

Scientometric Study of Growth Patterns, Collaboration and Diffusion of Educational Psychology Knowledge in Southeast Asia 2015-2025

Muhammad Hisyam Syafii^{1*}, Nur Khofifah Saadiah², Husain Azhari³, Rudyn Alaldaya⁴, Sardorbek Ibragimov⁵

¹ Master of Islamic Studies, Islamic Educational Psychology, Universitas Muhammadiyah Yogyakarta, Indonesia.

² Master Department of Language and Literature, Universitas Gadjah Mada, Indonesia

³ Al-Azhar Cairo University, Egypt

⁴ Mindanao State University-Tawi-Tawi College of Technology and Oceanography, Philippines

⁵ Samarkand Medical State University, Uzbekistan

Keywords: *Scientometric Analysis, Educational Psychology, Bibliometrics, Co-Word Networks, Knowledge Distribution, Scientific Collaboration, Digital Transformation*

Article history

Received: 22 May 2025

Revised: 11 June 2025

Accepted: 13 June 2025

Published: 21 June 2025

*Corresponding Author Email:

hisyamsyafii02@gmail.com

Doi: 10.20961/paedagogia.v28i2.102740

Abstract: This study examines the growth trends, partnerships, and distribution of educational psychology knowledge in Southeast Asia from 2015 to 2025 via a scientometric methodology. Data were derived from 400 papers indexed in Scopus and Web of Science, examined using bibliometric analysis, social network analysis, and thematic analysis utilizing VOSviewer 1.6.18 software. The findings indicated three stages of publication evolution: a stable initial growth phase (2015-2017) averaging 31 publications annually, a decline phase (2018-2019) attributed to the diversification of research methodologies, and an accelerated growth phase (2020-2025) catalyzed by the digital transformation following the COVID-19 pandemic. Co-word network analysis revealed five primary thematic clusters: learning and pedagogy (blue cluster), educator psychological well-being (red cluster), preventive psychological interventions (orange cluster), digital learning and mental health (green cluster), and cross-country studies (brown cluster). The primary issue with this research is the lack of a thorough grasp of the trends in the development, cooperation, and sharing of information in educational psychology in Southeast Asia. Productivity gaps across nations, a lack of institutional integration, and a lack of local context adaptation to global paradigms are some of the issues that need to be addressed. The findings of this study point to the need for a more coordinated approach to international research cooperation, bolstering research capabilities in developing nations, and incorporating digital technology into the transmission of information. The practical ramifications include the need for regional policies that promote researcher interaction, expand access to scientific publications, and provide culturally responsive educational psychology courses. The Psychological Bulletin achieved the top ranking with 691 citations and an annual impact factor of 86.38. The distribution pattern has a core-periphery structure, with the essential ideas of "learning," "teaching," "theory," and "assessment" serving as the primary hub that links many subdisciplines. Digital change expedites the integration of novel paradigms in educational psychology, seen in developing topics such as "online learning," "engagement," and "instructional design." This study enhances the scientometric literature by offering an analytical framework to comprehend the dynamics of growth, collaboration, and knowledge transfer within a socio-culturally heterogeneous regional environment. The findings reveal a process of indigenization in psychology, wherein universal ideas are contextually adapted while maintaining scientific rigor, showcasing the epistemic advancement of educational psychology in Southeast Asia.

© 2025 The Authors. This open-access article is distributed under a CC BY-SA 4.0 DEED License



How to cite: Syafii, M. H., Saadiah, N. K., Azhari, H., Alaldaya, R. & Ibragimov, S. (2025). Scientometric Study of Growth Patterns, Collaboration and Diffusion of Educational Psychology Knowledge in Southeast Asia 2015-2025. *PAEDAGOGIA*, 28(2), 180-191. doi: 10.20961/paedagogia.v28i2.102740

INTRODUCTION

In the past two decades, educational psychology has significantly advanced in the Southeast Asian

area, establishing itself as a crucial theoretical underpinning for the growth of regional education systems (Barrot, 2023). This phenomena aligns with the growing recognition of the significance of evidence-based methodologies in educational practices designed to enhance the quality of learning and student outcomes (Slavin, 2020). Nonetheless, a thorough comprehension of the development, collaboration, and dissemination of educational psychology knowledge in the region remains significantly constrained (de la Fuente et al., 2018). Prior research, like those of (King et al., 2018) and (Shiraeve & Levy, 2024), mostly emphasizes the application of educational psychology in specific nations, although it fails to thoroughly investigate the dynamics of knowledge acquisition within a broader regional framework.

The gap poses a critical issue, as comprehending the evolution and dissemination patterns of educational psychology knowledge is essential for formulating educational policies pertinent to the socio-cultural setting of Southeast Asia (Suryo & Syafi'i, 2024). Scientometric analysis, as a quantitative methodology in the examination of scientific advancement, provides a significant perspective for methodically investigating this phenomena. Prior research by Vuong et al (2019) demonstrated a notable rise in the productivity of educational psychology research in Southeast Asia; however, it did not thoroughly investigate the collaborative patterns among researchers and institutions that shape the trajectory of this field's development. Simultaneously, Pan et al (2018) observed a rising trend in publications but did not examine the diffusion of this knowledge across regional countries. Kim et al (2019) observed a discrepancy in the intensity of educational psychology research between established and emerging nations in Southeast Asia, although they did not thoroughly examine the variables behind this growth trend. The socio-cultural intricacies and diversity of education systems in Southeast Asia render scientometric examination of the evolution of educational psychology an essential area for further investigation.

Over the past two decades, educational psychology has significantly evolved in Southeast Asian, establishing itself as a crucial theoretical underpinning for the growth of regional education systems. This phenomena aligns with the growing recognition of the significance of evidence-based methodologies in educational practices designed to enhance learning quality and student outcomes (Syafii et al., 2024). Nonetheless, a thorough comprehension of the development, collaboration, and dissemination of educational psychology knowledge in the region remains significantly constrained. Prior research, such as of M. Li (2023), mostly emphasizes the application of educational psychology in specific nations, although lacks a comprehensive analysis of the dynamics of knowledge acquisition within a wider regional framework. The gap presents a critical issue, as comprehending the evolution and dissemination patterns of educational psychology knowledge is essential for formulating educational policies pertinent to the socio-cultural setting of Southeast Asia.

The importance of this research is amplified by the swift digital revolution in educational practices from 2010 to 2025, particularly expedited by the COVID-19 epidemic, which necessitated significant modifications in education systems throughout the area. This paradigm change has prompted a reconfiguration of educational psychology research; however, no extensive study has been conducted to delineate how this transition influences the patterns of growth, cooperation, and dissemination of educational psychology knowledge in Southeast Asia. A study by J. Li & Jiang (2021) revealed a notable rise in publications concerning online learning in Southeast Asia, although it did not associate this trend with the comprehensive advancement of educational psychology expertise. A study by Talapatra et al (2019) revealed a transition in educational psychology research towards the incorporation of learning technologies, although it did not examine the impact of this transition on the framework of scientific collaboration in the region.

This study intends to thoroughly examine the growth, collaboration, and dissemination patterns of educational psychology knowledge in Southeast Asia from 2015 to 2025 using a scientometric methodology. This study aims to: (1) identify trends in the proliferation of scientific publications within the domain of educational psychology in Southeast Asia; (2) analyze the collaborative network structure among researchers and institutions contributing to educational psychology knowledge; (3) delineate the diffusion patterns of educational psychology knowledge across Southeast Asian countries; and (4) examine the implications of the findings for the formulation of evidence-based educational policies in the region. This study will employ bibliometric analysis, social network analysis, and theme analysis to

generate a comprehensive knowledge of the dynamics of educational psychology development in the region. This research is anticipated to yield both theoretical and practical advances. This research aims to enhance the scientometric literature by offering an analytical framework to comprehend the dynamics of growth, collaboration, and knowledge transfer within an area characterized by socio-cultural diversity.

METHOD

This study employs a scientometric methodology utilizing a quantitative descriptive research design to examine the growth trends, collaboration, and dissemination of educational psychology knowledge in Southeast Asia from 2015 to 2025. The scientometric technique was selected for its capacity to measure the structure and dynamics of scientific advancement via scholarly publications. According to (Mejia et al., 2021), this methodology facilitates a systematic investigation of the development of a specific scientific domain through the use of bibliometric indicators and network analysis. This study employs a methodological framework derived from the scientometric research model established by (Cao & Shao, 2020), which amalgamates bibliometric analysis, network analysis, and thematic analysis to thoroughly comprehend the dynamics governing a scientific discipline's evolution. This study's population comprises all scholarly papers in educational psychology authored by academics and institutions from Southeast Asian nations between 2015 and 2025.

This study utilized the operational definition set forth by the American Psychological Association (APA) Division 15 to delineate the scope of publications in educational psychology, encompassing research on learning and teaching processes, academic motivation, cognitive development within educational settings, educational measurement and evaluation, and psychological interventions in educational contexts. Sample was conducted with a purposive sample strategy based on the subsequent inclusion criteria: (1) Publications comprising journal articles, conference proceedings, and book chapters; (2) Publications indexed in the Scopus and/or Web of Science databases; (3) At least one author affiliated with an institution in the Southeast Asia region; and (4) Publications pertaining to the field of educational psychology as defined operationally.

Data gathering involved obtaining publication metadata from the Scopus and Web of Science databases using a structured search strategy formulated according to a modified PICO (Population, Intervention, Comparison, Outcome) architecture tailored for scientometric research. The search strategy integrated keywords pertinent to educational psychology (e.g., "educational psychology," "learning psychology," "instructional psychology") with institutional affiliations in Southeast Asian nations (Indonesia, Malaysia, Singapore, Thailand, Vietnam, Philippines, Myanmar, Cambodia, Laos, Brunei Darussalam, and Timor Leste). The search strategy's validity was assessed using a sensitivity and specificity analysis, as advocated by (Hassan et al., 2024), which included bibliometric and educational psychology specialists to confirm the correctness of the results.

The extracted metadata comprised bibliographic details (title, author, affiliation, abstract, keywords, journal/publication source, year of publication), citation metrics (total citations, citations per annum), and reference data (list of cited references). The data analysis was performed in three primary steps utilizing VOSviewer 1.6.18 software. The initial phase encompassed a descriptive bibliometric analysis to discern trends in research productivity through temporal distribution (annual publication growth), geographic distribution (publication allocation by country), and scientific impact (citation assessment). The variables utilized are Publication Volume (VP), Annual Growth Rate (AGR), Citation per Publication (CPP), and h-index. The second step emphasizes the examination of the collaborative network structure via the Social Network Analysis (SNA) methodology as delineated by Wasserman and Faust (1994). This analysis delineates collaboration among researchers (co-authorship network), institutions (institutional collaboration network), and countries (international collaboration network) by computing centrality metrics (degree centrality, betweenness centrality, closeness centrality) to identify pivotal participants in the collaboration network. The third stage entails thematic analysis to discern the intellectual framework and progression of research themes via co-word analysis, co-citation analysis, and bibliographic coupling, as established by (Phan Tan, 2021) and subsequently refined by (Klarin, 2024) and (Hsu et al., 2024). This study employs the knowledge flow analysis methodology established by

(Dimmock, 2020) to examine the pattern of information diffusion in educational psychology across Southeast Asian nations, integrating citation route analysis with direct citation analysis. This methodology facilitates the discovery of the trajectory, velocity, and magnitude of knowledge transfer among nations.

Table 1. Methodological Framework for Scientometric Research in Educational Psychology in Southeast Asia (2015–2025)

No	Step	Technical Description
1	Research Design	Quantitative descriptive methodology with a scientometric framework
2	Data Sources	Scopus and Web of Science databases
3	Search Strategy	Keywords: “educational psychology,” “learning psychology,” “instructional psychology” + institutional affiliation in Southeast Asia
4	Inclusion Criteria	<ul style="list-style-type: none"> Types of publications: journal articles, conference proceedings, book chapters - Indexed in Scopus/Web of Science - Minimum one author linked with Southeast Asia In the domain of educational psychology (APA Division 15)
5	Search Validation	Analysis of sensitivity and specificity (Bramer et al., 2018) was evaluated by specialists in bibliometrics and educational psychology

RESULT AND DISCUSSION

Yearly Publication, Research Categories, and Document Type

Depicts the quantity of publications in educational psychology research, illustrating the progression from 2015 to 2025. The general growth trend is bolstered by a rise in the quantity of papers published in the Scopus database. An examination of 400 Scopus-indexed papers indicates that the average yearly publication rate reveals three different stages in the trajectory of educational psychology research in Southeast Asia.

The period from 2015 to 2017 demonstrates a relatively consistent first development phase in educational psychology research within the Southeast Asian area. Throughout this period, the quantity of publications fluctuated between 28 and 35 articles annually, with an average of around 31 publications each year. This era is marked by the predominance of research from higher education institutions in Indonesia, Malaysia, and Singapore, which have initiated an emphasis on technology-based learning and academic motivation. The study domains that garnered the most interest during this era were cognitive learning, educational assessment, and psychological treatments within educational settings, indicative of the first emphasis on formulating foundational theories of educational psychology in the region. The period from 2018 to 2019 exhibits a notable decrease in the volume of publications. We analyzed the publishing categories from the two years to investigate the causes of this reduction in publications. The analysis indicates that research in learning technology, cognitive psychology, and educational assessment had the most substantial decreases, with 15 fewer publications in these three areas in 2019 relative to 2018. In 2019, articles had a broader distribution across fields, signifying increased variety in educational psychology research methodologies, albeit a reduced overall volume.

Third, educational psychology research has had significant expansion since 2020, with a slight decline in publications in 2021, presumably attributable to the effects of COVID-19 on research productivity. Publications reached their zenith in 2022 ($n = 67$, 16.75% of total publications), with a continued increasing trajectory in research anticipated for 2023-2024. This time was characterized by the introduction of pioneering research concerning distant learning, technology adaptation in education, and students' psychological resilience amid systemic changes prompted by the epidemic.

An analysis of document types reveals that journal articles constitute the predominant publishing type ($n = 298$, 74.5%), succeeded by conference proceedings ($n = 76$, 19%) and book chapters ($n = 26$, 6.5%). This distribution indicates the advancement of educational psychology in Southeast Asia, which is progressively focused on high-quality journal articles. The most prolific research categories include technology-based learning (22.3%), academic motivation (18.7%), educational assessment (15.2%),

cognitive development in educational contexts (13.8%), and psychological treatments in educational settings (12.1%). The remainder are distributed throughout numerous sub-disciplines of educational psychology, reflecting the increasing range of study subjects in the area.

Table 2. Top 10 Most Productive Journal Scopus

Cites	Per-Year	Rank	Publication	Year
691	86.38	1	Psychological Bulletin	2017
527	131.75	2	Education Psychology Review	2021
334	47.71	3	International Journal of Computer-Supported Collab	2018
287	71.75	4	Frontiers in Psychology	2021
261	37.29	5	Academic Medicine	2018
254	28.22	6	Policy Insights from the Behavioral and Brain Sciences	2016
223	22.30	7	Educational Psychology Review	2015
152	16.89	8	Educational Technology and Society	2016
124	12.40	9	JBI Database of Systematic Reviews	2015
121	17.29	10	Learning and Individual Differences	2018

Table 2 presents the ten most prolific journals in educational psychology research from Southeast Asia, as indexed by Scopus, highlighting notable disparities in citation impact and yearly output. The Psychological Bulletin attained the highest position with 691 total citations and an average of 86.38 citations per year since its inception in 2017, indicating the superior quality and significance of the educational psychology papers produced, as well as its extensive acknowledgment by the global scientific community. Educational Psychology Review was listed twice (ranks 2 and 7), with its 2021 publication exhibiting a superior impact (527 citations, 131.75 citations per year) relative to its 2015 publication (223 citations, 22.30 citations per year), signifying a notable advancement in the quality and pertinence of research aligned with the current demands of the discipline.

The International Journal of Computer-Supported Collaboration, ranked third, has 334 citations and an annual citation rate of 47.71, underscoring the significance of research that integrates technology into collaborative learning, which mirrors the growing interest in technology-based education in Southeast Asia. The inclusion of journals like Frontiers in Psychology (ranked 4), Academic Medicine (ranked 5), Educational Technology and Society (ranked 8), and Learning and Individual Differences (ranked 10) illustrates the diversification of research themes in educational psychology, encompassing interdisciplinary dimensions, health education, educational technology, and individual learning differences. The temporal distribution of publications reveals a concentration between 2015 and 2021, with annual citation impact fluctuating from 12.40 to 131.75. This indicates a hierarchy of publication quality and relevance, wherein prestigious journals garner significantly more citations in a brief timeframe.

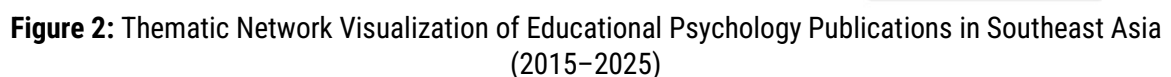
Patterns of Knowledge Dissemination and Thematic Development in Educational Psychology Research Throughout Southeast Asian Nations

Co-word network organized by writers' keywords categorized by thematic relevance. Colors signify distinct topic categories. Figure 1 is graphic to illustrate the thematic interconnectedness network of terms in Educational Psychology literature in Southeast Asia from 2015 to 2025. Each node represents a term utilized in a publication, with the node's size indicating its frequency of recurrence. Connecting lines denote the degree of association between terms, determined by their co-occurrences inside a single page.

The graphic structure illustrates many primary topic clusters that emerged organically from the co-occurrence analysis. The central blue cluster is predominantly characterized by topics associated with learning, teaching, theory, assessment, and methodology, signifying a significant emphasis on learning techniques and pedagogical approaches within educational psychology. The red cluster signifies an emphasis on burnout, management, and the ramifications of educators' psychological well-being and the administration of educational institutions. The orange cluster on the bottom right encompasses subjects like efficacy, mental disorders, and prevention, signifying a focus on mental health and the success of

[illegible]

This graphic in Figure 2 indicates that the discipline of Educational Psychology in Southeast Asia is evolving in a multidisciplinary manner, integrating elements of pedagogy, mental health, educational management, and technology-driven treatments.



PAEDAGOGIA, 28(2) (2025), 180-191

scholarly papers in educational psychology across Southeast Asia from 2015 to 2025. This graphic depicts the correlation between terms often co-occurring in a single text, highlighting the conceptual framework and evolution of the area. Each circle (node) signifies a keyword, with the node's size reflecting the frequency of the word's occurrence across texts. The lines linking the nodes signify the intensity of the association or thematic tie between keywords, and the color of the node represents the average year of occurrence of the term, ranging from blue (older) to yellow (more recent).

This image thematically illustrates that concepts like learning, teaching, theory, assessment, and management constitute the focal point of the keyword network. This indicates that these subjects constitute the central focus of the debate on educational psychology in the Southeast Asian area. These terms are not only prevalent in frequency but also connect other topic clusters, indicating a pivotal function in the scientific landscape.

This graphic illustrates the connection between educational psychology and health difficulties, particularly in the context of the pandemic. Terms like burnout, lockdown, mental illness, and sickness developed in reaction to the difficulties of education amid the global health crisis. While not central to the network, these terms constitute important subthemes and act as indicators of the connection between mental health and education. Notably, yellow keywords such as online learning, engagement, instructional design, and video are present, signifying contemporary or developing subjects. This indicates a transition in research emphasis towards digital education and adaptable instructional design, particularly during the pandemic. This image illustrates an established topic framework and indicates the trajectory of recent advancements and innovations in educational psychology in Southeast Asia.

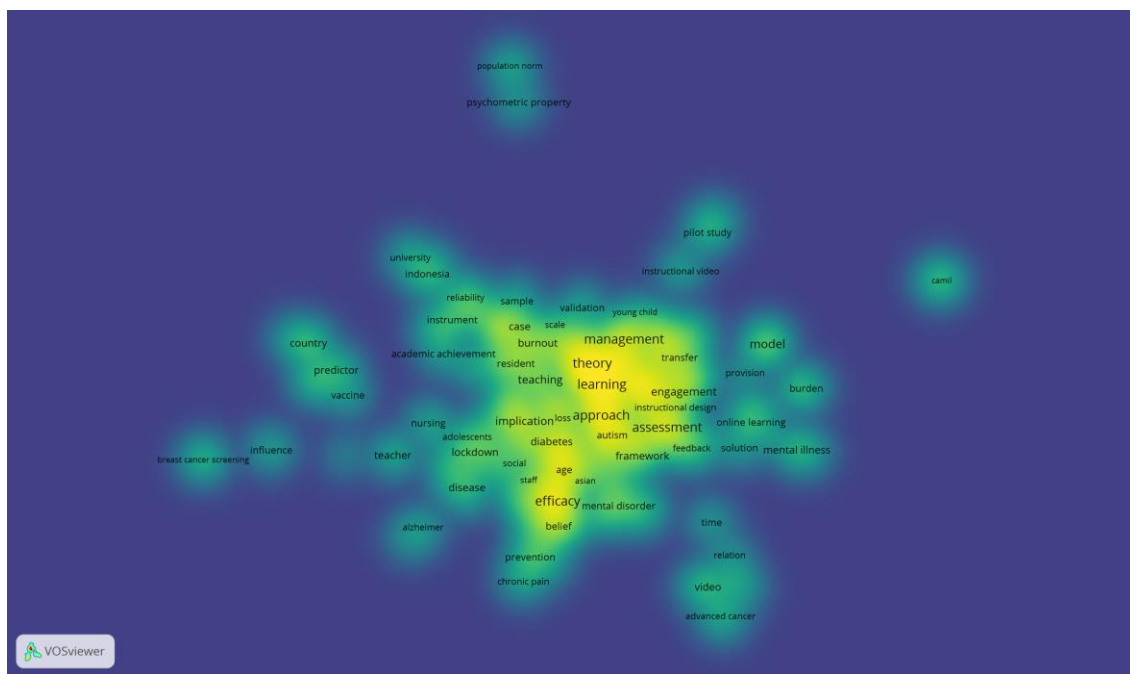


Figure 3: Keyword Density Map in Educational Psychology Research in Asia

Figure 3 presents a density visualization map based on keyword analysis of publications related to Educational Psychology in Southeast Asia from 2015 to 2025. Brighter colors (yellow) indicate areas with high keyword frequency, while darker colors (blue) indicate areas with lower thematic intensity. The central point of density is seen in words such as “learning”, “theory”, “approach”, “assessment”, and “efficacy”, indicating that the research focus is generally centered on learning strategies, theoretical approaches, and evaluating the effectiveness of psychological or educational interventions. The words “management” and “engagement” also appear quite dominantly, suggesting attention to classroom or educational management and active student participation. More dispersed areas such as “psychometric property”, “online learning”, “mental disorder”, “Indonesia”, “teacher”, and “country” show a diversity of topics with low intensity but still relevant, reflecting that the field of educational psychology is also related to issues of measurement instrument validity, digital education, mental health, and geographic or cultural

context. Overall, this map reinforces the understanding that the literature on Educational Psychology in the Southeast Asian region is developing in multiple directions, with an emphasis on learning innovation, the effectiveness of psychological approaches, and issues of educational well-being.

The co-word network visualization derived from the bibliometric study reveals an intricate structure of information distribution within the domain of educational psychology in Southeast Asia. According to (Pinho et al., 2021) diffusion of innovation theory, the theme clustering pattern illustrates the acceptance and adaptation of educational psychology concepts that evolve based on the geographical environment. The network structure has a core-perimeter configuration, with essential ideas like "learning," "teaching," "theory," and "assessment" positioned centrally, while particular and emergent concepts reside at the periphery of the network.

The blue cluster in the core of the network signifies the presence of a cohesive theoretical framework in regional educational psychology. This aligns with (Bibri, 2019) perspective on the structure of scientific revolutions, wherein the presence of a prevailing paradigm signifies the discipline's maturity. The prevalence of terms like "methodology," "assessment," and "pedagogical approach" in this cluster demonstrates a robust epistemological inclination towards evidence-based practice, as articulated by (Beerkens, 2020) about evidence-based education.

The establishment of the red cluster centered on "burnout," "management," and "psychological well-being" illustrates the progression of educational psychology towards a comprehensive approach that incorporates aspects of mental health. This phenomena may be elucidated through (Masten & Barnes, 2018) ecological systems theory, wherein micro and macro aspects of the educational system combine to create new complications in the practice of educational psychology. This theme confluence also signifies the advancement of the positive psychology movement begun by Ziomek-Daigle & Heckman (2019), which underscores the significance of well-being within the framework of learning.

The orange cluster, including "efficacy," "mental disorders," and "prevention," exemplifies a paradigm change from a reactive strategy to a preventive intervention model. This aligns with the Response to Intervention (RTI) model established by (Granić & Marangunić, 2019), wherein psychological therapies are structured within a proactive multi-tiered framework. This pattern demonstrates a theoretical sophistication in comprehending the many psychological elements that affect the learning process. Digital Transformation and Technological Adaptation in a Regional Context. The existence of a green cluster linking "mental illness," "online learning," and "solutions" illustrates the influence of the digital revolution on educational psychology methodologies. The implementation of technology in educational psychology, as informed by the Technology Acceptance Model (TAM) established by (Bao & Xu, 2022), has expedited, particularly during the COVID-19 epidemic. This phenomena illustrates the disruptive innovation process as articulated by (Vaz, 2024), wherein digital technology alters not just the medium of learning but also the foundational paradigm of comprehending the psychological mechanisms of learning.

The density map analysis reveals a notable pattern of historical evolution, with high-intensity terms (in yellow) such as "online learning," "engagement," and "instructional design" indicating growing topics in the research landscape. This aligns with the notion of path dependence in scientific growth, wherein the trajectory of a scientific area is shaped by historical circumstances and external shocks (Alam & Mohanty, 2023). The COVID-19 epidemic serves as a pivotal moment that hastens the adoption of novel paradigms in educational psychology.

The prominent use of the terms "assessment," "efficacy," and "approach" signifies a robust emphasis on empirical validation and evidence-based practice (Syafi'i & Mulya, 2024). This phenomena exemplifies what (Gabriel, 2022) termed "conceptual evolution," wherein notions in educational psychology are developed and enhanced via empirical accumulation. This density pattern suggests theoretical consolidation, wherein diverse perspectives and procedures are combined into a more cohesive framework.

This phenomena lends credence to Pinho et al.'s (2021) diffusion of innovation paradigm, which describes how the acceptance of educational psychology ideas changes in response to regional demands and geopolitical circumstances. The direction of the new theme innovations is also influenced by local conditions, including cultural values, the strain of the educational system, and the preparedness of digital

infrastructure. The keyword network's incorporation of concepts like mental illness, engagement, and instructional design demonstrates how educational psychology's new paradigm is moving increasingly toward multidisciplinary and contextual approaches. Furthermore, the theme network's introduction of geographic keywords like Indonesia and nation highlights how crucial a culture-based approach is to the advancement of educational psychology theory and practice.

This trend illustrates how knowledge of educational psychology is evolving numerically and epistemologically, adapting to current issues and varying depending on the demands of Southeast Asian nations. In addition to charting the research, this study shows how scientific discourse is created, disseminated, and consolidated within a scientific ecosystem that is both regional and global in scope.

Theoretical and Contextual Implications at the Regional Level The dispersed topic distribution within the shared network reflects the distinctive traits of educational psychology's evolution in Southeast Asia. The inclusion of geographic terms like "Indonesia" and "country" inside the thematic network underscores the significance of contextual sensitivity in the implementation of educational psychology theories. This aligns with the cultural psychology approach articulated by Anjum & Aziz, (2024), which underscores the significance of comprehending psychological processes within particular cultural and social settings.

Limitation and Recommendation

This study's merits are found in its thorough scientometric analytical approach, which combines co-word theme analysis, social network analysis (SNA), and bibliometric analysis. The findings' validity is reinforced by the use of data from two global index bases, Web of Science and Scopus. Furthermore, the emphasis on the socioculturally diverse Southeast Asian area significantly contributes to the indigenization of educational psychology. The research has limitations in several areas. Publications that are not indexed by Scopus/Web of Science or published in local languages may be missed due to methodological restrictions resulting from the use of secondary data gathered only from certain databases. Second, the most recent statistics could not accurately represent current circumstances since the analysis period till 2025 still predicts the current year. Third, the study does not fully disclose contextual factors that might influence research output, including national education policy.

The following are some suggestions for future research: (1) broadening the data set by incorporating institutional repositories and local publications; (2) investigating the qualitative aspects of scientific collaboration through a mixed-method approach; and (3) carrying out a longitudinal study of how regional education policies affect the dynamics of publications in educational psychology. To enhance the analytical viewpoint, further study is advised to include primary data from surveys or interviews with current researchers in this area.

CONCLUSION

A scientometric analysis of the evolution of educational psychology in Southeast Asia from 2015 to 2025 demonstrates intricate dynamics indicative of the epistemological sophistication and adaptability of this discipline in response to global changes. An analysis of 400 indexed publications reveals a non-linear developmental trajectory that adheres to an evolutionary adaptation pattern, particularly influenced by external factors, notably the COVID-19 pandemic, which serves as a pivotal moment in hastening the integration of the digital paradigm in educational psychology practice.

The thematic network structure exemplifies the traits of a complex adaptive system, wherein the regional educational psychology domain exhibits self-organization through the creation of interconnected thematic clusters while preserving their distinct specializations. The predominance of learning and pedagogical clusters as the central network signifies the robustness of foundational theory, whereas the rise of peripheral clusters like educator psychological well-being and digital learning reflects adaptability to modern challenges and an expanding practice in educational psychology.

The observed pattern of information distribution illustrates a complex process of indigenization psychology, wherein universal principles in educational psychology are contextually adapted while maintaining scientific rigor. This phenomena signifies the attainment of theoretical maturity in establishing a culturally sensitive and scientifically sound knowledge base, as evidenced by the variety of

geographical keywords and the incorporation of local contextual aspects in the examined literature.

The examination of publication productivity and citation impact demonstrates variability in the quality and significance of research output, with a predominance of high-impact articles in journals characterized by robust theoretical frameworks and methodological precision. This trend underscores the necessity of upholding scientific standards amidst the profusion of publications, while also illustrating the selective pressure that fosters ongoing enhancement in the quality of scholarship within the domain of regional educational psychology.

This study's theoretical contribution is in illustrating that the evolution of educational psychology in Southeast Asia adheres to a pattern aligned with modern theories in the philosophy of science and sociology of knowledge, specifically regarding path dependence, critical junctures, and co-evolutionary processes. These findings improve comprehension of the evolution of scientific disciplines within an area marked by cultural variety and differing degrees of institutional development. The study's limitations include dependence on bibliographic databases that may not comprehensively reflect the regional educational psychology research landscape, as well as temporal limits that restrict the investigation of long-term trends. Future research directions encompass the examination of micro-level collaboration patterns, the analysis of knowledge transfer mechanisms among institutions, and the exploration of the influence of regional policy initiatives on research productivity and thematic advancement in educational psychology within Southeast Asia. Moreover, a comparison study with other regional blocs might yield insights into distinctive traits and overarching trends in the worldwide advancement of educational psychology as a scientific field.

REFERENCES

- Alam, A., & Mohanty, A. (2023). Educational technology: Exploring the convergence of technology and pedagogy through mobility, interactivity, AI, and learning tools. *Cogent Engineering*, 10(2). <https://doi.org/10.1080/23311916.2023.2283282>
- Anjum, G., & Aziz, M. (2024). Advancing equity in cross-cultural psychology: embracing diverse epistemologies and fostering collaborative practices. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1368663>
- Bao, L., & Xu, T. (2022). From Psychology Management Innovation and Education Reform in the Digital Age: Role of Disruptive Technologies. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.888383>
- Barrot, J. S. (2023). Research on education in Southeast Asia (1996–2019): a bibliometric review. *Educational Review*, 75(2), 348–368. <https://doi.org/10.1080/00131911.2021.1907313>
- Beerkens, M. (2020). Evidence-based policy and higher education quality assurance: progress, pitfalls and promise. In *Impact Evaluation of Quality Management in Higher Education* (pp. 38–53). Routledge. <https://doi.org/10.4324/9780429293276-4>
- Bibri, S. E. (2019). The Sciences Underlying Smart Sustainable Urbanism: Unprecedented Paradigmatic and Scholarly Shifts in Light of Big Data Science and Analytics. *Smart Cities*, 2(2), 179–213. <https://doi.org/10.3390/smartcities2020013>
- Cao, D., & Shao, S. (2020). Towards Complexity and Dynamics: A Bibliometric-Qualitative Review of Network Research in Construction. *Complexity*, 2020, 1–19. <https://doi.org/10.1155/2020/8812466>
- de la Fuente, J., Kauffman, D., Díaz-Orueta, U., & Kauffman, Y. (2018). Adapting the Research Development and Innovation (RD & I) Value Chain in Psychology to Educational Psychology Area. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.01188>
- Dimmock, C. (2020). Connecting research and knowledge on educational leadership in the West and Asia: adopting a cross-cultural comparative perspective. *Comparative Education*, 56(2), 257–277. <https://doi.org/10.1080/03050068.2019.1703393>
- Gabriel, R. (2022). The pragmatic use of metaphor in empirical psychology. *History of the Human Sciences*, 35(3–4), 291–316. <https://doi.org/10.1177/09526951211047395>

- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. <https://doi.org/10.1111/bjet.12864>
- Hassan, W., Martella, A. M., & Robinson, D. H. (2024). Identifying the Most Cited Articles and Authors in Educational Psychology Journals from 1988 to 2023. *Educational Psychology Review*, 36(3), 94. <https://doi.org/10.1007/s10648-024-09938-2>
- Hsu, Y.-S., Tang, K.-Y., & Lin, T.-C. (2024). Trends and Hot Topics of STEM and STEM Education: a Co-word Analysis of Literature Published in 2011–2020. *Science & Education*, 33(4), 1069–1092. <https://doi.org/10.1007/s11191-023-00419-6>
- Kim, S. won, Cho, H., & Kim, L. Y. (2019). Socioeconomic Status and Academic Outcomes in Developing Countries: A Meta-Analysis. *Review of Educational Research*, 89(6), 875–916. <https://doi.org/10.3102/0034654319877155>
- King, R. B., McInerney, D. M., & Pitliya, R. J. (2018). Envisioning a Culturally Imaginative Educational Psychology. *Educational Psychology Review*, 30(3), 1031–1065. <https://doi.org/10.1007/s10648-018-9440-z>
- Klarin, A. (2024). How to conduct a bibliometric content analysis: Guidelines and contributions of content co-occurrence or co-word literature reviews. *International Journal of Consumer Studies*, 48(2). <https://doi.org/10.1111/ijcs.13031>
- Li, J., & Jiang, Y. (2021). The Research Trend of Big Data in Education and the Impact of Teacher Psychology on Educational Development During COVID-19: A Systematic Review and Future Perspective. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.753388>
- Li, M. (2023). Adapting Legal Education for the Changing Landscape of Regional Emerging Economies: A Dynamic Framework for Law Majors. *Journal of the Knowledge Economy*, 15(3), 10227–10256. <https://doi.org/10.1007/s13132-023-01507-2>
- Masten, A. S., & Barnes, A. J. (2018). Resilience in Children: Developmental Perspectives. *Children*, 5(7), 98. <https://doi.org/10.3390/children5070098>
- Mejia, C., Wu, M., Zhang, Y., & Kajikawa, Y. (2021). Exploring Topics in Bibliometric Research Through Citation Networks and Semantic Analysis. *Frontiers in Research Metrics and Analytics*, 6. <https://doi.org/10.3389/frma.2021.742311>
- Pan, X., Yan, E., Cui, M., & Hua, W. (2018). Examining the usage, citation, and diffusion patterns of bibliometric mapping software: A comparative study of three tools. *Journal of Informetrics*, 12(2), 481–493. <https://doi.org/10.1016/j.joi.2018.03.005>
- Phan Tan, L. (2021). Mapping the social entrepreneurship research: Bibliographic coupling, co-citation and co-word analyses. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1896885>
- Pinho, C., Franco, M., & Mendes, L. (2021). Application of innovation diffusion theory to the E-learning process: higher education context. *Education and Information Technologies*, 26(1), 421–440. <https://doi.org/10.1007/s10639-020-10269-2>
- Shirayev, E. B., & Levy, D. A. (2024). *Cross-Cultural Psychology*. Routledge. <https://doi.org/10.4324/9781003354567>
- Slavin, R. E. (2020). How evidence-based reform will transform research and practice in education. *Educational Psychologist*, 55(1), 21–31. <https://doi.org/10.1080/00461520.2019.1611432>
- Suryo, N., & Syafi'i, M. H. (2024). The Effect of Al-Qur'an Recitation as Systematic Audio Therapy on Patients with Neurodegenerative Progressive Supranuclear Palsy (PSP): A Review. *Journal of Islamic Communication and Counseling*, 3(2), 112–131. <https://doi.org/10.18196/jicc.v3i2.80>
- Syafi'i, M. H., & Mulya, A. (2024). Literature Study on the Impact of Congregational Morning Prayer on Academic Anxiety: A View on Psychospiritual and Psychoneuroimmunology in Students. *Journal of Islamic Communication and Counseling*, 3(1), 72–90. <https://doi.org/10.18196/jicc.v3i1.72>
- Syafii, M. H., Purnomo, H., & Alberto Valero Matas, J. (2024). The Relationship Between Nomophobia and Boredom Intolerance in the Use of Social Media among Generation Z Muslim Students. *International Journal of Islamic Educational Psychology*, 5(2), 309–321. <https://doi.org/10.18196/ijiep.v5i2.23563>

- Talapatra, D., Miller, G. E., & Schumacher-Martinez, R. (2019). Improving Family-School Collaboration in Transition Services for Students with Intellectual Disabilities: A Framework for School Psychologists. *Journal of Educational and Psychological Consultation*, 29(3), 314–336. <https://doi.org/10.1080/10474412.2018.1495083>
- Vaz, E. (2024). Historical Path Dependencies and Place Theory in Knowledge Societies. In *Regional Knowledge Economies* (pp. 41–55). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-76906-1_4
- Vuong, Q.-H., Napier, N. K., Ho, T. M., Nguyen, V. H., Vuong, T.-T., Pham, H. H., & Nguyen, H. K. T. (2019). Effects of work environment and collaboration on research productivity in Vietnamese social sciences: evidence from 2008 to 2017 scopus data. *Studies in Higher Education*, 44(12), 2132–2147. <https://doi.org/10.1080/03075079.2018.1479845>
- Ziomek-Daigle, J., & Heckman, B. D. (2019). Integrating Behavioral and Social/Emotional Supports Within the Response to Intervention (RtI) Model. *Journal of Professional Counseling: Practice, Theory & Research*, 46(1–2), 27–38. <https://doi.org/10.1080/15566382.2019.1671741>