leads the list of published documents with a total of 14 records in the Scopus database during the period of the years 2018-2022, followed by Brazil and Chile with 13 and 9 documents respectively.

One of the most outstanding documents was the article "Adaptation and validation into Spanish of the Psychological Capital Questionnaire-12 (PCQ-12) in academic contexts" in which the relevance of the study of Psychological Capital in the work and educational spheres is emphasized, especially in non-English-speaking contexts, since in this region there is a lack of "evaluation and measurement instruments" so here the "validation of a PCQ of 12 items adapted to the academic context and translated into Spanish" through a study in which it is determined that "the Spanish academic PCQ-12 is a reliable and valid indicator of academic psychological capital". (Carmona-Halty, Martinez, Meneghel, & Youssef-Morgan, 2021)(Carmona-Halty, Martinez, Meneghel, & Youssef-Morgan, 2021)

At this point, it is important to note that the preparation of scientific publications in many cases is carried out from collaborations that may involve private and/or public institutions from one or more countries. Therefore, the same publication can be linked to one or more authors with different nationalities and thus to more than one country simultaneously, being part of the total number of articles or publications of each of them in the final sum. Next, in *Figure 5*, you will see in greater detail the flow of collaborative work carried out by several countries.

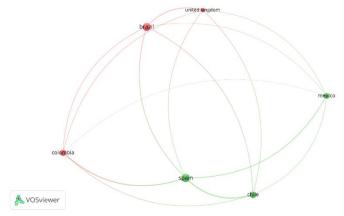


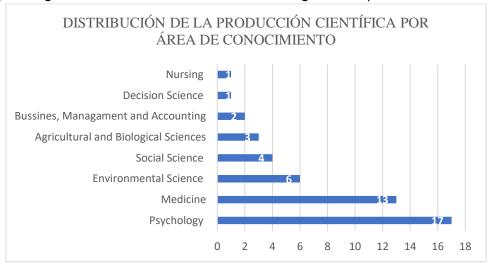
Figure 5. Co-citations between countries.

Source: Own elaboration (2023); based on data provided by Scopus.

Figure 5 shows the grouping of research according to the collaboration between authors belonging to various international institutions. There is evidence of outstanding participation among authors affiliated with institutions in Latin American countries such as Spain, Brazil, Chile, Colombia, Mexico and the United Kingdom.

#### 4.4 Distribution of scientific production by area of knowledge

Figure 6 shows the distribution of the elaboration of scientific publications from the area of knowledge through which the different research methodologies are implemented.



**Figure 6**. Distribution of scientific production by area of knowledge. **Source:** Own elaboration (2023); based on data provided by Scopus.

Due to the nature of our variables and their importance in economic and personal growth, as well as the development of a country, it is not surprising that most of the publications found in the Scopus database, on these are made from psychology occupying the main position in the publication of documents. Other areas such as medicine as well as environmental science have contributed to the study of these variables, publishing 13 and 6 papers each.

As we can see in *Figure 6*, the variables object of this study are relevant in various areas of knowledge, since they can positively and negatively influence the performance or performance of people in whatever their function and therefore can also impact the environment in which they are.

#### 4.5 Type of publication

In the following graph, you will observe the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.



Figure 7. Type of publication.

Source: Own elaboration (2023); based on data provided by Scopus.

Figure 7 clearly shows that the predominant type of publication in the study of Psychological Capital and Stress was the journal article with a total of 34 papers, followed by reviews with only 3 publications.

"Empowerment begins at home: parent-child relationships, psychological capital, and academic performance: a longitudinal mediation analysis" was based on the study that was conducted to analyze and understand "how academic psychological capital mediates parent-child relationships and academic performance in a group of high school students" using a three-wave instrument that allowed to establish that there is "a significant indirect effect." between the (good) relationships between parents and children (evaluated at time 1) and academic performance (evaluated at time 3) through academic PsyCap (evaluated at time 2)", that is, students who maintain a good relationship with their parents also maintain a good level of psychological capital as well as good academic performance. (Carmona-Halty, Salanova, & Schaufeli, The strengthening starts at home: Parent-child relationships, psychological capital, and academic performance - a longitudinal mediation analysis, 2019) (Carmona-Halty, Salanova, & Schaufeli, The strengthening starts at home: Parent-child relationships, psychological capital, and academic performance - a longitudinal mediation analysis, 2019) (Carmona-Halty, Salanova, & Schaufeli, The strengthening starts at home: Parent-child relationships, psychological capital, and academic performance - a longitudinal mediation analysis, 2019)

#### 5. CONCLUSIONS

After the bibliometric analysis carried out in the present research work, it was established that Spain was the country with the highest number of records published forthe Capital Pspsychological variables with a total of 37 publications, in the Scopus database during the period 2018-2022 and that the area of knowledge with the greatest contribution was psychology with 17 texts.

The documents found in Scopus suggest that with the passage of time the research related to our study variables has decreased, however what we can argue is that there is a need to evaluate Psychological Capital and Stress by multiple institutions that wish to improve their productivity or recognition as the case may be. Although these variables could be analyzed from different perspectives, the most recurrent refer to companies and educational institutions that seek to implement strategies that allow them to obtain the best from the personnel in charge in order to maximize their benefits. In the words of Julieta Laudadío and Belén Mesurado the importance of Psychological Capital lies in the fact that

Propicia attitudes and behaviors that favor individual performances and positive institutions. The results suggest the value and potential of psychological capital, not only for the survival of teachers in more adverse work environments, but for them to thrive and develop their full capabilities. (Laudadío & Mesurado, 2019)

Additionally, it can be said that, although researchers are more interested in measuring Psychological Capital and knowing its relationship with human behavior than in determining the causes that generate stress, both variables are related so that the study of one could respond to the other. For this reason and with the sole objective of continuing to raise awareness of the importance of guaranteeing access to this type of information in a transparent way by anyone, we hope to encourage with this article the participation of scientific communities in the study of these variables from any scientific profile and area of knowledge always seeking to provide more alternatives that contribute to the investigation of topics of general interest.

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