
FROM CULTURE TO HEALTH: HOTSPOTS AND TRENDS IN LATIN DANCE RESEARCH BASED ON BIBLIOMETRIC ANALYSIS

QI LIANG^{1*}, MUHAMAD HAFIZ BIN ISMAIL², DIYANA ZULAIKA BINTI ABDUL GHANI³, MIMI GUO⁴

¹ FACULTY OF EDUCATIONAL SCIENCES AND TECHNOLOGY, UNIVERSITI TEKNOLOGI MALAYSIA, EMAIL: qiliang@graduate.utm.my, ORCID:0009-0005-7775-3208

² FACULTY OF EDUCATIONAL SCIENCES AND TECHNOLOGY, UNIVERSITI TEKNOLOGI MALAYSIA, MALAYSIA, EMAIL: hafiz@utm.my ORCID:0009-0000-4571-0514

³ FACULTY OF EDUCATIONAL SCIENCES AND TECHNOLOGY, UNIVERSITI TEKNOLOGI MALAYSIA, MALAYSIA, EMAIL: diyanazulaika@utm.my ORCID:0000-0003-2551-959X

⁴ FACULTY OF EDUCATIONAL SCIENCES AND TECHNOLOGY, UNIVERSITI TEKNOLOGI MALAYSIA, MALAYSIA, EMAIL: mimiguo@graduate.utm.my ORCID:0009-0005-4649-9657

Abstract

Objective: This study employs a bibliometric approach to systematically examine the research hotspots, evolutionary trajectory, and disciplinary transition of Latin dance studies—from cultural interpretation toward health-oriented applications.

Materials and Methods: Scientific publications related to Latin dance from 2006 to 2025 were retrieved from the Web of Science Core Collection. The records were exported in BibTeX format and analyzed using the Bibliometrix package in R. A comprehensive quantitative analysis was performed, encompassing publication output, citation performance, collaboration networks, keyword co-occurrence, and thematic evolution, to construct a knowledge map of the field.

Results: The analysis reveals a staged developmental pattern in Latin dance research, evolving from fragmented exploration to rapid expansion over the past two decades. The United States and the United Kingdom emerged as the primary contributors, while Spain and Brazil served as pivotal hubs in regional collaboration within Latin America. The author collaboration network exhibited a structure characterized by concentrated core groups and dispersed peripheral contributors. Thematic evolution indicates a clear shift from early studies centered on cultural identity and social meaning toward research emphasizing exercise prescription, health intervention, and functional improvement among older adults.

Conclusion: Latin dance research demonstrates a distinct disciplinary migration from cultural inquiry to health application, reflecting growing interdisciplinary integration and translation into public health practice. Future research is expected to further extend into active aging, cross-cultural communication, and health policy implementation, offering new insights and opportunities for both academic advancement and practical application.

Keywords: Latin dance; bibliometric analysis; research hotspots; thematic trends; Bibliometrix

1. INTRODUCTION

Originating from the cultural traditions of Latin America, Latin dance has evolved into a cross-cultural practice that integrates artistic aesthetics with athletic rigor, characterized by vibrant rhythm, intricate technique, and rich emotional expression (UNESCO, 2006; World DanceSport Federation, n.d.). With the acceleration of

globalization, the influence of Latin dance has extended far beyond the realm of performing arts and has been increasingly applied in education, competitive sports, and health-related fields. Empirical studies have shown that Latin dance can improve the quality of life among older adults (Banio, 2020; Liu, 2023), enhance students' physical fitness (Meric, 2016; Hu, 2025), reduce body image anxiety among adolescents (Cain, 2015), and serve as an effective intervention for both physical and mental health (Lopez, 2023).

In academic research, early studies on Latin dance primarily focused on pedagogy and cultural identity interpretation. With the rise of interdisciplinary inquiry, the research focus has expanded toward biomechanics, injury prevention, psychology, and public health—reflecting a clear disciplinary migration from culture to health. Evidence suggests that Latin dance training significantly enhances motor performance and functional capacity (Aguinaga, 2019). Dancers outperform non-dancers in gait, dynamic balance, and core stability (Liu et al., 2022). Biomechanical analyses further demonstrate that Latin dance improves tendon adaptability and joint load management (Gao, 2023), thereby enhancing stability during rapid rotations and weight shifts (Lobo et al., 2022). Moreover, systematic reviews indicate that Latin dance not only promotes physical fitness but also exerts positive effects on psychological well-being, including reductions in depression and anxiety (Liu et al., 2023). Research on competitive dancers further highlights its potential in sport psychology, showing that long-term training alleviates anxiety and strengthens emotional regulation (Hanks et al., 2024; Liu, 2025).

From psychological and social perspectives, Latin dance presents a dual nature. Its artistic expressiveness and social engagement foster confidence, emotional regulation, and interpersonal connection; yet, aesthetic norms and performance pressures may simultaneously induce psychological stress (Francisco, 2012), creating tension between body image and performance anxiety (Quested & Duda, 2010). This dynamic underscores Latin dance as both a potential medium for enhancing mental well-being and a possible source of psychological burden—necessitating evidence-based approaches for balance and intervention. At the same time, Latin dance retains profound cultural and social significance: its movements, music, and performative rituals embody Latin American cultural heritage while serving as a global medium of identity and intercultural exchange (Ege, 2024).

Despite recent empirical advances in biomechanics, psychology, and public health, there remains a lack of systematic understanding of the global knowledge structure and evolutionary trends in Latin dance research. Specifically, existing studies have not yet clarified how the field has transitioned from cultural interpretation to health application, how research hotspots have evolved, and what directions future studies might pursue. To address this gap, the present study employs a bibliometric approach using data from the Web of Science Core Collection (2006–2025). Through Bibliometrix and Biblioshiny analysis tools, this study systematically investigates Latin dance research from multiple dimensions—including publication trends, academic influence, collaboration networks, keyword co-occurrence, and thematic evolution—to uncover its research hotspots and knowledge trajectories. The findings aim to provide an objective data foundation for future work in training science, injury prevention, psychological intervention, and cross-cultural communication (Aria & Cuccurullo, 2017).

2. MATERIALS AND METHODS

This study conducted a systematic bibliometric analysis of research related to Latin dance within the field of sport sciences. Scientific publications from 2006 to 2025 were retrieved from the Web of Science Core Collection to comprehensively capture academic outputs associated with Latin dance (Bergeron et al., 2018).

To ensure comprehensive coverage, the search strategy included not only the keyword “Latin dance” but also related terms such as “dance sport,” “Cha-cha-cha,” “Samba,” “Jive,” “Paso Doble,” “Salsa,” and “Bachata.” The detailed literature selection process is illustrated in Figure 1.

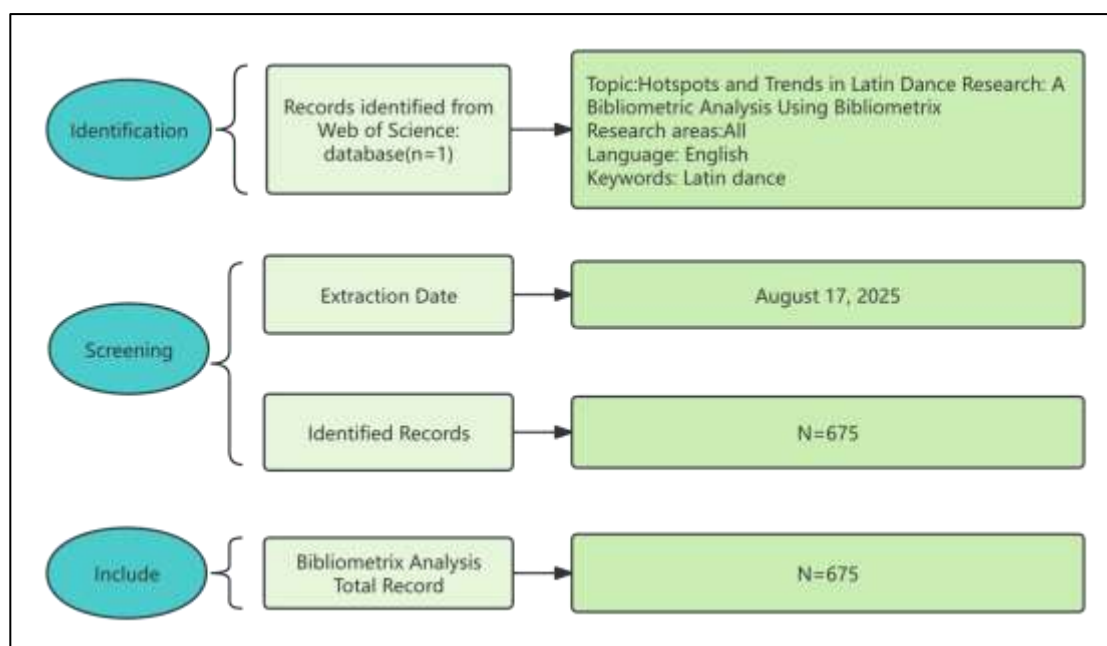


Figure 1. Flowchart of the publication selection process.

To ensure data accuracy and consistency, publications unrelated to Latin dance, those not addressing physical performance or health intervention, and non-English documents were excluded. The final dataset was exported in BibTeX format and analyzed using the Bibliometrix package in the R environment (Aria & Cuccurullo, 2017). Analyses were conducted through the Biblioshiny interface, encompassing author collaboration, country collaboration, keyword co-occurrence, and thematic evolution.

The bibliometric workflow included:

- Descriptive statistics on publication quantity, document types, and annual growth trends;
- Author and institutional collaboration network analysis;
- Keyword frequency and co-occurrence mapping;
- Thematic evolution analysis;
- Citation and social network analysis.

Through these procedures, this study systematically uncovered the knowledge structure, research hotspots, and developmental trends of Latin dance research in the field of sport sciences, highlighting its disciplinary evolution from cultural expression toward health-oriented intervention.

3. RESULTS

3.1 Main information

As shown in Table 1, a total of 675 publications related to Latin dance were identified from 2006 to 2025, distributed across 393 different sources, including journals, books, and conference proceedings. The annual growth rate of publications was 2.56%, indicating a relatively slow yet steady upward trend in research output within this field. The average publication age was 9.2 years, suggesting that most studies are not recent contributions and that the field's research renewal rate remains limited. The average citation per document was 3.98, reflecting a moderate-to-low academic impact. Collectively, all documents contained 18,668 references, demonstrating that Latin dance research draws upon a broad and interdisciplinary knowledge base.

At the keyword level, 631 Keywords Plus and 1,467 author keywords were extracted, revealing a dispersed thematic structure and considerable topic diversity. In terms of authorship, a total of 5,295 scholars contributed to this body of research, among which 411 papers were single-authored, involving 367 individual authors. The average number of co-authors per document was 8.59, suggesting that Latin dance research is primarily conducted

through team-based collaboration. However, the rate of international co-authorship was only 15.85%, indicating that global research collaboration in this domain remains limited and has significant potential for enhancement.

Table 1 Main information about data

Description	Results
Timespan	1996:2025
Sources (Journals, Books, etc)	393
Documents	675
Annual Growth Rate %	2.56
Document Average Age	9.2
Average citations per doc	3.973
References	18668
Keywords Plus (ID)	631
Author's Keywords (DE)	1467
Authors	5295
Authors of single-authored docs	3367
Single-authored docs	411
Co-Authors per Doc	8.59
International co-authorships %	15.85

3.2 Analysis of national research output, trends and citation impact

As shown in Table 2, the national distribution of research output on Latin dance exhibits a clear head concentration effect, with a small number of countries contributing the majority of publications. The United States (682 articles) and the United Kingdom (447 articles) form the first tier, demonstrating consistent and sustained productivity. Spain (282) and Brazil (159) constitute the second tier, while Japan (144), Germany (142), China (119), and Canada (111) form a stable third group. Although Italy (92), Mexico (79), and Chile (71) have been long-term contributors, their overall publication volumes remain limited.

In terms of academic influence, there are substantial disparities among countries. The United Kingdom (average citation = 8.30), Japan (6.60), Australia (5.60), the United States (4.90), and Germany (4.40) show solid and steady performance. Meanwhile, Italy (11.00), the Netherlands (9.00), and Belgium (13.50), though less prolific, demonstrate high per-paper impact, suggesting that their studies are often published in high-visibility international journals. In contrast, Spain (2.10), Brazil (2.90), China (2.90), and Canada (2.60) exhibit moderate to low impact, while several Latin American countries, such as Argentina (0.50), Mexico (0.10), and Chile (1.50), have comparatively lower citation averages.

Table2-Countries' Scientific Production and Citations

Country	Freq	TC	Average Article Citations
USA	682	956	4.90
UK	447	506	8.30
SPAIN	282	46	2.10
BRAZIL	159	109	2.90
JAPAN	144	33	6.60
GERMANY	142	79	4.40
CHINA	119	101	2.90
CANADA	111	37	2.60
ITALY	92	132	11.00
MEXICO	79	1	0.1

CHILE	71	17	1.50
ARGENTINA	55	9	0.50
AUSTRALIA	49	78	5.60
COLOMBIA	42	56	7.00
FRANCE	34	21	3.50
VENEZUELA	32	4	2.00
NORWAY	31	0	0
POLAND	27	9	1.80
BELGIUM	25	27	13.50
NETHERLANDS	25	27	9.00

From a temporal perspective (Figure 2), the period 1996–2015 represents a slow initial phase in which most countries produced relatively few publications each year. After 2015, Latin dance research entered a phase of steady growth. The cumulative publication curves for the United States and the United Kingdom rose sharply, showing a marked acceleration around 2022. During the same period, Spain, Germany, Japan, China, Brazil, and Canada also increased their research output, although their overall growth rates remained lower than those of the United States and the United Kingdom.

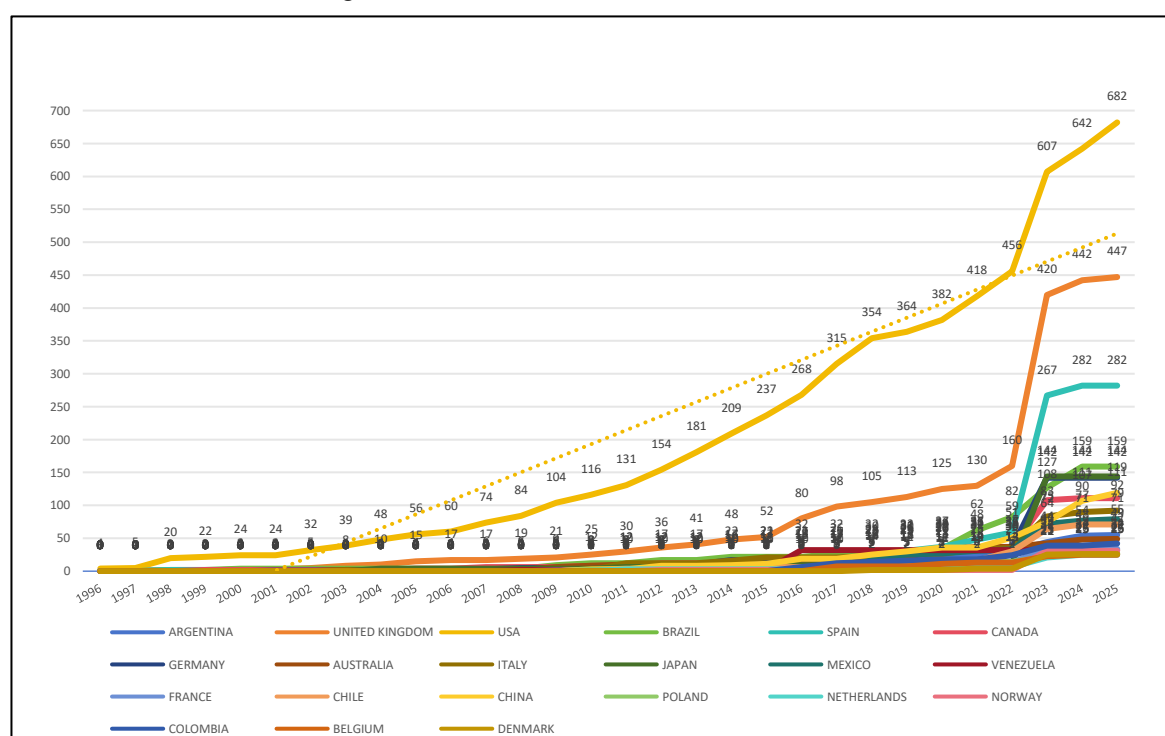


Figure 2 - Countries' Production over Time

Overall, the global landscape of Latin dance research exhibits a dual dynamic driven by language and culture. English-speaking countries and Ibero–Latin American nations constitute the primary contributors, while publication language and journal visibility play a pivotal role in shaping disparities in academic impact. This pattern reflects the interactive relationship between cultural dissemination and scholarly production, highlighting how cultural heritage and linguistic accessibility jointly influence the global distribution of research influence.

3.3 Analysis of journal publication output and temporal trends

From the perspective of publication volume, Latin dance research exhibits a high level of concentration across journals. As shown in Table 3, *Latin American Music Review – Revista de Música Latinoamericana* ranks first with 47 publications, far exceeding any other source. It is followed by *Dance Magazine* and *Latin American Perspectives*, each with 17 publications, while *Dancing Times* (16) and *Latin American Theatre Review* (15)

occupy subsequent positions. After these leading journals, publication counts decline progressively, with most sources contributing fewer than ten articles.

Table 3 - Most Relevant Sources

Sources	Articles
LATIN AMERICAN MUSIC REVIEW-REVISTA DE MUSICA LATINOAMERICANA	47
DANCE MAGAZINE	17
LATIN AMERICAN PERSPECTIVES	17
DANCING TIMES	16
LATIN AMERICAN THEATRE REVIEW	15
LATIN AMERICAN RESEARCH REVIEW	14
ANNALS OF BEHAVIORAL MEDICINE	10
JOURNAL OF LATIN AMERICAN AND CARIBBEAN ANTHROPOLOGY	9
JOURNAL OF LATIN AMERICAN STUDIES	9
JOURNAL OF LATIN AMERICAN CULTURAL STUDIES	8
TAKING FORM, MAKING WORLDS: CARTONERA PUBLISHERS IN LATIN AMERICA	8
TEMAS DE NUESTRA AMERICA-REVISTA DE ESTUDIOS LATINOAMERICANOS	8
RESEARCH IN DANCE EDUCATION	6
URDIMENTO-REVISTA DE ESTUDOS EM ARTES CENICAS	6
BULLETIN OF LATIN AMERICAN RESEARCH	5
FRONTIERS IN PSYCHOLOGY	5
JOURNAL OF AGING AND PHYSICAL ACTIVITY	5
8TH INTERNATIONAL SCIENTIFIC CONFERENCE ON KINESIOLOGY	4
CENTRO JOURNAL	4
CHOREOGRAPHING MEXICO: FESTIVE PERFORMANCES AND DANCING HISTORIES OF A NATION	4

As illustrated in Figure 3, the overall publication volume of Latin dance research remained low between 1996 and 2005, with only a few journals—such as Latin American Music Review and Dance Magazine—showing early accumulation. After 2006, the cumulative number of publications in most academic journals began to increase steadily. Among them, Latin American Music Review exhibited the most significant growth, with its curve rising consistently after 2010 and stabilizing at the highest level after 2020. During the same period, Dance Magazine, Latin American Perspectives, Dancing Times, and Latin American Theatre Review also demonstrated continuous upward trends.

In contrast, other journals such as Annals of Behavioral Medicine, Frontiers in Psychology, and Journal of Aging and Physical Activity participated in the field but contributed a relatively small number of papers, with limited growth. After 2020, aside from the leading sources, a few emerging outlets—such as the 8th International Scientific Conference on Kinesiology and Choreographing Mexico—showed a slight increase in publication activity.

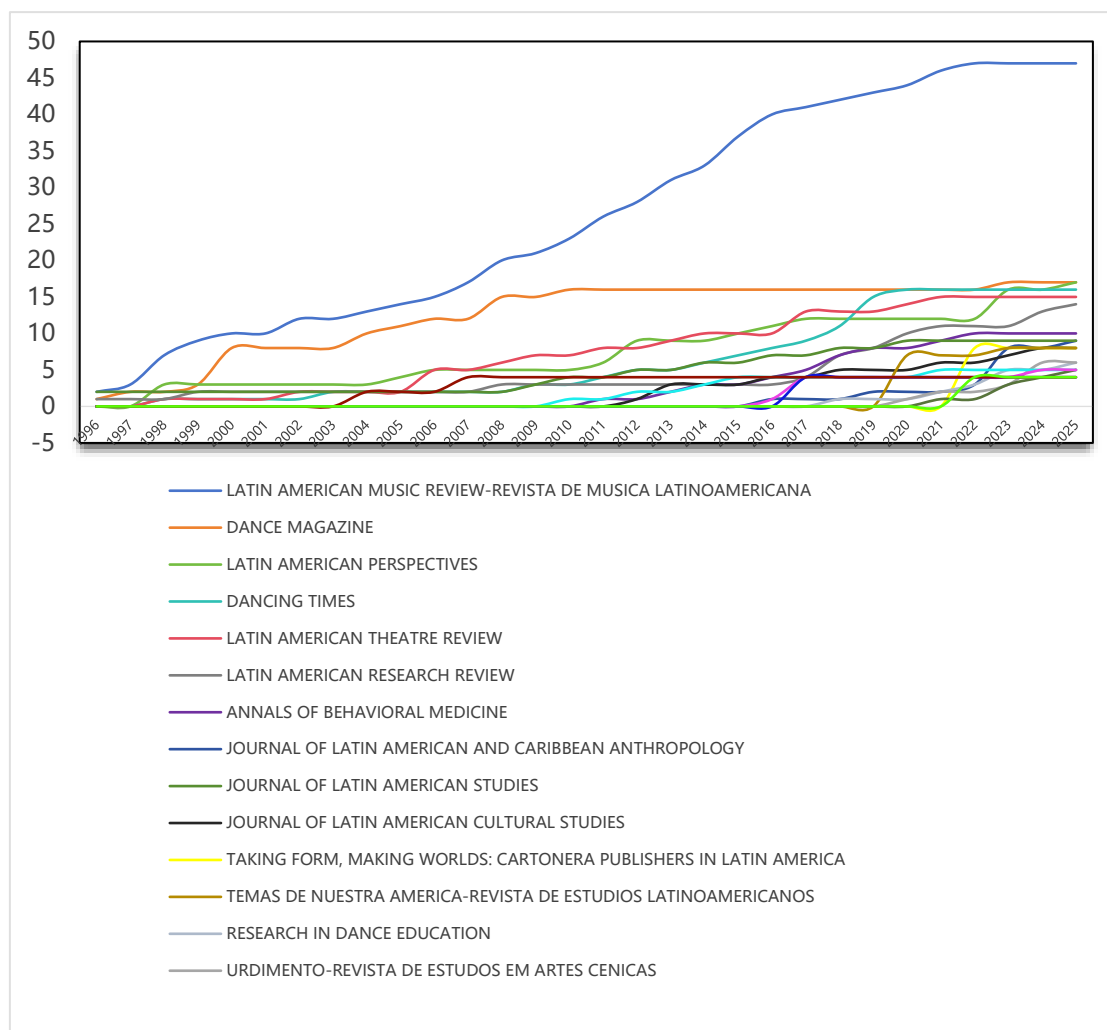


Figure 3 - Sources' Production over Time.

In summary, publications on Latin dance have shown a pattern of long-term cumulative growth, with Latin American Music Review serving as the primary source. Other journals exhibit a more dispersed distribution, reflecting the diversification of research outlets. The thematic scope of Latin dance studies has progressively expanded across disciplines, encompassing performing arts, anthropology, and health sciences.

3.4 Analysis of annual scientific production and citation data

As shown in Figure 4, the annual number of publications remained relatively stable between 1996 and 2008, averaging around ten papers per year. After 2009, research output began to rise gradually, reaching a temporary peak of 27 articles in 2013. Although a slight decline followed, annual publications generally remained above 20. A notable increase occurred after 2018, with consistently high output from 2020 to 2024, peaking in 2023 with 54 publications. The apparent decrease in 2025 (25 articles) is likely attributable to the database update cycle.

The mean number of citations per article (MeanTC per Art) showed relatively minor fluctuations overall. During the early period (1996–2008), citation impact remained low, followed by a gradual increase after 2010, reaching its highest value in the past decade in 2017 (8.19). Subsequently, a slight downward trend was observed, stabilizing between 2.0 and 4.0 after 2020, with 0.72 recorded for 2025. Overall, the growth in publication volume did not correspond proportionally to an increase in average citation impact, indicating that productivity expansion and citation accumulation did not progress synchronously.

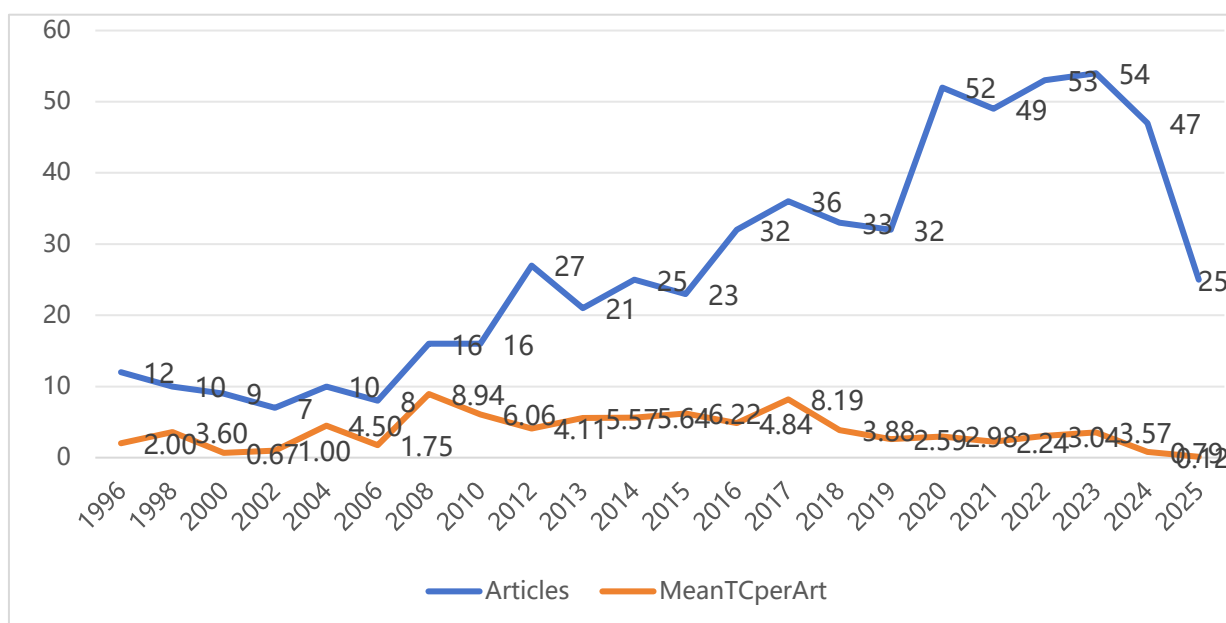


Figure 4 - Annual scientific production and citation data

As shown in Table 4, the most frequently cited publication is Raymond J (2005), with 121 total citations, representing the highest overall citation count in the dataset. It is followed by Aumasson JP (2008) with 98 citations and Olvera N (2010) with 68 citations. When assessed by average citations per year, Kanai M (2023) ranks first with 22 citations per year, followed by Gould CC (2018) (6.63 citations/year) and Kunkel D (2017) (4.78 citations/year). In terms of normalized citation impact (Normalized TC), Kanai M (18.47), Olvera N (11.22), and Aumasson JP (10.97) demonstrate the highest relative influence within the field.

Table 4 - Most Global Cited Document

Paper	Total Citations	TC per Year	Normalized TC
RAYMOND J, 2005, APPL PSYCHOPHYSIOL BIOFEEDBACK	121	5.76	9.58
AUMASSON JP, 2008, FAST SOFTWARE ENCRYPTION	98	5.44	10.97
OLVERA N, 2010, OBESITY	68	4.25	11.22
KANAI M, 2023, NATURE	66	22.00	18.47
GOULD CC, 2018, BIOETHICS	53	6.63	13.66
SANCHEZ R, 2016, DANCING JACOBINS: A VENEZUELAN GENEALOGY OF LATIN AMERICAN POPULISM	48	4.80	9.91
KUNKEL D, 2017, CLIN REHABIL	43	4.78	5.25
GUZMAN-GARCIA A, 2013, DEMENT-INT J SOC RES PRACT	40	3.08	7.18
MARQUEZ DX, 2017, J AGING PHYS ACT	40	4.44	4.88
PIERRO A, 2003, SELF IDENTITY	40	1.74	5.12
DA SILVA BORGES EG, 2012, ARCH GERONTOL GERIATR	35	2.50	8.51
BRIA S, 2011, J SPORTS MED PHYS FIT	35	2.33	5.59
FROMONT C, 2013, COLON LAT AM REV	32	2.46	5.74
DOMENE PA, 2016, J SPORTS SCI	32	3.20	6.61
MARQUEZ DX, 2015, HEALTH EDUC BEHAV	31	2.82	4.99
HULBERT S, 2017, COMPLEMENT THER MED	31	3.44	3.78
CHAN JSY, 2020, NEUROSCI BIOBEHAV REV	30	5.00	10.06
BOSSE J, 2007, J AM FOLK	29	1.53	4.14

AGUINAGA S, 2019, J AGING HEALTH	28	4.00	10.80
MARQUEZ DX, 2014, CONTEMP CLIN TRIALS	28	2.33	4.96

In summary, the annual scientific production of Latin dance research has shown a steady upward trajectory, reaching its peak in recent years. Highly cited papers are predominantly concentrated between 2005 and 2018, reflecting a temporal accumulation effect in the development of research influence.

3.5 Analysis of country collaboration networks

As illustrated in Figure 5, the United States holds an overwhelming lead with nearly 200 publications, establishing itself as the primary research hub in Latin dance studies. The United Kingdom ranks second, producing approximately half as many papers. Brazil, China, Spain, and Argentina follow closely, forming a medium-sized research cluster. Germany, Australia, Canada, Italy, and Chile contribute fewer publications but maintain a steady level of research output. Overall, the distribution of research activity is largely concentrated across Europe, North America, and Latin America.

In terms of collaboration types, countries such as the United States, United Kingdom, Brazil, China, and Spain engage in both a substantial volume of single-country publications (SCP) and a significant proportion of multiple-country publications (MCP). Among these, the United States and United Kingdom exhibit higher levels of international collaboration, whereas Brazil and China primarily collaborate with partners within their respective regional networks.

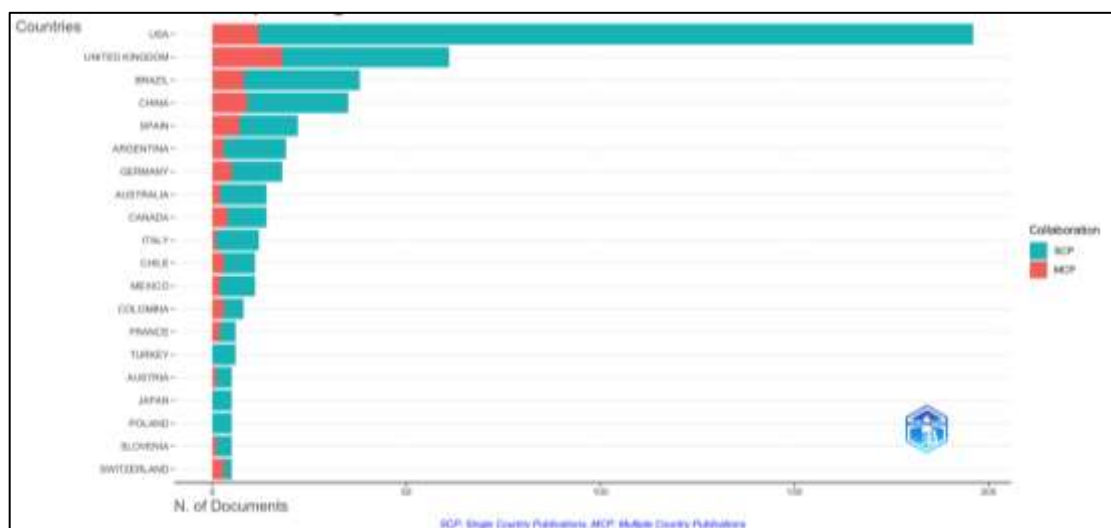


Figure 5 - Corresponding Author's Countries

As shown in Table 5, the United States serves as the central hub of international collaboration, maintaining strong bilateral partnerships with the United Kingdom (16 collaborations), Brazil (9), Canada (7), Argentina (6), Colombia (5), Australia (4), and Spain (4). Spain exhibits close connections with Latin American countries, particularly Chile (9 collaborations) and Brazil (7), indicating an active transatlantic research link. Brazil also plays a key regional role in South America, engaging in frequent collaborations with Chile (8), Colombia (4), and Argentina (3). In contrast, China's international cooperation is primarily intercontinental, with its strongest links observed with the United Kingdom (4 collaborations) and Hungary (4 collaborations).

Table 5 - Countries' Collaboration

From	To	Frequency
USA	UNITED KINGDOM	16
SPAIN	CHILE	9
USA	BRAZIL	9
BRAZIL	CHILE	8
SPAIN	BRAZIL	7

USA	CANADA	7
USA	ARGENTINA	6
BRAZIL	CANADA	5
USA	COLOMBIA	5
AUSTRALIA	SWITZERLAND	4
BRAZIL	COLOMBIA	4
CHILE	ARGENTINA	4
CHILE	IRELAND	4
CHINA	HUNGARY	4
SPAIN	IRELAND	4
UNITED KINGDOM	AUSTRALIA	4
UNITED KINGDOM	CHINA	4
USA	AUSTRALIA	4
USA	SPAIN	4
ARGENTINA	IRELAND	3

In summary, the international collaboration network of Latin dance research exhibits a tripolar structure encompassing the United States, Europe, and Latin America. The United States occupies a central position, while the United Kingdom, Spain, and Brazil serve as key regional hubs. Collaborative activity is frequent within regions and shows a gradual increase in cross-continental partnerships.

3.6 Analysis of author collaboration

As illustrated in Figure 6, Marquez DX stands out as the most prolific author, with 23 publications and a fractionalized value of 5.23, indicating his primary authorship role across multiple collaborative works. He is followed by Aguinaga S with 17 publications (3.84). Bell L, Flynn AU, and O'Hare P each contributed eight papers, forming the second tier of active researchers in this field. Authors such as Cordioli M, Marques IG, and Wilbur JE have comparatively lower publication counts but remain consistently involved in Latin dance-related research activities.

Table 6 - Most Relevant Authors

Authors	Articles	Articles Fractionalized
MARQUEZ DX	23	5.23
AGUINAGA S	17	3.84
BELL L	8	2.67
FLYNN AU	8	2.67
O'HARE P	8	2.67
CORDIOLI M	7	0.00
MARQUES IG	7	0.74
WILBUR JE	6	0.72
[ANONYMOUS] A	6	6.00
CUELLAR MR	5	5.00
DOMENE PA	5	1.57
JALDIN MA	5	0.91
KANAI M	5	0.00
KAUSHAL N	5	0.62
RACHEL R	5	0.14

WANKE EM	5	1.15
ANTONIO A	4	0.00
BALBIM GM	4	0.42
BUSTAMANTE EE	4	0.84
GU Y	4	0.68

As shown in Figure 6, the author collaboration network displays a multi-centered distribution, with notable variations in the strength and density of collaborative relationships among researchers. Marquez DX occupies the central position, forming a tightly connected cluster with Kaushal N, Bustamante EE, Jaldin MA, and Hughes ST, which together constitute the largest research group within the network. Several smaller clusters are also observed, including one centered on Amanda Zorojoli LM and Banasik K; a dyadic collaboration between Bell L and O'Hare P; two dual-node connections (Liu X – Son KG and Gu Y – Xu D); and an independent pair formed by Groneberg DA and Wanke EM.

From a structural perspective, the network is characterized by a core–periphery configuration, in which a central, highly collaborative group led by Marquez DX is surrounded by multiple smaller and localized research units. This pattern suggests a relatively decentralized yet complementary collaboration structure, reflecting both concentration of expertise and diversification of research efforts across the field.

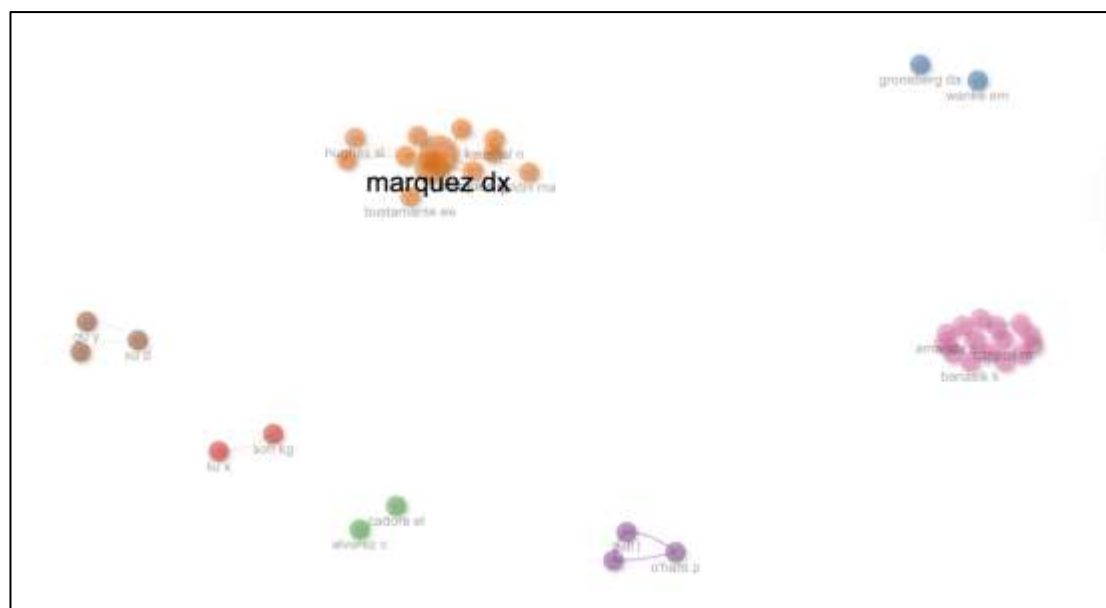


Figure 6 - Author Collaboration Network.

In summary, the author collaboration network in Latin dance research is characterized by a multi-cluster structure led by a group of core researchers, whose productivity and collaboration frequency are significantly higher than those of smaller, peripheral teams.

3.7 Analysis of high-frequency keywords

As shown in Table 7 and Figure 7, the most frequent keywords in Latin dance research cluster around three core themes: exercise, health, and physical activity. The most frequently occurring term is “exercise” (31 occurrences), followed by “performance” (21) and “physical activity” (20), which together form the conceptual foundation of the field.

Closely related terms such as “music” (18) and “program” (18) indicate the dual nature of Latin dance research, encompassing both health intervention and artistic expression. Associated keywords—including “adults” (13), “balance” (12), “intervention” (11), “dance” (10), and “health” (10)—suggest that current studies primarily focus on adult populations, emphasizing coordination, motor control, and health promotion.

In addition, terms such as “fitness” (9), “older adults” (8), “quality of life” (8), and “ballet” (7) reflect growing research interest in exercise-based interventions for aging populations and their effects on quality of life. Keywords like “children” (7) and “adolescents” (6) demonstrate that youth populations have also become research

targets. Meanwhile, “validity” (6), “interventions” (6), “women” (6), and “cognitive function” (5) highlight an ongoing shift toward empirical validation and the integration of psychological and cognitive health dimensions within Latin dance studies.

In summary, the keyword structure of Latin dance research centers on three major thematic dimensions—physical activity, health intervention, and artistic expression. It encompasses diverse age groups and interdisciplinary research directions, reflecting the integrated convergence of exercise science and cultural arts within this field.

Table 7 - Most Frequent Words

Words	Occurrences
exercise	31
performance	21
physical-activity	20
music	18
program	18
adults	13
balance	12
intervention	11
dance	10
health	10
fitness	9
older-adults	8
quality-of-life	8
ballet	7
children	7
adolescents	6
interventions	6
validity	6
women	6
cognitive function	5



Figure 7 - Word Cloud

3.8 Trend Topics

As illustrated in Figure 8, the thematic evolution of Latin dance research between 2006 and 2025 reveals a structural shift from a cultural orientation toward a health-oriented focus.

During the early stage (2007–2013), research themes were primarily concentrated on social and cultural topics such as “identity,” “women,” “disability,” and “children,” emphasizing the relationships between dance, gender, social identity, and education. Concurrent keywords such as “dance,” “music,” and “culture” further reflect the dominance of artistic expression and cultural dissemination as the main research perspectives of this period.

Between 2014 and 2018, the thematic focus gradually transitioned toward health-related areas, with keywords such as “adults,” “ballet,” “older adults,” and “physical activity” indicating growing interest in the effects of dance on physical activity and health outcomes across different age groups.

After 2019, health- and intervention-related themes increased markedly, with terms such as “exercise,” “program,” “performance,” “interventions,” “health,” “prevalence,” and “risk” emerging as high-frequency core concepts. From 2021 to 2024, the rising prominence of “balance” and “quality of life” suggests a further refinement of research priorities toward functional improvement and quality-of-life enhancement.

Overall, Latin dance research has undergone a conceptual evolution from studies of culture and identity toward those emphasizing health intervention and physical functionality. In recent years, the field has become increasingly empirical and health-science-oriented, demonstrating a clear trend toward interdisciplinary integration.

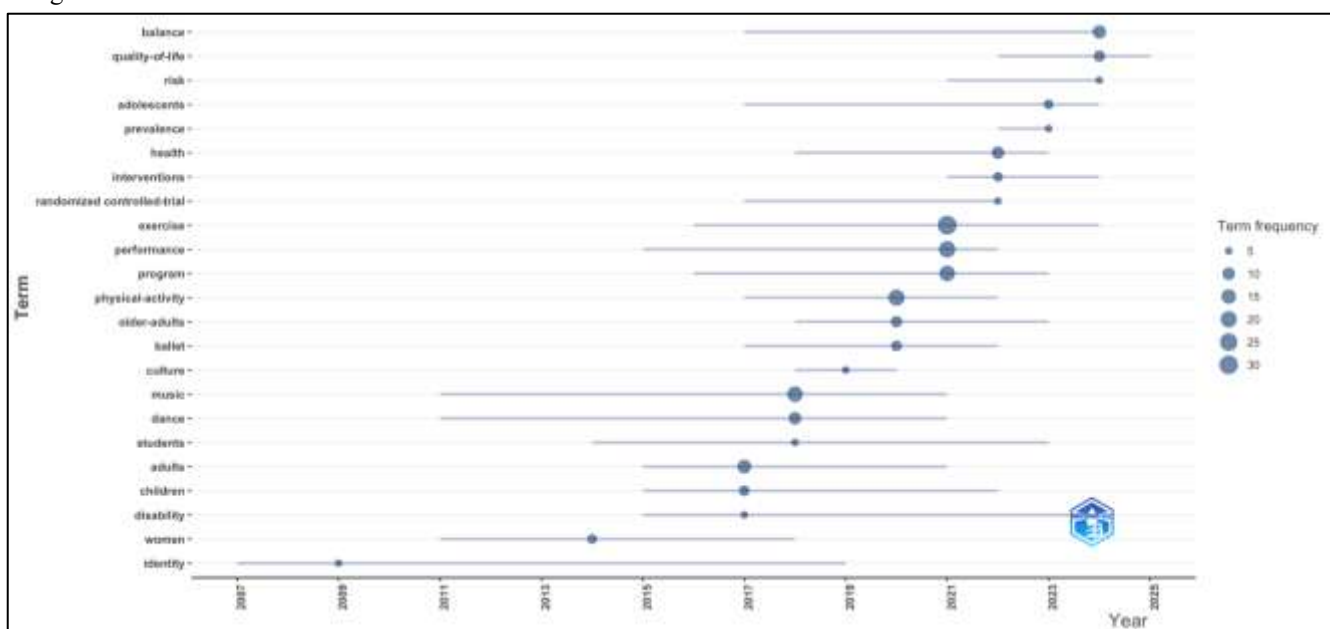


Figure 8 – Trend Topics.

4. DISCUSSION

This study systematically explores the knowledge structure, evolutionary trajectory, and developmental trends of Latin dance research from eight analytical dimensions. Overall, over the past three decades (1996–2025), the field has evolved from a phase of limited scholarly attention to one of rapid expansion, reflecting an interdisciplinary transition from cultural studies to health-oriented intervention. This transformation underscores the sustained academic interest in the multifaceted social, cultural, and health values embodied in Latin dance.

(1) Research Growth and Knowledge Evolution: From Cultural Identity to Health Translation

The quantitative growth of Latin dance research follows a three-stage pattern of initiation–expansion–stabilization, suggesting that the topic has transitioned from a marginal subject to a multidisciplinary research focus. Early studies emphasized the cultural expression and identity dimensions of dance, while research after 2015 increasingly adopted an “exercise prescription” perspective, shifting toward physical activity, intervention programs, and health outcomes.

This transition reflects not only a change in disciplinary interest but also a paradigm shift—from narrative-driven humanistic interpretation to evidence-based health science. Dance has been redefined as a measurable physical

intervention, integrated into the frameworks of psychology, rehabilitation, and public health. Cultural elements, rather than disappearing, have become embedded as key variables influencing adherence and long-term intervention efficacy through mechanisms such as rhythm, music, and emotional engagement.

(2) National Distribution and Academic Influence: Language Ecology and Knowledge Dominance

At the national level, research output and citation performance exhibit a pronounced concentration pattern. The United States and United Kingdom consistently maintain global leadership, reflecting their advantages in academic resources, international collaboration, and publication language. Meanwhile, Latin American and Iberian countries contribute unique cultural insights and innovation grounded in dance traditions, yet their academic visibility remains limited due to language barriers and journal accessibility.

This imbalance suggests that, although Latin dance originated in Latin America, its knowledge narrative has been reconstructed within the English-language academic system. Enhancing multilingual collaboration and promoting open-access dissemination could help rebalance global knowledge flows and diversify scholarly discourse.

(3) Core Journals and Disciplinary Expansion: From Humanities to Health Sciences

The journal distribution reveals that *Latin American Music Review* has become a primary academic outlet since 2015, highlighting the role of Latin dance in globalization and cultural identity research. Meanwhile, the inclusion of *Annals of Behavioral Medicine*, *Research in Dance Education*, and *Frontiers in Psychology* marks the field's expansion into psychological, educational, and health science domains.

This evolution of journal ecology indicates that Latin dance research has transcended the boundaries of performing arts, establishing a three-dimensional structure of culture–body–health, serving as a conceptual and methodological bridge between the humanities and life sciences.

(4) Research Output and Citation Dynamics: Expansion, Dilution, and Reaccumulation

Temporal analysis reveals a three-phase trajectory of low activity–steady growth–rapid expansion. Since 2020, publication volume has surged, while short-term citation averages have declined—reflecting a typical cycle of expansion, dilution, and reaccumulation. As new topics emerge rapidly, immediate citation density disperses; however, over time, high-quality studies regain prominence and accumulate long-term influence.

Highly cited works are concentrated in areas such as health promotion, rehabilitation, and aging research, establishing Latin dance as a model for physical intervention and cognitive function studies. Simultaneously, cultural and identity-based research maintains longitudinal depth, forming a dual-core structure of health sciences and the social humanities.

(5) International Collaboration: Tripolar Structure and Cross-Linguistic Exchange

The international collaboration network demonstrates a clear “one dominant, multiple strong” configuration. The United States occupies a leading position in both productivity and centrality, while the United Kingdom and Spain enhance their visibility through high levels of international co-authorship. Brazil and Chile act as key hubs in Latin America, mediating both South–South and South–North collaborations, exemplifying multilayered, multilingual cooperation.

Overall, the field exhibits a tripolar structure connecting the United States, Europe, and Latin America. International collaboration substantially enhances visibility and citation impact, and fostering cross-linguistic and interregional partnerships will be crucial to building a more balanced and inclusive global research network.

(6) Author Collaboration Structure: Core Aggregation and Peripheral Innovation

The author network reveals a high concentration of productivity and impact, with the top ten authors accounting for over 80% of total contributions, indicating a core-cluster-driven stage of development. The leading research team, headed by Marquez DX, forms a stable collaborative chain and drives the research agenda on health-oriented interventions. Meanwhile, peripheral authors—through small-scale collaborations—continue to expand research boundaries in education, culture, and special population interventions, embodying a core–periphery dynamic of leadership and innovation.

This multilayered structure indicates that the field is transitioning from thematic concentration to diversification, with potential for greater cross-team integration in the future.

(7) Keyword Structure and Research Hotspots: Health Orientation and Applied Deepening

High-frequency keywords such as exercise, performance, and physical activity dominate the literature, illustrating the incorporation of Latin dance into the frameworks of exercise prescription and health promotion. The main research subjects are adult and older populations, with outcome measures focusing on balance, cognitive function, physical fitness, and quality of life—underscoring its potential as a tool for enhancing functional and psychological well-being.

Cultural terms such as music and dance remain prominent, signifying that aesthetic and social identity factors continue to underpin research motivation. The field is thus forming an integrated chain of cultural motivation—physical mechanism—health outcome, demonstrating a progressively multi-layered and holistic research pattern.

(8) Thematic Evolution: From Cultural Narratives to Health Translation

The thematic evolution map reveals a shift from early cultural and identity-centered topics toward health intervention and clinical functionality. Since 2019, keywords such as exercise, program, balance, and quality of life have remained at the forefront, delineating the current frontier of research.

This trajectory illustrates the translation of Latin dance from a symbol of cultural expression to a practical instrument for public health intervention. With the growing challenges of population aging and chronic disease management, future research will likely deepen its focus on health improvement, risk reduction, and policy implementation.

5. In conclusion, Latin dance research over the past three decades has undergone a significant transformation from cultural representation to health science, establishing an interdisciplinary trajectory characterized by cultural initiation, scientific validation, and societal translation. Temporally, the field demonstrates steady cumulative growth; spatially, it reflects a multi-centered configuration led by English-speaking countries with Latin America as its cultural foundation.

Core authors and journals have driven thematic consolidation, while international collaborations have facilitated knowledge diffusion and disciplinary convergence. Thematic focus has evolved from “dance and identity” toward “exercise intervention and health promotion,” revealing vast application potential in aging, rehabilitation, and mental health. Overall, this developmental pathway exemplifies both the structural hierarchy of the global academic system and the organic extension of cultural art into health science, offering new theoretical insights and practical pathways for advancing public health, social well-being, and cultural sustainability.

6. CONCLUSION

This study, based on a bibliometric approach, systematically reveals the knowledge evolution and developmental landscape of Latin dance research over the past three decades. The findings indicate a clear disciplinary transition—from early explorations of culture and identity toward a health science orientation centered on exercise prescription, health intervention, and quality-of-life improvement. This progression has led to the formation of an integrated “culture–body–health” framework, reflecting the multidimensional nature of the field.

Globally, the United States and the United Kingdom hold leading positions, while Latin American countries actively participate through their cultural heritage and practical experience, together shaping a multi-polar collaborative structure in which the English-language academic system serves as the primary axis and Latin America as the cultural foundation. The author collaboration network exhibits a core–periphery pattern, with a small number of core teams driving thematic development and methodological standardization across the field.

In conclusion, Latin dance research is currently at a critical stage of interdisciplinary integration and public health translation, embodying the dual tendencies of the scientification of cultural art and the humanization of health research. Strengthening cross-linguistic collaboration and culturally adaptive research will further advance the global development and practical application of Latin dance in health promotion and intercultural communication.

7. ADVANTAGES AND LIMITATIONS

This study represents the first international application of bibliometric methods to systematically analyze Latin dance research, covering cultural, sports, and health dimensions. It fills a gap in the existing literature by providing a structured review of the transition from cultural studies to health-oriented applications, while also revealing

research hotspots, collaboration networks, and thematic evolution. However, several limitations should be considered when interpreting the findings. First, the study relied solely on the Web of Science database, which may have excluded literature from other databases or regional sources (e.g., Scopus, PubMed, CNKI), potentially underrepresenting non-English publications and certain regions, thereby affecting the comprehensiveness of global research trends. Second, the search strategy used only “Sports dance” as the keyword, without including specific dance styles or synonyms, which may have led to the omission of relevant studies and limited the inclusion of subtopics and localized research. Third, the bibliometric approach employed primarily quantitative metrics and co-occurrence networks, lacking qualitative content analysis, which may restrict a deeper understanding of theoretical frameworks and cultural contexts.

To address these limitations, future research could consider:

1. Expanding database coverage to include multiple languages and grey literature to better capture the global state of Latin dance research;
2. Optimizing search strategies to incorporate different dance styles and synonyms, enhancing the breadth and representativeness of the research;
3. Combining quantitative bibliometric analysis with qualitative content analysis to gain deeper insights into the theoretical rationale and cultural significance underlying research themes;
4. Focusing on regional studies and cross-cultural comparisons to uncover differences and trends in Latin dance research across countries and cultural contexts.

Author Contributions

Qi Liang¹ contributed to the conceptualization and design of the study, data collection, statistical analysis, and manuscript drafting.

Muhamad Hafiz Bin Ismail² provided overall supervision, methodological guidance, and critical review of the manuscript.

Diyana Zulaika Binti Abdul Ghani³ assisted in data processing, visualization, and literature analysis.

Mimi Guo⁴ contributed to language editing, formatting, and final approval of the manuscript.

All authors have read and approved the final manuscript and agree to be responsible for the integrity and accuracy of the work.

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Conflict of Interest Statement

The authors declare that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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