

Mapping Scientific Output in Sport Psychology Training Research in Peruvian University Theses

Ronald M. Hernández^{1*}, Doris Fuster-Guillén², Mery Nora Atencio Rivera³,
Yoselin Andrea Huapaya-Capcha⁴, Jean Pierre Quiñones Gomez⁵,
Rosita Elizabeth Yovera Morales⁶, Jonathan Merino Farias⁷ and
Ranshis Lhomans Rojas Chore⁸

¹*Universidad Señor de Sipán, Chiclayo, Perú

²Universidad Nacional Mayor de San Marcos, Perú

³Universidad Nacional Intercultural de la Selva Central Juan Santos Atahualpa, Perú

⁴Universidad Nacional de educación Enrique Guzmán y Valle, Perú

⁵Universidad Nacional Mayor de San Marcos, Perú

⁶Universidad César Vallejo, Perú

⁷Universidad César Vallejo, Perú

⁸Universidad César Vallejo, Perú

E-mail: ¹ronald.hernandez@outlook.com.pe, ²doristfusterguillen@gmail.com, ³matencio@uniscjsa.edu.pe,
⁴yhuapaya@une.edu.pe, ⁵jpquinonesg.unmsm@gmail.com, ⁶ryovera@ucvvirtual.edu.pe,
⁷jmerinof@ucvvirtual.edu.pe, ⁸frojasc26@ucvvirtual.edu.pe

ORCID: ¹<https://orcid.org/0000-0003-1263-2454>, ²<https://orcid.org/0000-0002-7889-2243>,

³<https://orcid.org/0000-0002-3599-4696>, ⁴<https://orcid.org/0000-0002-4794-2877>,

⁵<https://orcid.org/0000-0003-4502-3778>, ⁶<https://orcid.org/0000-0002-2593-4622>,

⁷<https://orcid.org/0000-0002-3306-3599>, ⁸<https://orcid.org/0000-0002-0674-978X>

(Received 25 February 2026; Revised 31 March 2026, Accepted 15 April 2026; Available online 05 June 2026)

Abstract - Sports psychology has become increasingly important in improving athletic performance, psychological well-being, and training processes, yet there is still little systematic evidence on the development of academic research in this field. A bibliometric analysis was conducted of undergraduate and graduate theses on sports psychology in Peru. The RENATI repository was used for the period 2010-2022. The sample consisted of 69 theses, which were analyzed as follows: universities with the highest production, gender of author and advisor, type of thesis according to academic degree obtained, evolution of theses by year, type of study conducted, type of sample in the thesis, type of access to the thesis, and thesis content. The results indicate that the Pontifical Catholic University of Peru is the institution with the most theses on sports psychology, 92.75% of which are for professional degrees. In addition, 52.17% are by female authors, while 47.83% are by male authors. Since 2019, scientific production has increased significantly, with a percentage greater than 10% per year. According to the type of research carried out, quantitative research obtains the highest percentage with 73.91%, and the variables of sports motivation and competitive anxiety are the most commonly addressed in the theses. It is concluded that it is necessary to continue opening new lines of research in order to contribute knowledge about sports psychology.

Keywords: Sports Psychology, Bibliometric analysis, Scientific Production, University Theses, Sports Motivation, Competitive Anxiety, Peru

I. INTRODUCTION

Practicing a sport can be an excellent field of training and socio-emotional development (Kuettel et al., 2021; Rodríguez Expósito, 2025). However, in recent years, there have been reports of a growing increase in mental health problems Åkesdotter et al., (2020), such as those reported in elite athletes like swimmer Michael Phelps or basketball player Kevin Love, a situation that has highlighted the importance of sports psychology (Schinke et al., 2018).

In this case, sports psychology is a branch of psychology whose scientific objective is to study mental activity and human behavior in the context of sports, exercise, and motor activity (Herrera Monge et al., 2019). Among its main functions is to help athletes overcome obstacles that may be affecting their performance, as well as to develop strategies to improve their performance in their respective disciplines (Quartiroli et al., 2023; Guedea-Delgado et al., 2022). Thus, both nationally and internationally, sports psychology has been integrated into the competitive world with the aim of enhancing results, offering various strategies and techniques to manage sensitive issues such as stress, depression, and anxiety (Thelwell et al., 2018; Mayoral et al., 2022).

Specifically, some studies conducted with athletes have shown a worrying incidence of psychological disorders, as revealed in a study conducted with Canadian athletes, in

which 31.7% were found to suffer from depression and 18.8% from anxiety (Poucher et al., 2021). In another study conducted with elite athletes in the United Kingdom, 47.8% were found to have symptoms of anxiety and depression, and 26.8% had distress (Foskett & Longstaff, 2018). A study conducted on elite athletes in Denmark reported that 13.9% showed moderate to severe anxiety, with a higher incidence in women than in men (Kuettel et al., 2021). Similarly, risk factors for depressive symptoms and stress were observed in athletes aged 18 and over in New Zealand (Beable et al., 2017). Regarding professional retirement from sport, Monterrosa Quintero et al., (2022) found that Colombian athletes reported higher levels of stress, anxiety, and depression at the time of retirement, demonstrating that greater psychological support should be provided at the time of retirement.

In Peru, there are indications that sports psychology has developed within an interesting historical framework. For example, it has been documented that when Peru qualified for the 1970 World Cup in Mexico, it had the advice of a psychiatrist, who worked individually and collectively to improve the performance of the Peruvian team (Fiorese et al., 2020). This situation has been replicated over the years in other disciplines, where sports psychologists from the Peruvian Institute of Sport offer their professional expertise (Razo-Ballon et al., 2024); In addition to this, achievements such as the soccer team's qualification for the 2018 World Cup in Russia and the gold medals won by athletes at the 2019 Pan American Games in Lima have made sports psychology increasingly important thanks to its positive impact on athletes (Noriega, 2019). Marín-González et al., (2024) conducted a study with university student athletes and found that 68% of the students who participated in a mental health program focusing on socio-emotional aspects felt better prepared to adapt to new situations, improving their ability to manage pressure in both sports and academics.

Given this situation, it is expected that health professionals, especially those in training, will conduct research to increase the scientific knowledge developed so far, given that the practice of sport in modern societies represents an agent for promoting quality of life and health in the general population De Bosscher, (2015), even more so in times of health emergencies (Barbosa-Granados et al., 2021). However, to date, there is no information revealing the state of scientific production on sports psychology in Peru, as there is in Spain (Olmedilla et al., 2017), where a bibliometric study of doctoral theses on sports psychology has been carried out, from which important recommendations and practical applications for sports management in that country have been derived. and within the South American region, there is a report of a study carried out in Brazil Vilarino et al., (2017), which analyzed the geographical distribution, evolution, and scientific production of research groups in sports psychology, concluding that there is a lack of research with sociological or historical analyses of sports psychology. Mayoral et al., (2022) found in a literature review that the United States,

Spain, and Ukraine were the most productive countries in terms of psychological intervention programs to improve athlete performance. Finally, Urrea Cuéllar & Londoño Vásquez, (2022), through a review of theoretical and research trends in the field of Physical Activity and Sports Psychology in Ibero-America, found that variables such as motivation, relationships, life skills, and intervention interests are part of a set of categories that need to be considered in psychological intervention in sports. Thus, in most Latin American countries, there are still very few studies that analyze scientific production, even by sports discipline (Moraes et al., 2019).

Considering that undergraduate and graduate studies are appropriate settings for generating scientific knowledge, it is expected that students' theses will include sports psychology as a line of research, and even that research will focus more on subfields such as clinical and educational psychology Ventura-León et al., (2022), which suggests that graduates of mental health-related degrees would have little interest in sports psychology topics.

In view of the above, the objective of the research was to analyze the scientific output of undergraduate and graduate theses on sports psychology deposited in the Peruvian repository of research papers (RENATI) between 2010 and 2022.

This article is structured as follows: first, it describes the methodology used to compile and analyze the theses on sports psychology registered in the RENATI repository. Next, it presents the results of the bibliometric analysis, considering variables such as universities with the highest output, characteristics of the theses, evolution over time, type of research, samples used, and psychological content addressed. Next, the main findings are discussed. Finally, the conclusions of the study are presented, as well as its limitations and possible future lines of research in the field of sports psychology in Peru.

II. METHOD

This is a bibliometric study using a descriptive-retrospective method. This type of research facilitates the selection, organization, and categorization of data from a quantitative-qualitative perspective, whose main purpose is to identify the quantity and quality of scientific sources related to a particular topic (Gallegos et al., 2020).

The unit of analysis was theses on sports psychology. Thus, the sample consisted of all undergraduate and graduate theses on sports psychology completed at Peruvian universities between 2010 and 2022.

A total of 10 variables were analyzed for each of the selected theses: university, gender of the author and advisor, type of thesis according to the academic degree obtained, evolution of the theses by year, type of study conducted, type of sample in the thesis, type of access to the theses, and thesis content.

The RENATI repository, which collects records of theses from Peruvian universities, was used to locate the information. Microsoft Excel 2019 was used to store and organize the selected theses, as well as the variables under study.

The search for documents was carried out in Peruvian university thesis repositories, mainly in RENATI and institutional repositories, using combinations of terms related to sports psychology. The descriptors "sports psychology" and "psychology of sport" were used, combined using Boolean OR operators, and the results were limited to the thesis document type. The general search strategy used was: ("sports psychology" OR "psychology of sport") AND thesis. Subsequently, filters were applied by country (Peru) and publication period to ensure the relevance and timeliness of the documents retrieved.

Algorithm Search_Sports_Psychology_Theses

INPUT:

Database ← Academic thesis repository (e.g., RENATI)

Search_Query ← ("sports psychology" OR "psychology of sport") AND thesis

OUTPUT:

Thesis_List ← Set of retrieved theses related to sports psychology

BEGIN

Step 1: Connect to the academic repository database

CONNECT Database

Step 2: Define search terms

Term1 ← "sports psychology"

Term2 ← "psychology of sport"

Document_Type ← "thesis"

Step 3: Construct Boolean search query

Search_Query ← (Term1 OR Term2) AND Document_Type

Step 4: Execute search in database

Results ← DATABASE.SEARCH(Search_Query)

Step 5: Initialize filtered results list

Thesis_List ← EMPTY_SET

Step 6: For each record in Results

FOR each Record IN Results DO

IF Record.Document_Type = "Thesis" THEN

IF Record.Topic CONTAINS Term1

OR Record.Topic CONTAINS Term2 THEN

ADD Record TO Thesis_List

END IF

END IF

END FOR

Step 7: Remove duplicate records

Thesis_List ← REMOVE_DUPLICATES(Thesis_List)

Step 8: Export final dataset

EXPORT Thesis_List

A total of 118 theses were obtained that met the search parameters, and those that were not directly related to sports psychology were then eliminated, reducing the number of theses to 69, which were the subject of the analysis (Fig. 1)

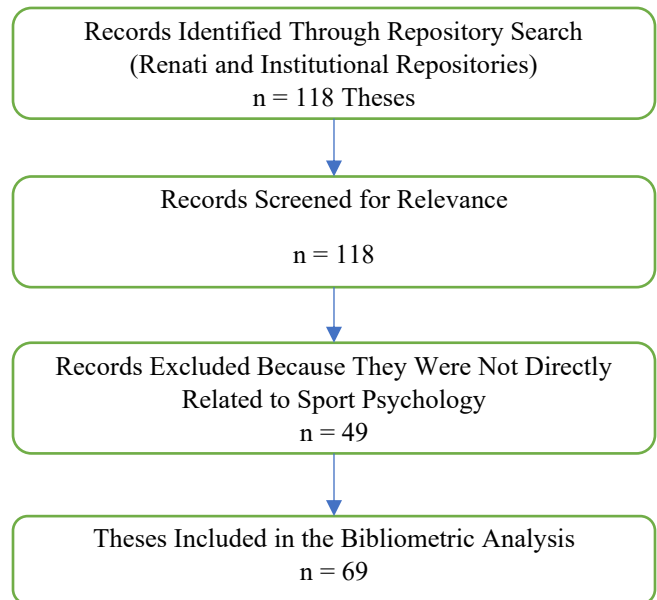


Fig. 1 Flow Diagram of the Identification, Screening, and Selection Process of Theses on Sport Psychology in Peruvian Repositories (2010–2022)

Descriptive bibliometric indicators were used to analyze scientific output, making it possible to identify the distribution, trends, and characteristics of the theses analyzed. The data collected was organized and processed using Microsoft Excel, enabling the calculation of absolute frequencies, relative frequencies, and growth rates of scientific output.

First, the absolute frequency (AF) indicator was used to determine the total number of theses registered in each of the categories analyzed, such as university of origin, year of

publication, type of research, type of sample, and topic addressed. This indicator is expressed by equation (1).

$$AF_i = n_i \quad (1)$$

In order to complement the analysis, the relative frequency (RF) was also calculated, which allows the proportion represented by each category to be identified in relation to the total number of documents analyzed. This indicator is expressed by equation (2).

$$RF_i = \left(\frac{n_i}{N}\right) \times 100 \quad (2)$$

Finally, to analyze the temporal evolution of scientific production, the annual growth rate (AGR) of theses was calculated, an indicator that allows the percentage variation in scientific production to be measured, using equation (3).

$$AGR = \left(\frac{P_t - P_{t-1}}{P_{t-1}}\right) \times 100 \quad (3)$$

III. RESULTS

Table I shows the percentage of theses on sports psychology produced at different Peruvian universities. Of a total of 23 universities, the Pontifical Catholic University of Peru (30.43%) and the Peruvian University of Applied Sciences (18.84%) have the highest output on sports psychology.

TABLE I THESES ON SPORTS PSYCHOLOGY FROM PERUVIAN UNIVERSITIES

University	n	%
Pontifical Catholic University of Peru	21	30.43
Peruvian University of Applied Sciences	13	18.84
César Vallejo University	6	8.7
Private University of the North	5	7.25
University of Lima	3	4.35
Señor de Sipán University	2	2.9
National University of San Agustín of Arequipa	2	2.90
Autonomous University of Peru	2	2.9
Alas Peruanas University	1	1.45
Andean University of Cusco	1	1.45
Autonomous University of Ica	1	1.45
Catholic University of Santa María	1	1.45
San Pablo Catholic University	1	1.45
University of San Martín de Porres	1	1.45
Sacred Heart Women's University	1	1.45
Marcelino Champagnat University	1	1.45
National University of the Altiplano	1	1.45
Federico Villarreal National University	1	1.45
Hermilio Valdizán National University	1	1.45
National University of San Marcos	1	1.45
Micaela Bastidas National University of Apurímac	1	1.45
Cayetano Heredia Peruvian University	1	1.45
Peruvian Union University	1	1.45

Note: Own elaboration, extracted from the RENATI platform

Table II shows that, of the 69 theses, 64 (92.75%) were written to obtain a professional degree, 3 (4.35%) were written for a master's degree, and 1.45% were written for a

second specialization and a doctorate, respectively. Furthermore, of the 69 theses, 36 (52.17%) were written by female authors, while 33 (47.83%) were written by male authors. Of the total number of theses evaluated, 42 (60.87%) were supervised by male advisors, while 27 (39.13%) were supervised by female advisors. Finally, in 92.75% of cases, RENATI provided access to the full text of the thesis, compared to 7.25% of cases in which only the abstract of the document was available. The 92.75% refers to theses that are freely available for download and consultation.

TABLE II CHARACTERISTICS OF THESES ON SPORTS PSYCHOLOGY

Characteristics of Theses on Sports Psychology	Percentage	
Thesis on sports psychology upon obtaining the academic degree	Second specialty	1.45
	Doctorate	1.45
	Master's degree	4.35
	Professional degree	92.75
Thesis on sports psychology according to author's gender.	Female	52.17%
	Male	47.83
Thesis on sports psychology according to advisor's gender	Female	39.13
	Male	60.87
Thesis on sports psychology according to access	Embargoed	7.25
	Free access	92.75

Note: Own elaboration, extracted from the RENATI platform

Table III presents it is evident that since 2019, scientific production has increased significantly, with a percentage greater than 10% per year.

TABLE III PERCENTAGES OF THESES ON SPORTS PSYCHOLOGY BY YEAR

Year	n	%
2010	1	1.45
2011	3	4.35
2012	2	2.90
2013	3	4.35
2014	1	1.45
2015	4	5.80
2016	4	5.80
2017	4	5.80
2018	5	7.25
2019	8	11.59
2020	10	14.49
2021	17	24.64
2022	7	10.14

Note: Own elaboration, extracted from the RENATI platform

Table IV shows the percentage of theses on sports psychology according to the type of research conducted. Quantitative research obtained the highest percentage with 73.91% followed by theoretical review with 10.14%.

TABLE IV PERCENTAGES OF THESES ON SPORTS PSYCHOLOGY ACCORDING TO TYPE OF RESEARCH

Type of Research	n	%
Quantitative research	51	73.91
Theoretical review	7	10.14
Qualitative research	6	8.70
Psychometric research	5	7.25

Note: Own elaboration, extracted from the RENATI platform

Table V shows that, in terms of the type of sample studied in the theses analyzed, 66.67% (n=46) of the cases involved professional athletes, and 17.39% (n=12) involved young athletes pursuing university studies.

TABLE V PERCENTAGES OF THESES ON SPORTS PSYCHOLOGY ACCORDING TO SAMPLE TYPE

Type of Sample	n	%
Professional athletes	46	66.67
Sports coaches	3	4.35
University athletes	12	17.39
Extreme athletes	1	1.45
Database articles (Theoretical Review)	7	10.14

Note: Own elaboration, extracted from the RENATI platform

With regard to the content of the theses in table VI, it can be seen that 20.93% of them studied psychological aspects related to sports motivation, followed by competitive anxiety and flow state with 16.28% and 9.30%, respectively.

TABLE VI PERCENTAGES OF THESES ON SPORTS PSYCHOLOGY ACCORDING TO CONTENT TYPE

Psychological Content	n	%
Sports motivation	9	20.93
Competitive anxiety	7	16.28
Flow state	4	9.30
Emotional intelligence	3	6.98
Sports well-being	3	6.98
Aggressiveness	2	4.65
Commitment to sport	2	4.65
Self-efficacy	2	4.65
Coping strategies	1	2.33
Sports satisfaction	1	2.33
Athletic identity	1	2.33
Self-confidence	1	2.33
Motivational style	1	2.33
Autonomy and control	1	2.33
Lifestyles	1	2.33
Health behaviors	1	2.33
Sportsmanship	1	2.33
Goal orientation	1	2.33
Sports indiscipline	1	2.33

Note: Own elaboration, extracted from the RENATI platform

In order to visualize the conceptual relationships between the main psychological variables identified in the theses analyzed, a thematic network map was created. The network shows that sport motivation and competitive anxiety are central nodes within academic production, connecting with variables related to athletes' performance and psychological

well-being, such as flow state, self-efficacy, coping strategies, and sport well-being. This pattern suggests that sports psychology research in Peru has focused mainly on psychological factors associated with performance and emotional regulation in the competitive context (Fig. 2)

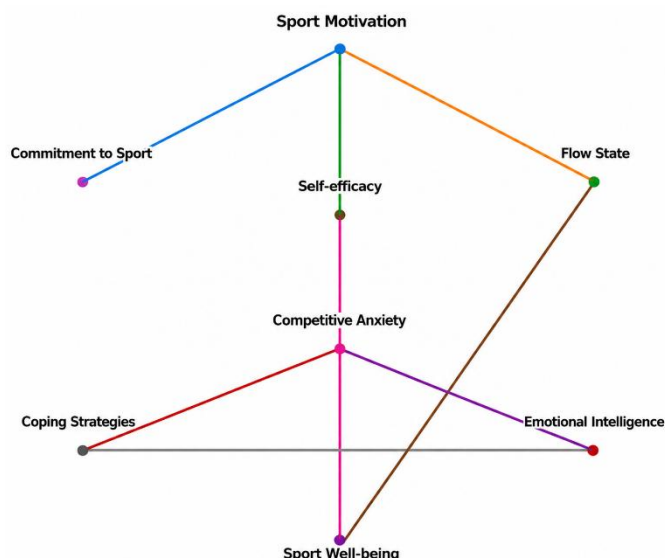


Fig. 2 Thematic Network Map of the Main Psychological Variables Identified in Theses on Sport Psychology in Peru

The results show that scholarly output in sports psychology in Peruvian university theses has increased since 2019, when most of the research was conducted to fulfill degree requirements using a quantitative approach with samples of professional athletes. Furthermore, the most frequently studied variables were sports motivation and competitive anxiety, reflecting an interest in understanding the psychological factors linked to athletes' performance and well-being

IV. DISCUSSION

In this study, analyzed the scientific output of undergraduate and graduate theses on the subject of sports psychology found in the Peruvian repository of research papers (RENATI) over the last 10 years. Looked at 69 theses, the results showed that of the total number of theses published in the repository, 92.75% were works submitted to obtain a professional degree. This result is consistent with changes in Peruvian university law Lavalle & de Nicolas, (2017), which favors the preparation of theses over proficiency exams for obtaining professional degrees. Likewise, it was observed that the largest amount of academic production belongs to institutions in the capital city of Lima. A similar result was found in a bibliometric analysis that identified that universities in the capital produced a greater number of studies (Mejia et al., 2022). It is important to consider that in Peru, sports psychology has been growing gradually (Fioerese et al. 2020).

In terms of gender, there is a greater presence of women both as authors of theses and as advisors for research projects

compared to men. This information is corroborated by Yesilcay, as 7 out of 10 students in the field of psychology are women (Yesilcay, 2000) and it is one of the professional fields with the highest female presence (O'Shaughnessy, 2017). On the other hand, other studies mention that in the case of doctoral theses, the presence of women decreases to 38.7% (Olmedilla et al., 2017).

Most theses on sports psychology correspond to the years 2019, 2020, and 2021. With an annual growth of 10%, this means that a greater number of works have been developed in recent years. This result is consistent with reports in similar areas of sports, where exponential growth has been observed, with 2019 being a key year in this regard (Campbell et al., 2022). The same growth can be observed in the same field of knowledge but with scientific articles (Gjestvang et al., 2023).

The results of this research show that the methodology with the highest number of theses was quantitative in nature. Similar results are reported in other studies, such as women's basketball, with a strong presence of quantitative work (Mamani-Jilaja et al., 2023). Likewise, review studies on sports psychology are also resorting to quantitative models McLaren & Bruner, (2022) and statistical models (Lindahl et al., 2015). In fact, most studies on sports psychology use quantitative methods, which continue to dominate this field (Campbell et al., 2022).

In terms of sample types, this study reports that the most common sample was professional athletes, followed by university athletes. This high number of professional athletes may be related to the fact that it is professional athletes who are most interested in increasing their performance and are therefore feasible for research (Reyes-Bossio et al., 2022). Furthermore, it is important for sports professionals to understand that sports training is a complex psycho-pedagogical process Quartirolí et al., (2023) and that it requires professionals in the field of sports psychology (Andrade et al., 2020).

Finally, the findings of this research show that the most studied topics are sports motivation and sports anxiety. This result is similar to that reported by Mamani-Jilaja et al., (2023) who reported motivation as a psychological variable linked to sports success and which has also been found in other studies (Olmedilla et al., 2017; Urrea Cuéllar & Londoño Vásquez, 2022). Sports motivation is understood as a key aspect that can achieve commitment and adherence to sport Barbosa-Granados et al., (2021) and is linked to the line of research on motivation, physical activity, and health (Herrera Monge et al., 2019; Madero et al., 2025). Likewise, sports anxiety is among the most researched topics due to its relationship with mental health and the fact that, as a result of COVID-19, it has experienced sustained growth (da Silva Neto et al., 2021; Henriksen et al., 2020; Urzua et al., 2020).

V. CONCLUSION

This paper presented the evolution of Peruvian thesis production on sports psychology from 2010 to 2022, with data from the RENATI repository. It concludes that 69 theses were presented during the period studied, with quantitative research designs and professional athletes as the sample type being the most studied. Ninety-two point seven five percent of the theses are open access, and the variables sports motivation and competitive anxiety are the most frequently addressed in the theses. Finally, it is important to mention that theses are an indicator of institutional scientific production. Their increase in recent years has allowed sports psychology courses to become part of the curricula of professional psychology and health science degrees. In view of this, it is necessary for academic authorities to continue to encourage the development of research on this variable.

On the other hand, the literature found shows that sports psychology has undergone a conceptual and thematic expansion, shifting from an exclusive emphasis on performance to the analysis of psychosocial and mental health variables of athletes. Within this framework, bibliometric studies have established themselves as a relevant methodological strategy for describing the structure, evolution, and main lines of research in a scientific field, allowing for the identification of production patterns, thematic gaps, and levels of academic maturity.

Likewise, the bibliography recognizes university theses as a valid source for analyzing scientific production in training, as it reflects research interests, predominant methodological approaches, and emerging areas that do not always translate into indexed publications. In the Peruvian context, the availability of institutional and national repositories makes this type of analysis possible, although the literature warns that the quality and standardization of metadata can influence the validity of the results. Finally, the use of reporting standards for systematic reviews contributes to strengthening the transparency and reproducibility of the analytical process. Taken together, these background factors support the relevance of the present research to characterize the state and trends of scientific production in sports psychology in Peru based on the systematic analysis of university theses.

Limitations and Practical Applications

This research has some limitations. First, there is a possibility that some theses may be missing from the RENATI repository, as the time between the defense and registration depends on procedures that can be very lengthy. Another limitation was the choice of keywords as a means of identifying specific titles. Obviously, there are more words and descriptors that could have been used, and it is likely that some theses have not been analyzed. Similarly, this study cannot be considered definitive in the field of sports psychology, although it is regarded as one of the first attempts to provide a Peruvian bibliometric review of this field.

Despite these limitations, this research represents a contribution to the field of sports psychology. Therefore, it concludes with the report of 69 theses, mainly from two universities, in which 51.17% of the authors are women and, since 2019, there has been a gradual increase; and that most theses follow a quantitative- methodology using professional athletes as a sample in two areas of preference, namely sports motivation and competitive anxiety.

This study invites the opening of new lines of research that contribute knowledge and thus expand the scientific field of sports psychology. Recent years have seen significant, constant, and sustained growth in this variable, which suggests an objective and flexible outlook with methodological rigor in research on different sports and the processes characteristic of psychology.

REFERENCES

- [1] Åkesdotter, C., Kenttä, G., Eloranta, S., & Franck, J. (2020). The prevalence of mental health problems in elite athletes. *Journal of science and medicine in sport*, 23(4), 329-335. <https://doi.org/10.1016/j.jsams.2019.10.022>
- [2] Andrade, A., Silva, R. B., & Dominski, F. H. (2020). Application of sport psychology in mixed martial arts: A systematic review. *Kinesiology*, 52(01), 94-102. <https://doi.org/10.26582/k.52.1.12>
- [3] Barbosa-Granados, S., Castañeda-Lozano, W. ., & Reyes-Bossio, M. (2021). Teaching experience with virtual environments in sports psychology, before and during the Covid-19 pandemic. *Revista Digital De Investigación En Docencia Universitaria*, 16(1), e1438. <https://doi.org/10.19083/ridu.2022.1438>
- [4] Beable, S., Fulcher, M., Lee, A. C., & Hamilton, B. (2017). SHARPSports mental Health Awareness Research Project: Prevalence and risk factors of depressive symptoms and life stress in elite athletes. *Journal of science and medicine in sport*, 20(12), 1047-1052. <https://doi.org/10.1016/j.jsams.2017.04.018>
- [5] Campbell, S., Mills, J., Atkinson, O., Gearity, B., Kuklick, C., & McCullick, B. (2022). Engaging in paradigmatic dialogue: A bibliometric analysis of coaching scholarship from 1970 to 2020. *International Sport Coaching Journal*, 10(1), 16-28. <https://doi.org/10.1123/iscj.2021-0045>
- [6] da Silva Neto, R. M., Benjamim, C. J. R., de Medeiros Carvalho, P. M., & Neto, M. L. R. (2021). Psychological effects caused by the COVID-19 pandemic in health professionals: a systematic review with meta-analysis. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 104, 110062. <https://doi.org/10.1016/j.pnpb.2020.110062>
- [7] De Bosscher, V. (2015). Theory Of Sports Policy Factors Leading To International Sporting Success (SPLISS) 1. In *Routledge handbook of theory in sport management* (pp. 93-113). Routledge.
- [8] Fiorese, L., Codonhato, R., JÚNIOR, J. R. A. D. N., Garcia-Mas, A., & VISSOCI, J. R. N. (2020). History and development of Sport Psychology in Latin America. *Int. J. Sport Psychol*, 51, 528-544. <https://doi.org/10.7352/IJSP.2020.51.528>
- [9] Foskett, R. L., & Longstaff, F. (2018). The mental health of elite athletes in the United Kingdom. *Journal of science and medicine in sport*, 21(8), 765-770. <https://doi.org/10.1016/j.jsams.2017.11.016>
- [10] Gallegos, M., Perez-Acosta, A. M., Klappenbach, H., López, W. L., & Bregman, C. (2020). The bibliometric studies in the field of Ibero-American psychology: A metabibliometric review. *Interdisciplinaria*, 37(2), 95-115. <https://doi.org/10.16888/INTERD.2020.37.2.6>
- [11] Gjestvang, C., Tangen, E. M., Arntzen, M. B., & Haakstad, L. A. (2023). How do fitness club members differentiate in background characteristics, exercise motivation, and social support? A cross-sectional study. *Journal of sports science & medicine*, 22(2), 235. <https://doi.org/10.52082/jssm.2023.235>
- [12] Guedea-Delgado, JC, Nájera Longoria, RJ, Zapata Ochoa, P., López Guillen, LG., Casas Mendoza, MM., Morquecho Sánchez, R., & Medina Félix, DR (2022). Perception of the functions and level of general knowledge among basketball coaches in Mexico. *Revista Mexicana De Ciencias De La Cultura Física* , 1 (2), 1–14. <https://doi.org/10.54167/rmccf.v1i2.970>
- [13] Henriksen, K., Schinke, R., Moesch, K., McCann, S., Parham, W. D., Larsen, C. H., & Terry, P. (2020). Consensus statement on improving the mental health of high performance athletes. *International Journal of Sport and Exercise Psychology*, 18 (5), 553–560. <https://doi.org/10.1080/1612197X.2019.1570473>
- [14] Herrera Monge, M. F., Salas Cabrera, J., Fonseca Schmidth, H., Alonso Ubieto, S., & Álvarez Bogantes, C. (2019). Older Adults' Perception of the of the Factors that Determine Participation to the Pre-Sport Voliocho in Santo Domingo, Heredia, Costa Rica. *MHSalud*, 16(1), 18-39. <https://doi.org/10.15359/mhs.16-1.2>
- [15] Kuettel, A., Pedersen, A. K., & Larsen, C. H. (2021). To flourish or languish, that is the question: Exploring the mental health profiles of Danish elite athletes. *Psychology of Sport and Exercise*, 52, 101837. <https://doi.org/10.1016/j.psychsport.2020.101837>
- [16] Lavallo, C., & de Nicolas, V. L. (2017). Peru and its new challenge in higher education: Towards a research university. *PLoS one*, 12(8), e0182631. <https://doi.org/10.1371/journal.pone.0182631>
- [17] Lindahl, J., Stenling, A., Lindwall, M., & Colliander, C. (2015). Trends and knowledge base in sport and exercise psychology research: a bibliometric review study. *International Review of Sport and Exercise Psychology*, 8(1), 71-94. <https://doi.org/10.1080/1750984X.2015.1019540>
- [18] Madero, S., Brusco, L. I., Diez-Canseco, F., Gomez-Restrepo, C., Olivar, N., Flores-Kanter, P. E., ... & Priebe, S. (2025). Asociación entre práctica deportiva y síntomas de ansiedad y depresión en jóvenes: estudio longitudinal en áreas urbanas desfavorecidas de América Latina. *Revista Colombiana de Psiquiatría*. <https://doi.org/10.1016/j.rcp.2025.08.004>
- [19] Mamani-Jilaja, D., Huayanca-Medina, P. C., Casa-Coila, M. D., Vilca-Apaza, H. M., & Romero-Carazas, R. (2023). Bibliometric analysis of scientific production in collective sports. <https://doi.org/10.47197/retos.v49.99002>
- [20] Marín-González, F. H., Portela-Pino, I., Fuentes-García, J. P., & Martínez-Patiño, M. J. (2024). Analysis of socio-emotional competencies as a key dimension for sustainability in colombian elite athletes. *Sustainability*, 16(5), 2066. <https://doi.org/10.3390/su16052066>
- [21] Mayoral, R. P., Rodríguez-Martínez, D., & León-Zarceño, E. M. (2022). Psychological intervention programs with athletes to improve performance: a current review. *Journal of Psychology Applied to Sport and Physical Exercise*, 7(1), Article e2. <https://doi.org/10.5093/rpadef2022a6>
- [22] McLaren, C. D., & Bruner, M. W. (2022). Citation network analysis. *International Review of Sport and Exercise Psychology*, 15(1), 179-198. <https://doi.org/10.1080/1750984X.2021.1989705>
- [23] Mejia, C., Mamani-Benito, O., Condori, S., Tito-Betancur, M., Ramos, G., & Torres, R. (2022). Scientific Production of Thesis Advisors in Human Medicine Faculties in Peru. *Bolivian Medical Gazette*, 45(1), 45–50. <https://doi.org/10.47993/gmb.v45i1.338>
- [24] Monterrosa Quintero, A., Echeverri Rios, A. R., Fuentes-García, J. P., & Gonzalez Sanchez, J. C. (2022). Levels of physical activity and psychological well-being in non-athletes and martial art athletes during the COVID-19 pandemic. *International journal of environmental research and public health*, 19(7), 4004. <https://doi.org/10.3390/ijerph19074004>
- [25] Moraes, L. C. L., Barbosa Rinaldi, I. P. B., Roberto Rojo, J., & Couto Gomes, L. C. (2019). Rhythmic gymnastics: profile of scientific production in journals in latin america, the caribbean and iberian countries. *Pensar en Movimiento: Revista de ciencias del ejercicio y la salud*, 17(1), 94-117. <https://doi.org/10.15517/pensarmov.v17i2.38382>
- [26] Noriega, M. (2019, October 31). The sports psychologist: why are they an ally for high-performance athletes? *Somos*, 2019. <https://elcomercio.pe/somos/orientacion-vocacional/el-psicologo-deportivo-por-que-es-un-aliado-para-los-atletas-de-alto-rendimiento-noticia/>

- [27] Olmedilla, A., Abenza, L., Serrano, A., Muñoz, A. M., García-Angulo, F., & Ortega, E. (2017). Bibliometric study of doctoral theses on sports psychology. *Cuadernos de Psicología Del Deporte*, 17 (2), 121–130. <https://revistas.um.es/cpd/article/view/301971>
- [28] O'Shaughnessy, D. M. (2017). *Takiwasi: addiction treatment in the " Singing House"* (Doctoral dissertation, James Cook University). <https://doi.org/10.4225/28/5a9dce00eafa6>
- [29] Poucher, Z. A., Tamminen, K. A., Sabiston, C. M., Cairney, J., & Kerr, G. (2021). Prevalence of symptoms of common mental disorders among elite Canadian athletes. *Psychology of Sport and Exercise*, 57, 102018. <https://doi.org/10.1016/j.psychsport.2021.102018>
- [30] Quartiroli, A., Fogaça, J. L., & Wagstaff, C. R. (2023). Professional training and development: The bedrock of ethical, competent, and sustainable sport psychology. *Journal of Applied Sport Psychology*, 35(3), 349-371. <https://doi.org/10.1080/10413200.2022.2043485>
- [31] Razo-Ballon, H., Ticona-Esquivel, R., & Montalvo, P. (2024, October). Design of IoT architecture and LLM model for personalized training recommendations for athletes. In *International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability* (pp. 306 -320). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-83210-9_23
- [32] Reyes-Bossio, M., Corcuera-Bustamante, S., Veliz-Salinas, G., Villas Boas Junior, M., Delgado-Campusano, M., Brocca-Alvarado, P., ... & Brandão, R. (2022). Effects of psychological interventions on high sports performance: A systematic review. *Frontiers in psychology*, 13, 1068376. <https://doi.org/10.3389/fpsyg.2022.1068376>
- [33] Rodríguez Expósito, A. (2025). Physical Education and values: a path to personal and social development. *Scientific Journal of Educational Innovation and Current Society "ALCON"*. ISSN 2960-8473, 5 (1), 344–351. <https://doi.org/10.62305/alcon.v5i1.553>
- [34] Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International society of sport psychology position stand: Athletes' mental health, performance, and development. *International journal of sport and exercise psychology*, 16(6), 622-639. <https://doi.org/10.1080/1612197X.2017.1295557>
- [35] Thelwell, R. C., Wood, J., Harwood, C., Woolway, T., & Van Raalte, J. L. (2018). The role, benefits and selection of sport psychology consultants: Perceptions of youth-sport coaches and parents. *Psychology of Sport and Exercise*, 35, 131-142. <https://doi.org/10.1016/j.psychsport.2017.12.001>
- [36] Urrea Cuéllar, Ángela, & Londoño Vásquez, D. (2022). Review of theoretical and research trends in the field of psychology of physical activity and sports in Ibero-America. *Psicogente*, 25 (47), 1–25. <https://doi.org/10.17081/psico.25.47.4836>
- [37] Urzua, A., Vera-Villaruel, P., Caqueo-Urizar, A., & Polanco-Carrasco, R. (2020). Psychology in the prevention and management of COVID-19. Contributions from the initial evidence. *Terapia psicológica*, 38(1), 103-118. <https://doi.org/10.4067/S0718-48082020000100103>
- [38] Ventura-León, J., Mamani-Benito, O., Tocco-Muñoz, S., & Curahua-Guillen, K. (2022). Bibliometric analysis of the scientific output of female psychologists in Peru. *Interdisciplinary. Journal of Psychology and Related Sciences*, 39 (2), 199–210. <https://doi.org/10.16888/interd.2022.39.2.13>
- [39] Vilarino, G. T., Dominsk, F. H., Andrade, R. D., Felden, É. P. G., & Andrade, A. (2017). Análise dos grupos de pesquisa em psicologia do esporte e do exercício no Brasil. *Revista Brasileira de Ciências do Esporte*, 39(4), 371-379. <https://doi.org/10.1016/j.rbce.2017.07.004>
- [40] Yesilcay, Y. (2000). Research project in statistics: Implications of a case study for the undergraduate statistics curriculum. *Journal of Statistics Education*, 8(2). <https://doi.org/10.1080/10691898.2000.12131293>