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EVOLUCIÓN DE LA RELACIÓN ENTRE PSICOLOGÍA Y ECONOMÍA EN LA ÚLTIMA DÉCADA: UN ANÁLISIS TENDENCIAL Y BIBLIOMÉTRICO

EVOLUTION OF THE RELATIONSHIP BETWEEN PSYCHOLOGY AND ECONOMICS IN THE LAST DECADE: A TREND ANALYSIS AND BIBLIOMETRIC STUDY

MARENA DE LA C. HERNÁNDEZ LUGO[1]
https://orcid.org/0000-0001-9036-3953

DIEGO D. DÍAZ GUERRA[2]
https://orcid.org/0000-0001-5169-838X

ARIADNA GABRIELA MATOS MATOS[3]
https://orcid.org/0000-0003-3442-9801

[1]*Licenciada en Psicología. Departamento de Psicología, Universidad Central "Marta Abreu" de Las Villas, Cuba,*
E *marenahernandezlugo@gmail.com*

[2]*Licenciado en Psicología. Departamento de Psicología, Universidad Central "Marta Abreu" de Las Villas, Cuba.*
E *diegod.diazg@gmail.com*

[3]*Doctora en Psicología. Departamento de Psicología/Sociología. Universidad "Ignacio Agramonte" de Camagüey, Cuba.*
E *ariadnamatos09@gmail.com*

RESUMEN

Este artículo explora la evolución de la relación entre la psicología y la economía durante el período 2014-2024, emplea un análisis bibliométrico de la base de datos Scopus. Centrándose en cómo las interacciones y los fenómenos psicológicos afectan las decisiones económicas, el estudio utiliza el software VOSviewer para visualizar las tendencias y las redes de colaboración en el campo de la economía conductual. Se revela un creciente interés en cómo los factores emocionales, los sesgos cognitivos y las influencias sociales influyen en las decisiones

PALABRAS CLAVE

Economía Conductual, Psicología Económica, Análisis Bibliométrico, Scopus, Vosviewer.

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económicas. Este análisis no solo muestra la integración de conocimientos psicológicos en la teoría económica, sino que también subraya el impacto de estas investigaciones en el desarrollo de políticas públicas más eficaces. Al identificar las principales áreas de investigación y colaboración, se proporciona una visión comprensiva de la dinámica entre estas dos disciplinas, destaca la importancia de una aproximación interdisciplinaria para entender y mejorar la toma de decisiones económicas en un entorno global.

ABSTRACT

This article explores the evolution of the relationship between psychology and economics during the period 2014-2024, employing a bibliometric analysis of the Scopus database. Focusing on how psychological interactions and phenomena affect economic decisions, the study utilizes the VOSviewer software to visualize trends and collaboration networks in the field of behavioral economics. By analyzing the scientific literature, a growing interest is revealed in how emotional factors, cognitive biases, and social influences impact economic decisions. This analysis not only demonstrates the integration of psychological knowledge into economic theory but also underscores the impact of this research on the development of more effective public policies. By identifying key areas of research and collaboration, this article provides a comprehensive insight into the dynamics between these two disciplines, emphasizing the importance of an interdisciplinary approach to understanding and enhancing economic decision-making in a global context.

KEYWORDS

Behavioral Economics, Economic Psychology, Bibliometric Analysis, Scopus, VoSviewer.

INTRODUCTION

Over the past decade, the interaction between psychology and economics has emerged as a fertile field of research. This reflects how economic dynamics influence and are influenced by individual and collective psychological processes (Debortoli & Brignole, 2024; Ross, 2022).

This multidisciplinary approach reveals the intimate interconnection between the human mind and economic forces, highlighting how factors such as cognitive biases, emotions, and perceptions influence financial decisions, consumer preferences, and the formation of efficient markets. At the same time, it is increasingly recognized how economic conditions and financial policies impact mental health, emotional well-being, and social behavior (Ahmad & Oriani, 2022; Bartholomeyczik *et al.*, 2022; Higuera Carrillo, 2022).

The synergy between psychology and economics opens a vast field of possibilities for interdisciplinary research. This fertile ground not only broadens and enriches the theoretical understanding of both disciplines but also promotes an integrated approach to addressing the most complex socioeconomic challenges faced by contemporary society (Eslava-Zapata *et al.*, 2023; Sueyoshi & Wang, 2020; Voulvoulis & Burgman, 2019).

The study of behavioral economics, which lies at the intersection of psychology and economics, provides valuable insights into how people make decisions that do not always align with the rationality expectations of traditional economic theory. This approach reveals the importance of factors such as emotions, cognitive biases, and social influences, which affect economic decisions ranging from investment and savings to consumption and negotiation (Aoujil *et al.*, 2023; Arnott & Gao, 2019; Pérez Valdivia *et al.*, 2024; Winter, 2020).

Furthermore, the integration of psychological knowledge into economics not only enriches economic theory but also fosters the development of more effective public policies that account for the complexity of human behavior. In this context,

bibliometric analysis offers a powerful tool to examine how research in this field is advancing, which topics dominate the discussion, and how international collaborations influence the evolution of these disciplines (Cardeño-Portela *et al.*,2023; Lecouteux, 2023; Williamson, 2019).

This article explores the evolution of the relationship between these two disciplines from a bibliometric perspective, using the Scopus database to identify trends, patterns, and developments from 2014 to 2024. It seeks to map the structure of research in psychology and economics, identify key actors, collaboration networks, and emerging thematic areas. With this approach, the aim is to provide a comprehensive view of how contributions from these fields converge to form a body of knowledge that is fundamental for understanding and improving decision-making in a complex and globalized economic context.

METHODOLOGY

To conduct the bibliometric analysis, a rigorous methodological approach comprising multiple interconnected stages was implemented. In this process, the prestigious Scopus database, recognized for its extensive coverage and reliability in academia, was used, along with the specialized software VOSviewer for the visual representation of the collected data (Bretas & Alon, 2021; Gómez-Cano *et al.*, 2023; Ledesma & Malave-González, 2022).

Phase 1. Definition of search criteria and data collection

The process began with defining the search criteria to gather relevant articles. Keywords such as “Psychology,” “Economics,” and “Behavioral Economics” were selected to capture the interaction between these disciplines. A temporal range from 2014 to 2024 was established. The search was conducted in the title, abstract, and keywords of articles available in Scopus, ensuring that the documents were directly related to the study's topics of interest.

Phase 2. Data extraction and filtering

Once the data were collected, they were filtered to exclude documents that were not research articles, such as conference papers, book chapters, or reviews, focusing the analysis on published scientific articles. It was verified that the selected articles were written in English to maintain consistency in the analysis.

Phase 3. Bibliometric analysis with VOSviewer

With the filtered data, VOSviewer software was used to conduct bibliometric analysis. This software enabled the creation of co-citation and keyword co-occurrence maps to identify the most prominent trends and topics in the field of study. Parameters in VOSviewer were configured to analyze collaboration networks among authors, institutions, and countries, providing a graphical visualization of how collaborations and research topics are interconnected globally.

Phase 4. Interpretation and synthesis of results

The final phase involved interpreting the maps and data obtained from the bibliometric analysis. The most influential authors, most cited articles, and leading institutions contributing to research in this field were identified. Additionally, connections between different subfields within economic psychology were analyzed, and emerging areas and research trends were identified. This phase culminated in synthesizing the findings within a broader context to understand how the interaction between psychology and economics has evolved over the past decade.

This methodology provided a detailed and well-organized overview, allowing for an exploration of the complex dynamics and evolution of research in the fields of psychology and economics. By unraveling the intricacies of these interdisciplinary fields, critical areas and emerging trends were identified, highlighting nodal points that could be fundamental for guiding future research in these domains of knowledge (Eslava-Zapata *et al.*, 2023; Lomas *et al.*, 2020; Sánchez Catillo *et al.*, 2024).}

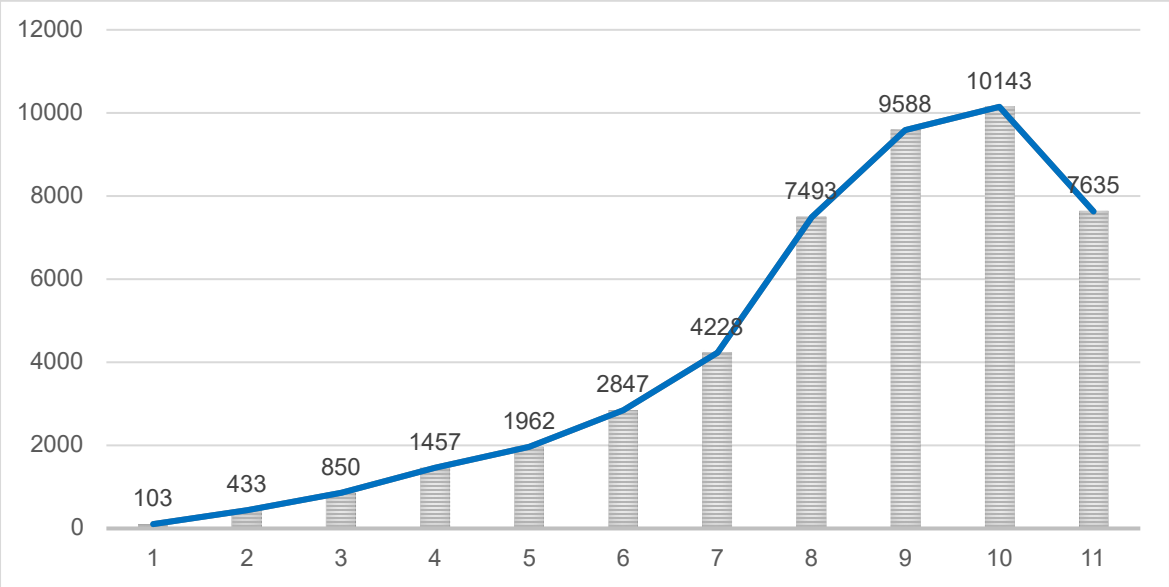
RESULTS

Bibliometric analysis

Over the past decade, the bibliometric analysis of the relationship between psychology and economics in the Scopus database revealed several key trends. The observed evolution in the relationship between these fields of study during the last decade is remarkable, with a significant increase in the number of articles published annually (see Figure 1). Starting modestly in 2014 with 103 articles, this field experienced exponential growth, peaking in 2023 with 10,143 articles and remaining robust in 2024 with 7,635 publications. This upward trend reflects growing interest and commitment from the academic community to explore the intersection between these two seemingly disparate fields (Wang *et al.*, 2022).

Figure 1

Documents published by year



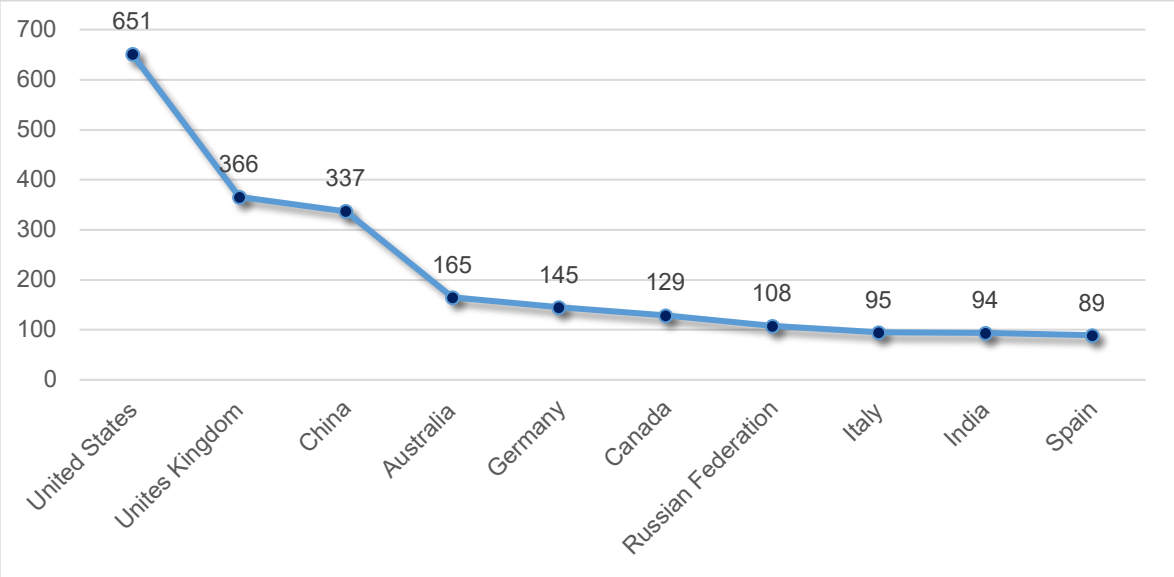
Note: The figure shows the number of documents published from 2014 to 2024 on the addressed topic.

Source. Own elaboration.

The countries most involved in this area of study, such as the United States, the United Kingdom, and China, indicate a global distribution of interest and research in this topic (see Figure 2). This geographical diversity highlights the international importance and relevance of the relationship between psychology and economics, as well as the need for diverse perspectives and approaches to fully understand its implications (Bullock, 2019).

Figure 2

Countries most involved in this field of study

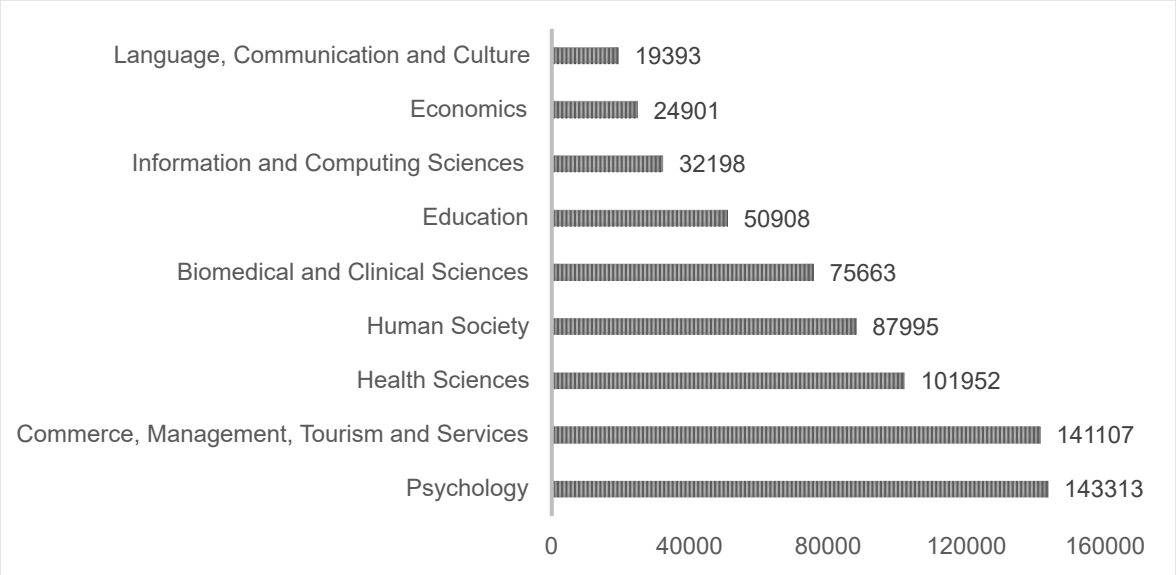


Note: The figure shows the number of publications in the countries most involved in the field of study.

Source: Own elaboration.

Regarding the most prominent research fields, which range from Psychology to Commerce, Management, Tourism and Services, Health Sciences, and Human Society, a wide array of disciplines involved in this interdisciplinary dialogue is evident (see Figure 3). This multifaceted approach underscores the complexity and interconnectedness of these fields, as well as the countless possibilities for collaborative research and the generation of innovative knowledge (Dalton *et al.*, 2021).

Figure 3
Most prominent research fields



Note: The figure indicates the number of publications in the most prominent research fields on the addressed topic.

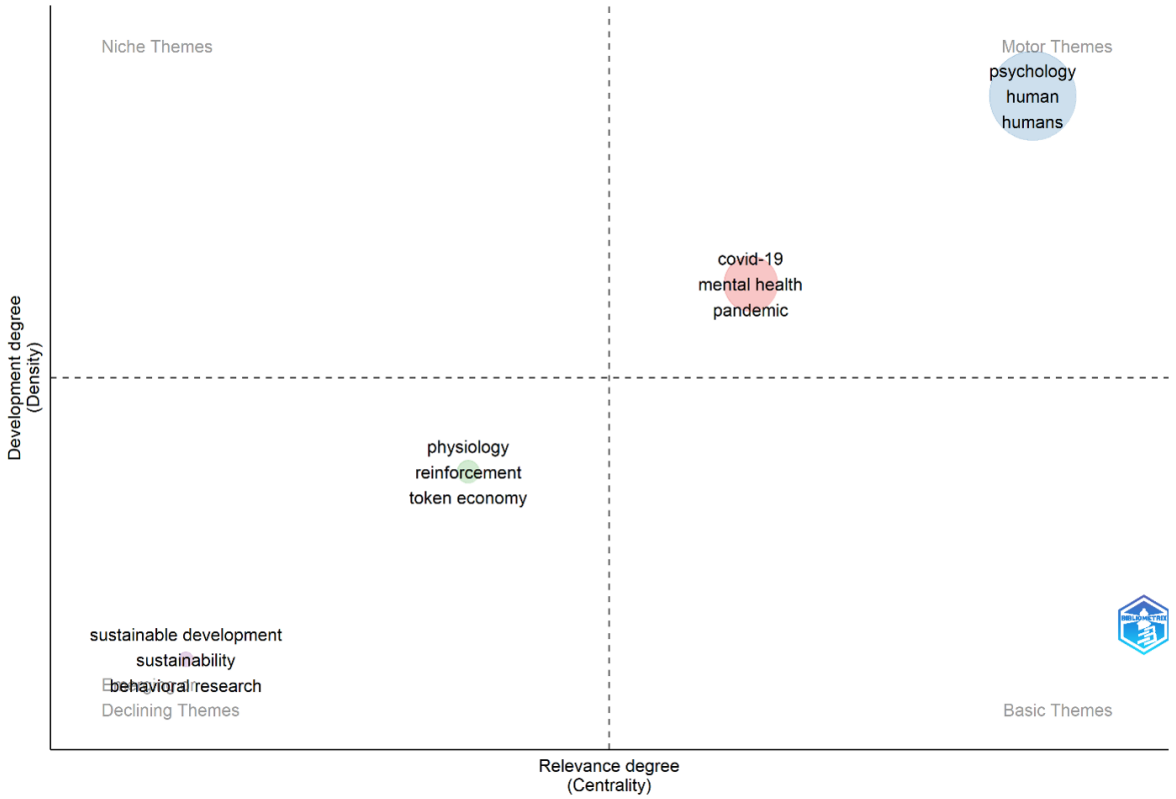
Source: Own elaboration.

The main trends identified, such as mental health, symbolic economics, sustainable development, and political economy, reflect critical and emerging areas of interest at the intersection of Psychology and Economics (see Figure 4). These topics suggest a focus on fundamental issues related to human well-being, social and economic impact, and the long-term sustainability of our societies and systems.

The predominant keywords, such as psychology, political economy, mental health, and economics, highlight the fundamental concepts guiding research in this field (see Figure 5). These core terms indicate key focus areas and common points of interest that unite researchers in their exploration of the complex interaction between the human mind and economic processes.

Figure 4

Thematic map of main research trends



Note: The figure shows the research trends identified during the study period through bibliometric analysis.

Source. Bibliometrix

Figure 5
Keyword co-occurrence

Note: The figure shows the predominant keywords in the reviewed articles during the study period
Source. VOSviewer.

As observed, the bibliometric analysis reveals a dynamic landscape in research on the relationship between Psychology and Economics, characterized by steady growth, global diversity, enriching interdisciplinarity, and a renewed focus on sustainability and digital innovation. These findings offer valuable insights for future research and collaborations, as well as for a deeper understanding of the challenges and opportunities inherent in this fascinating area of study.

Growth in innovation ecosystem research

In recent years, a significant increase has been observed in studies exploring the impact of innovation ecosystems on global economic and social progress. This research field continues to develop, with growth suggesting a fertile ground for visionary researchers seeking to delve into it (Domanski *et al.*, 2020; Hoyos Chavarro *et al.*, 2022; Konietzko *et al.,* 2020).

While Nordic countries and the United Kingdom stand out for their research activity in this area, the United States and China lead in terms of citations and impact. This growing interest reflects greater recognition of the complexity and dynamism inherent in interactions within innovation ecosystems, addressing a wide range of topics from digitalization to sustainable development (López-Rubio *et al.*, 2021; Sandnes, 2021; Zhang *et al.*, 2019).

This trend demonstrates an evolution in the perception of how innovation intertwines with crucial aspects such as environmental sustainability, social equity, and economic prosperity. Additionally, it underscores the importance of understanding and fostering these dynamic environments to drive global progress (Chege & Wang, 2020; Linares Giraldo *et al.*, 2023; Xiao & Su, 2022).

Interdisciplinarity and international collaboration

Research in this field highlights a marked interdisciplinary focus, merging elements of psychology with economic and management practices. This amalgamation of disciplines significantly enriches the analysis, allowing for a deeper and more holistic understanding of the phenomena studied. The synergy between psychology and economic and management approaches yields new perspectives on decision-making, consumer behavior, organizational efficiency, and other fundamental aspects influencing the business and economic world (McNeish & Kelley, 2019; Pouso *et al.*, 2020; Truc, 2021).

International collaboration emerged as a determining factor in this landscape, enhancing productivity, the impact of published research, and fostering diversity of approaches and richness of ideas. This emphasis on global networks highlights

the importance of connectivity and knowledge exchange in generating significant advances in fields that transcend traditional disciplinary boundaries (Aulawi, 2021; Dua *et al.*, 2022; Mogrovejo Andrade, 2022).

Focus on sustainability and digital innovation

With the growing focus on sustainability, research explores how innovation and digital transformation can support sustainable development goals. This includes studies on how technology can improve energy efficiency, food security, and mitigate the effects of climate change. These areas of study demonstrate how economic policies and strategies can benefit from a more human behavior psychology and social interactions-centered approach (Mondejar *et al.*, 2021; Sachs *et al.*, 2019; Singh *et al.*, 2022).

These trends underscore a significant evolution toward an increasingly sophisticated understanding of the intricate relationship between human behavior and economic systems. This emerging approach stimulates a stream of research that transcends national and disciplinary boundaries, advocating for a global and interdisciplinary perspective that encompasses multiple viewpoints and methodologies (Addessi *et al.*, 2019; Pérez-Guedes & Arufe-Padrón, 2023; Schill *et al.*, 2019).

By exploring this complex intersection between human behavior and economics, the need to adopt holistic approaches that consider both individual and systemic aspects is highlighted. This integrative perspective provides fertile ground for collaboration across different disciplines, fostering the emergence of new ideas and approaches that enrich the understanding of these complex phenomena in today's society (Arnaud *et al.*, 2021; Aksenov *et al.*, 2021; Whitman, 2021).

Trend analysis

Over the past decade, the relationship between psychology and economics has evolved significantly, highlighting several key trends and developments, such as the incorporation of psychology into behavioral economics and its practical application in marketing and finance. These advances open the door to deeper and more collaborative interdisciplinary research, enriching both theory and practice in both

disciplines (Dowling *et al.*, 2019; Horton, 2019; Vlaev *et al.*, 2019).

Behavioral economics delves into how psychological factors influence economic decisions. This discipline emphasizes that, unlike the classical assumption of rationality and utility maximization, individuals are frequently influenced by emotions, cognitive biases, and social contexts. Studies in this field explore intrinsic and extrinsic motivations, the effect of loss aversion, and how social norms affect economic decisions, suggesting that public policies can benefit from these insights to promote more desirable behaviors (Gómez Miranda, 2022; Phillips & Pohl, 2020; Sánchez-Castillo *et al.*, 2024; Valaskova *et al.*, 2019).

Economic psychology has found practical applications in areas such as marketing, where psychological principles are used to influence consumer purchasing decisions. Additionally, in the financial realm, it helps understand investor behaviors and how these affect markets, revealing how mass psychology can influence phenomena such as speculative bubbles or financial panics (Naseem *et al.*, 2021; Sussman *et al.*, 2023).

Beyond psychology, the relationship between economics and sociology is also gaining relevance. It is observed how economic and social behaviors are intertwined and how understanding these links can enhance our comprehension of well-being and human decision-making. The integration of these disciplines underscores the importance of considering social and cultural factors in economic analysis (Akhtar, F., & Das, 2020; Paule-Vianez *et al.*, 2020; Raut, 2020).

Prospect theory, which highlights how people value changes in wealth states and handle probabilities in situations of gains and losses, critiques the classical economic view that assumes rational and utility-maximizing decisions. This drives a reexamination of many economic principles in light of psychological findings (Lipman & Attema, 2019; Maialeh, 2019; Wang et al., 2020).

The ethical dimensions of economic behavior are receiving more attention, exploring how dishonesty and corruption can be understood and mitigated through

economic psychology. This leads to growing interest in how psychological factors, such as social norms and self-control, play a crucial role in economic decisions and their underlying ethics (Anguera-Torrell, 2020; Ivașcu *et al.*, 2022; Speer *et al.*, 2020).

These trends underscore an increasingly deep integration between psychology and economics, allowing for a more nuanced understanding of how humans make decisions in an economic context. This ongoing evolution promises to drive innovative discoveries and fresh perspectives in the landscape of psychological and economic research in the years to come.

DISCUSSION

The intersection between psychology and economics, particularly highlighted in the realm of behavioral economics, underscores the importance of integrating economic fundamentals into the academic training of future psychologists. This interdisciplinary approach not only enriches the understanding of human behavior in economic contexts but also expands the tools and methods psychologists can employ to address complex problems (Anglada-Tort *et al.*, 2022; Pérez Gamboa *et al.*, 2019; Roman-Acosta *et al.*, 2023).

First, teaching economics in psychology programs enables students to better understand how economic decisions affect emotional and psychological well-being. Concepts such as opportunity cost, incentives, and markets are not only relevant in business or finance but also apply to personal and social decision-making. For example, prospect theory illuminates how people value losses and gains, which can be crucial for understanding behaviors ranging from financial investments to lifestyle choices (Baranov *et al.*, 2020; Hua & Liu, 2021; Schröder & Freedman, 2019).

Furthermore, training in economics helps future psychologists design better interventions and public policies. Understanding economic principles can facilitate the design of programs that motivate desired behaviors, such as incentive schemes to improve public health or penalty systems to deter harmful behaviors. Econo-

mic psychology provides a framework for evaluating the effectiveness of these interventions, considering both rational and emotional factors in decision-making (Feldman *et al.*, 2020; Miles & Fassinger, 2021; Rodríguez-Torres *et al.*, 2022).

Lastly, economics training prepares psychologists to contribute to broader areas such as policy development, urban planning, and product and service design. These roles require an understanding of how economic structures and policies influence human behavior on a large scale (Nayyar & Malhotra, 2023; Sima *et al.*, 2020).

Incorporating economics into the training of psychologists not only broadens their perspective and skill set but also better equips them to face the challenges of the modern world, where economics and psychology are increasingly intertwined. This interdisciplinary approach promotes a more holistic understanding of human behavior, essential for designing effective and sustainable solutions to complex problems.

CONCLUSIONS

The research revealed significant growth in the integration of psychology into the study of economics, particularly in behavioral economics, from 2014 to 2024. The bibliometric analysis showed that publications in this field have increased notably, reflecting growing interest from the scientific community in exploring how economics and psychology intertwine and affect human behavior..

It was observed that institutions in countries with advanced economies, primarily in Europe and North America, dominate research in this field. This underscores the importance of fostering greater international collaboration and the inclusion of researchers from diverse regions of the world to enrich perspectives and approaches in the study of behavioral economics.

The study emphasized the relevance of incorporating economic education into psychology programs and vice versa as a means of better prepare future professionals for real-world challenges. This curricular integration is essential for develo-

ping more effective public policies that consider both economic and psychological factors.

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