

From Serving Guests to Greening Hotels: Mapping a Decade of Hospitality Leadership Research

Sarah Sentika^{1)*}, Sri Astuti Pratminingsih²⁾, Rivaldi Arissaputra³⁾, Ramadhi⁴⁾

^{1,2,4)} Doctoral Program in Management Sains, Faculty of Pascasarjana, Universitas Widyatama

¹⁾ Management, Faculty of Business and Humanities, Universitas Satu

³⁾ International Trade, Faculty of Economic, Business, and Social Sciences, Universitas 'Aisyiyah Bandung

⁴⁾ Retail Management, Faculty of Economics and Business, Universitas Adzkia

*Corresponding Author

Email: sentika.sarah@widyatama.ac.id

Abstract

Hospitality firms depend on frontline employees whose conduct leaders shape, yet reviews of hospitality leadership research rarely extend beyond 2021 or beyond subscription databases. This study maps how the field developed between 2016 and 2026, which themes structure it, and where its research frontier lies. We retrieved 2,581 journal articles from OpenAlex and combined a performance analysis of output, citations, authors, and countries with a keyword co-occurrence analysis of 162 keywords in VOSviewer. The results show that the corpus received 28,952 citations (11.22 per article; h-index 85). Annual output grew at a compound rate of about 25% between 2016 and 2025, and two thirds of the articles appeared from 2023 onward. The United Kingdom (42.11 citations per article), China (31.46), and Australia (30.42) recorded the highest impact among the ten most productive countries, whereas Indonesia ranked second in output (254 articles) but last in impact (0.88 citations per article). Environmentally oriented leadership accounts for four of the ten most cited articles. The keyword map forms six clusters: green, digital, and strategic leadership (54 keywords); psychological mechanisms linking positive leadership to frontline outcomes (45); leadership competencies and education (23); leadership as a human resource lever (22); careers and women in leadership (13); and classic leadership styles (5). Only the green and mechanism clusters exceed the citation average of their publication years, with normalised citations of 1.49 and 1.63. The overlay map shows a shift from servant, ethical, and transformational styles toward green, digital, and resource-based perspectives, with keywords such as digital leadership and green innovation averaging publication years of 2024 to 2025. The study closes with a theory, context, characteristics, and methodology agenda for longitudinal, multilevel, and context-sensitive work.

Keywords: Hospitality leadership, Bibliometric analysis, Green leadership, OpenAlex, VOSviewer

INTRODUCTION

Hospitality firms sell experiences that employees produce in person. A single hotel stay passes through encounters with reservation agents, housekeepers, servers, and front-desk staff, and supervisors shape how each of those employees behaves toward guests. The sector also carries persistent workforce problems: irregular hours, modest pay, heavy emotional labour, and high turnover, which the COVID-19 pandemic exposed and amplified (Baum et al., 2020). Employees' own online reviews place the quality of senior leadership among the strongest predictors of satisfaction and of the decision to leave in high-contact services (Stamolampros et al., 2019). Authentic leadership lowers hospitality employees' turnover intention through stronger organisational commitment (Gatling et al., 2016). Leadership therefore sits close to the core of service quality and workforce stability in hotels and restaurants.

Scholars explain these effects through a small set of theories. Social exchange theory treats supportive leadership as an investment that employees repay with commitment and discretionary effort (Cropanzano et al., 2017). Conservation of resources theory views leaders as sources or drains of the personal resources that employees need to cope with demanding guests (Hobfoll et al., 2018). The job demands-resources model places leadership among the job resources that buffer strain and raise engagement (Bakker & Demerouti, 2017). Self-determination theory links leader behaviour to the satisfaction of employees' needs for autonomy, competence, and relatedness (Deci et al., 2017). Researchers have combined these

lenses with a growing list of leadership styles, including transformational, servant, ethical, authentic, empowering, and inclusive leadership. Evidence from Indonesian micro, small, and medium enterprises adds that employees of Generation X and the millennial generation both find ethical leadership more motivating than transformational and servant leadership (Sentika et al., 2022).

Several reviews have taken stock of this literature. A systematic review of servant leadership traced its antecedents, mechanisms, and outcomes in management and hospitality (Bavik, 2020). A critical review of leadership styles in contemporary hospitality proposed a roadmap for future work (Elkhwesky et al., 2022). A state-of-the-art review of articles published between 2000 and 2021 found transformational leadership, leader-member exchange, and servant leadership to be the most studied approaches and noted that researchers seldom treat the hospitality setting as a contingency in its own right (Guchait et al., 2023). A bibliometric study identified eleven research streams through bibliographic coupling (Huertas-Valdivia et al., 2022). A co-word analysis found seven thematic clusters and flagged creativity and innovation as emerging topics (González-Torres et al., 2025).

Three further studies extend this picture. A mapping of six decades of leadership research in hospitality journals, based on co-citation and text-mining analyses, identified eight leadership domains, placed leader-member exchange at the centre of the field, and recorded growing attention to abusive supervision and other destructive forms of leadership (Arici et al., 2021). A meta-analysis of 62 primary studies with 66 independent samples ($N = 23,037$) showed that transformational leadership relates most strongly to followers' relational perceptions, followed by attitudinal and behavioural outcomes, and that cultural differences, rating sources, and time lags partly moderate these relationships (Gui et al., 2020). A systematic review of 41 articles on leadership and sustainability concluded that leadership styles significantly shape environmental sustainability initiatives in tourism and hospitality, while leaders' own traits and customer-related outcomes remain under-examined (Mahran et al., 2025). Together, these studies describe a literature whose core theories have matured and whose thematic boundaries are widening, yet each covers either a long historical span, a single leadership style, or a single theme.

Three limitations of this evidence base motivate the present study. First, the corpora behind most of these reviews close in 2021 or earlier (Arici et al., 2021; Gui et al., 2020), before the post-pandemic surge in publications that the present data reveal, and the most recent review concentrates on a single theme, sustainability (Mahran et al., 2025). Second, earlier reviews drew mainly on Web of Science and Scopus, which index a selective set of journals and under-represent outlets from Asia, the Middle East, and Africa, where a growing share of hospitality leadership research originates. OpenAlex offers an open index with broader coverage and compares well with Scopus for country-level analysis (Alperin et al., 2024). Third, most earlier maps describe the field at one point in time and say little about which themes are rising or which earn above-average citations, even though overlay visualisations by publication year and normalised citation make such readings possible (van Eck & Waltman, 2010).

This study maps hospitality leadership research published between 2016 and 2026 with OpenAlex data and VOSviewer. Three research questions guide the analysis. How have output and citation impact developed, and which articles, authors, and countries drive the field? Which thematic clusters structure the field? Which themes are emerging, which carry the strongest impact, and what research agenda follows from these patterns? The study contributes an updated map that covers the post-2021 expansion and the output of emerging economies, a joint reading of thematic structure, recency, and impact, and a research agenda organised around theory, context, characteristics, and methodology (Lim et al., 2022).

RESEARCH METHODS

This study adopts a bibliometric design that combines performance analysis with science mapping (Donthu et al., 2021). Performance analysis describes the productivity and impact of publications, authors, and countries. Science mapping examines relations among research constituents, here the keywords that articles share, to reveal the conceptual structure of a field. Bibliometric reviews add the most value when they move beyond description toward implications for theory and practice (Mukherjee et al., 2022), so the analysis ends with a structured research agenda. Figure 1 summarises the procedure.

OpenAlex served as the data source. OpenAlex is an open catalogue of scholarly works, authors, sources, institutions, and concepts that succeeded the Microsoft Academic Graph and offers free programmatic access (Priem et al., 2022). Three features justify its use for this topic. It indexes journals from emerging economies that subscription databases often omit, VOSviewer can retrieve its records through an application programming interface, and anyone can reproduce the search without a licence. Its metadata also carry known weaknesses, including missing affiliation countries, missing reference lists, and imperfect document-type classification (Alperin et al., 2024). The study reports these weaknesses where they affect the results.

On 17 October 2026, we searched OpenAlex for the phrase “Leadership in Hospitality” across all searchable fields and restricted the results to the publication years 2016 to 2026 and to the document type article. The search returned 2,581 records, all of which entered the analysis. A search across all fields matches titles, abstracts, and indexed full texts, which favours recall over precision. We kept every retrieved record so that other researchers can reproduce the dataset, and we account for the loss of precision when interpreting the results. The window covers ten complete years and the first ten months of 2026.

For science mapping, we created a map from bibliographic data in VOSviewer (van Eck & Waltman, 2010), with records downloaded through the OpenAlex interface. We selected co-occurrence as the type of analysis, keywords as the unit of analysis, and full counting, under which every co-occurrence of two keywords in an article adds one unit of link strength. A minimum of 20 occurrences per keyword retained 162 keywords. This threshold keeps keywords that appear in close to 0.8% of the articles, which preserves the main themes while keeping the map legible. VOSviewer normalised link strengths with the association strength method, positioned items with its default layout parameters (attraction 2, repulsion 0), and grouped them with a clustering resolution of 1.00, a minimum cluster size of 1, and the option to merge small clusters. We applied no thesaurus file. The keywords are those that OpenAlex assigns, so generic terms such as “hospitality industry” and near-synonyms such as “mediation” and “mediating effect” remain separate items, and the interpretation treats them as such. The study reports three visualisations: a network map that shows clusters, an overlay map coloured by average publication year with average normalised citations as a second score, and a density map. VOSviewer normalises citations by dividing each article's citation count by the mean citation count of all articles in the dataset published in the same year, so a value above one marks above-average impact for an article's age.

For performance analysis, we exported the metadata of the same 2,581 records from OpenAlex in CSV format and computed the indicators in Python. The indicators cover annual output, total and mean citations, the h-index of the corpus, author productivity, country productivity, and international collaboration. Author counts rely on OpenAlex author identifiers, which separate researchers who share a name. Country counts rely on the country codes of authors' affiliations, with each country counted once per article. An article counts as internationally co-authored when its authors list affiliations in two or more countries. Affiliation countries were available for 1,899 records (73.6%), so country indicators describe that subset.

Two data-quality checks preceded the interpretation. First, 26 titles appeared twice (1.0% of records), a pattern consistent with OpenAlex holding separate entries for versions of the same work. Second, 77 records dated 2017 credit a single media account as author, carry no affiliation and no citations, and form parts of one conference media series on women's leadership in the hospitality industry. Because VOSviewer built the keyword map from the full set of records, we retained these entries for consistency, excluded the media account from the author ranking, and flag their influence wherever it shapes the results.

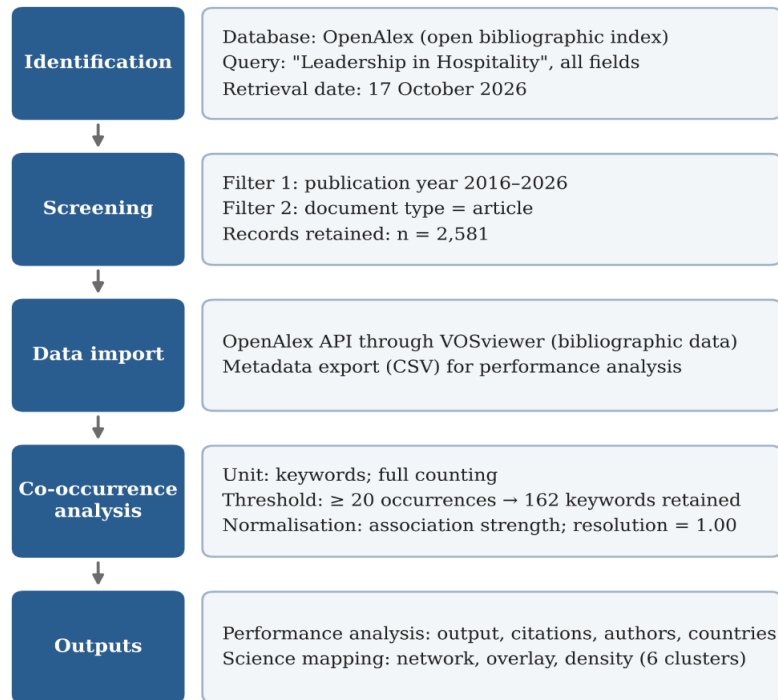


Figure 1. Data retrieval and analysis procedure
 Source: Authors' design based on Donthu et al. (2021)

RESULTS AND DISCUSSION

This section first reports the findings in the order of the research questions: publication output and citation impact, influential articles, productive authors and countries, the conceptual structure of the field, and its thematic evolution and impact. It then interprets these findings and compares them with earlier reviews in the Discussion subsection.

Results

Publication output and citation impact

Table 1 summarises the corpus. Output grew from fewer than one hundred articles in 2016 to several hundred a year after 2023, a compound annual growth rate of about 25% between 2016 and 2025, and the first ten months of 2026 already exceed the full 2025 total (Figure 2a). Two thirds of the corpus appeared from 2023 onward. Mean citations per article move in the opposite direction (Figure 2b). Articles published between 2016 and 2022 average more than twenty citations in every year except 2017, while articles published from 2023 onward have had little time to accumulate citations. Half of the corpus (1,336 articles, 51.8%) remains uncited. The 2017 values carry the imprint of the media series described in the methods:

those records inflate the year's output and pull its mean impact down, and without them the 2017 mean rises to the level of neighbouring years.

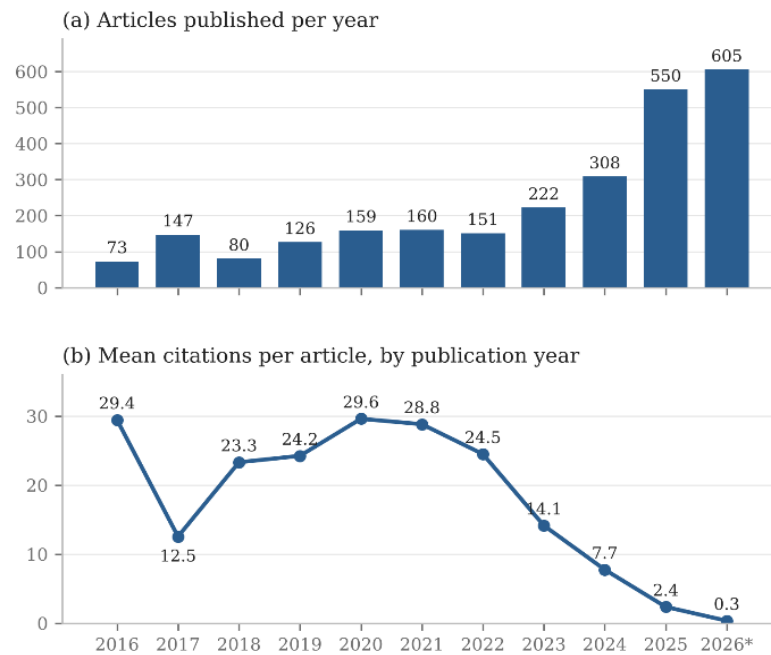
Table 1. Main information on the dataset

Indicator	Value
Data source; retrieval date	OpenAlex; 17 October 2026
Publication period	2016–2026 (2026 partial)
Document type	Article
Articles	2,581
Total citations	28,952
Mean citations per article	11.22
h-index of the corpus	85
Uncited articles	1,336 (51.8%)
Distinct authors (OpenAlex identifiers)	5,215
Countries represented	109
Articles with affiliation country	1,899 (73.6%)
Internationally co-authored articles	531 (28.0% of 1,899)
Keywords mapped (≥ 20 occurrences)	162
Clusters; links; total link strength	6; 5,859; 25,146

Source: Processed OpenAlex and VOSviewer data (2026)

Figure 2. Annual articles and mean citations per article, 2016–2026

Source: Processed OpenAlex data (2026)



*Partial year (data retrieved 17 October 2026).

Influential articles

Table 2. Ten most cited articles

No.	Article	Focus	Citations
1	Darvishmotevali & Altinay (2022)	Servant leadership, green HRM, and employee green behaviour	472
2	Tuomi et al. (2021)	Applications and implications of service robots	409
3	Bhutto et al. (2021)	Green inclusive leadership and green creativity	387

No.	Article	Focus	Citations
4	Brammer & Clark (2020)	COVID-19 and management education	286
5	Stamolampros et al. (2019)	Satisfaction and turnover determinants in employee reviews	280
6	Sarwar et al. (2020)	Ethical leadership, engagement, well-being, and performance	218
7	Kim et al. (2020)	Hotels' environmental leadership and citizenship behaviour	216
8	Luu (2019)	Environmentally specific servant leadership and OCBE	216
9	Huertas-Valdivia et al. (2019)	Effects of different leadership styles on workers	212
10	Boukis et al. (2020)	Customer incivility and supervisor leadership style	203

Note: OCBE = organisational citizenship behaviour for the environment. Source: OpenAlex citation counts on 17 October 2026

Environmentally oriented leadership dominates the list of the most cited articles in Table 2. Four of the ten examine how leaders move employees toward green behaviour. Servant leadership strengthens the effect of green human resource management on employees' green behaviour (Darvishmotevali & Altinay, 2022). Green inclusive leadership raises green creativity through a green psychological climate and work engagement (Bhutto et al., 2021). Hotels' environmental leadership encourages employees' citizenship behaviour (Kim et al., 2020), and environmentally specific servant leadership fosters citizenship behaviour for the environment (Luu, 2019). The remaining six articles cover the deployment of service robots, the drivers of satisfaction and turnover in employee reviews, ethical leadership and well-being across cultures, the comparative effects of leadership styles, and the buffering role of supervisors when customers behave uncivilly (Boukis et al., 2020; Huertas-Valdivia et al., 2019; Sarwar et al., 2020; Stamolampros et al., 2019; Tuomi et al., 2021).

One article in the list, a reflection on management education during the pandemic (Brammer & Clark, 2020), lies outside hospitality leadership, and the same holds for a study of indigenous tourism during COVID-19 just below the top ten (Carr, 2020). Both entered the corpus because the all-field search matched words in their full texts.

Productive authors and countries

The corpus lists 5,215 distinct author identifiers. Bassam Samir Al-Romeedy (25 articles), Hazem Ahmed Khairy (20), Luu Trong Tuan and Ahmed Mohamed Hasanein (16 each), and Sameh Fayyad (14) lead in productivity. Productivity and impact diverge at the top of this ranking: the 16 articles of Luu Trong Tuan received more citations than the 75 articles of the other four leading authors combined. Table 3 lists the ten most productive countries among the 109 represented.

Table 3. Ten most productive countries

Country	Articles	Citations	Citations per article
United States	260	5,238	20.15
Indonesia	254	224	0.88
China	215	6,763	31.46
Pakistan	192	3,545	18.46
India	139	1,413	10.17
Malaysia	129	1,933	14.98
Saudi Arabia	106	1,313	12.39

Country	Articles	Citations	Citations per article
Egypt	103	1,248	12.12
United Kingdom	102	4,295	42.11
Australia	84	2,555	30.42

Note: Each country counted once per article; based on 1,899 articles with affiliation data.

Source: Processed OpenAlex data (2026)

The country ranking separates volume from influence. The United States and China combine high output with high impact. The United Kingdom and Australia publish less but earn the highest citations per article. A third group, formed by Indonesia, India, Saudi Arabia, and Egypt, contributes substantial volume at modest impact. Indonesia stands out: it ranks second in output, yet its articles receive the fewest citations per article in the top ten, and most of them appeared from 2023 onward. Pakistan and Malaysia publish somewhat smaller volumes than Indonesia but record 18.46 and 14.98 citations per article. Of the 1,899 articles with country data, 531 (28.0%) involve international co-authorship.

Conceptual structure of the field

The co-occurrence network in Figure 3 groups the 162 keywords into six clusters. “Hospitality industry” forms the central hub, as the search phrase would predict, followed by “hotel employees,” “transformational leadership,” “job satisfaction,” and “mediating effect” in total link strength. Table 4 profiles each cluster with its size, core keywords, occurrence-weighted mean publication year, and occurrence-weighted mean normalised citations.

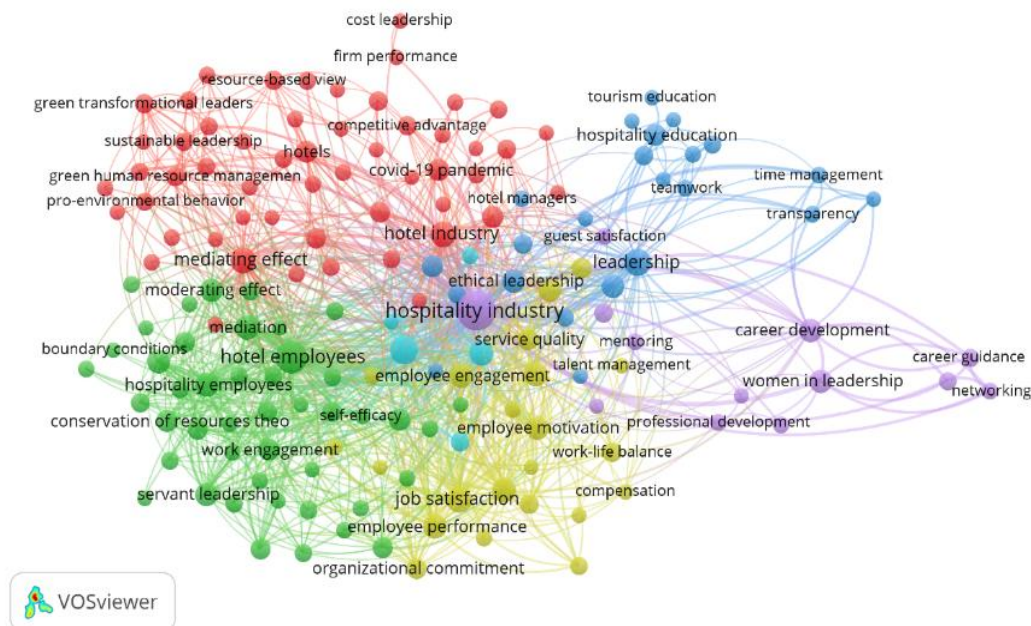


Figure 3. Keyword co-occurrence network (162 keywords, six clusters)

Source: VOSviewer output based on OpenAlex data (2026)

Table 4. Profile of the six thematic clusters

Cluster	Items	Core keywords	Mean year	Norm. citations
1. Green, digital, and strategic leadership (red)	54	mediating effect; hotel industry; COVID-19 pandemic; green HRM; green transformational leadership; digital transformation	2023.9	1.49
2. Mechanisms of positive leadership (green)	45	hotel employees; servant leadership; social exchange theory; work engagement; conservation of resources theory	2023.5	1.63
3. Leadership competencies and education (blue)	23	leadership; ethical leadership; leadership development; hospitality education; leadership skills	2022.1	0.65
4. Leadership as a human resource lever (yellow)	22	job satisfaction; employee performance; employee engagement; organisational culture; employee retention	2023.8	0.58
5. Careers and women in leadership (purple)	13	hospitality industry; career development; women in leadership; career guidance; mentoring	2022.1	0.73
6. Classic leadership styles (cyan)	5	transformational leadership; leadership styles; transactional leadership; democratic leadership; authoritarian leadership	2022.9	0.83

Note: Mean year and normalised citations are weighted by keyword occurrences. Source: Processed VOSviewer map file (2026)

Cluster 1 (green, digital, and strategic leadership) is the largest cluster by number of items. It joins green transformational, environmental, sustainable, responsible, and entrepreneurial leadership with green human resource management, pro-environmental behaviour, green creativity, and green innovation. A second strand in the same cluster covers digital leadership, digital transformation, artificial intelligence, crisis management, and organisational resilience, and a third draws on the resource-based view, dynamic capabilities, and competitive advantage. Studies in this cluster treat leadership as a capability that converts environmental and technological pressure into employee behaviour and firm performance, and they often rely on social cognitive theory (Aboramadan & Karatepe, 2021; Darvishmotevali & Altinay, 2022). Keywords such as “five-star hotels” and “luxury hotels” show that upscale properties supply most of the empirical settings.

Cluster 2 (mechanisms of positive leadership) holds the explanatory core of the field. It gathers servant, authentic, empowering, inclusive, paradoxical, and spiritual leadership together with leader-member exchange, and it connects them to work engagement, citizenship behaviour, well-being, innovative behaviour, burnout, emotional exhaustion, and turnover intention among frontline employees. Its theoretical keywords name social exchange theory, conservation of resources theory, self-determination theory, the job demands-resources model, and social learning theory, which matches the lenses outlined in the introduction (Bakker & Demerouti, 2017; Deci et al., 2017; Hobfoll et al., 2018; Tuomi et al., 2021). Its methodological keywords, including mediation, moderated mediation, serial mediation, and boundary conditions, reveal a field that explains leadership effects through chains of psychological mechanisms (Bavik, 2020).

Cluster 3 (leadership competencies and education) brings together leadership development, hospitality education, leadership skills, emotional intelligence, communication and soft skills, teamwork, and curriculum development. It treats leadership as a set of competencies that schools and employers can build, and it places ethical leadership close to these developmental concerns. Three of its keywords, time management, transparency, and fairness, carry mean publication years around 2017 and almost no citations, which ties them to the media series rather than to the scholarly stream. Cluster 4 (leadership as a human resource lever) links leadership support to job satisfaction, employee performance, engagement, motivation, retention, organisational culture, service quality, work-life balance, and compensation. Research in this cluster models leadership as one antecedent among several human resource practices and often measures outcomes that matter to managers, such as retention and performance (Gatling et al., 2016; Stamolampros et al., 2019).

Cluster 5 (careers and women in leadership) groups career development, women in leadership, women leaders, women in management, mentoring, networking, career guidance, and professional development around the hub term “hospitality industry.” Several of these keywords show mean publication years near 2017 and almost no citations, which matches the media series identified in the methods. The cluster therefore overstates the size of scholarly research on gender and careers in hospitality leadership and understates its recency. Cluster 6 (classic leadership styles) is small yet central. It contains transformational, transactional, democratic, and authoritarian leadership together with the generic term “leadership styles,” and it reflects studies that compare the effects of several styles on the same outcomes (Huertas-Valdivia et al., 2019).

The clusters overlap more than they separate. Only about a third of the total link strength falls within clusters, and the strongest connection between any two clusters joins Cluster 1 and Cluster 2, followed by the link between Cluster 2 and Cluster 4. The links also expose one distortion: ethical leadership co-occurs often with time management, career development, transparency, and fairness, the vocabulary of the media series, so part of its prominence in Cluster 3 reflects those records and not scholarly output.

Thematic evolution and research impact

The overlay map in Figure 4 colours each keyword by the average publication year of the articles that use it. Keywords tied to careers, women leaders, education, and ethical, authentic, and servant leadership sit at the older end of the scale. The most recent keywords are digital transformation, digital leadership, the job demands-resources model, the resource-based view, adaptive leadership, organisational sustainability, environmental commitment, green human resource management, sustainable leadership, and green innovation, all with mean publication years in 2024 or 2025.

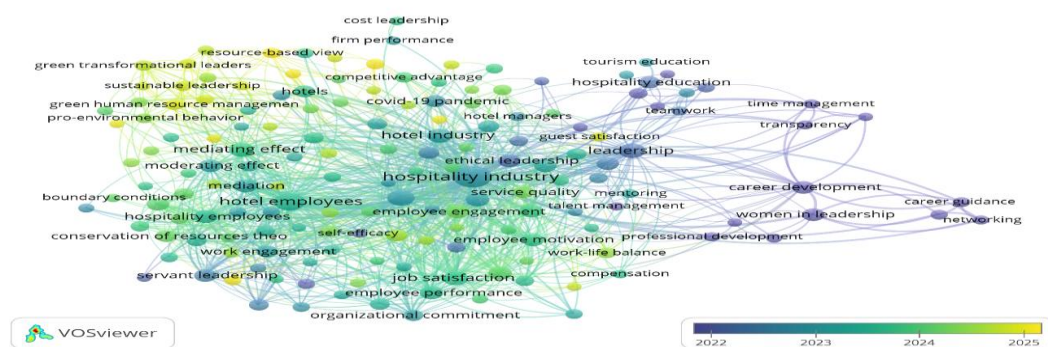


Figure 4. Overlay visualisation by average publication year

Source: VOSviewer output based on OpenAlex data (2026)

Normalised citations add the impact dimension. Clusters 1 and 2 are the only clusters with weighted normalised citations above one, which means their articles outperform the citation average of their publication years (Table 4). Clusters 3 and 4 sit well below that average. At the keyword level, green innovation, green transformational leadership, employee green behaviour, green creativity, pro-environmental behaviour, paradoxical leadership, social cognitive theory, and the mediation-related terms record the highest normalised citations. The density map in Figure 5 shows where research concentrates: the hottest zones surround the industry hub, hotel employees, and the cluster of job satisfaction and employee performance.

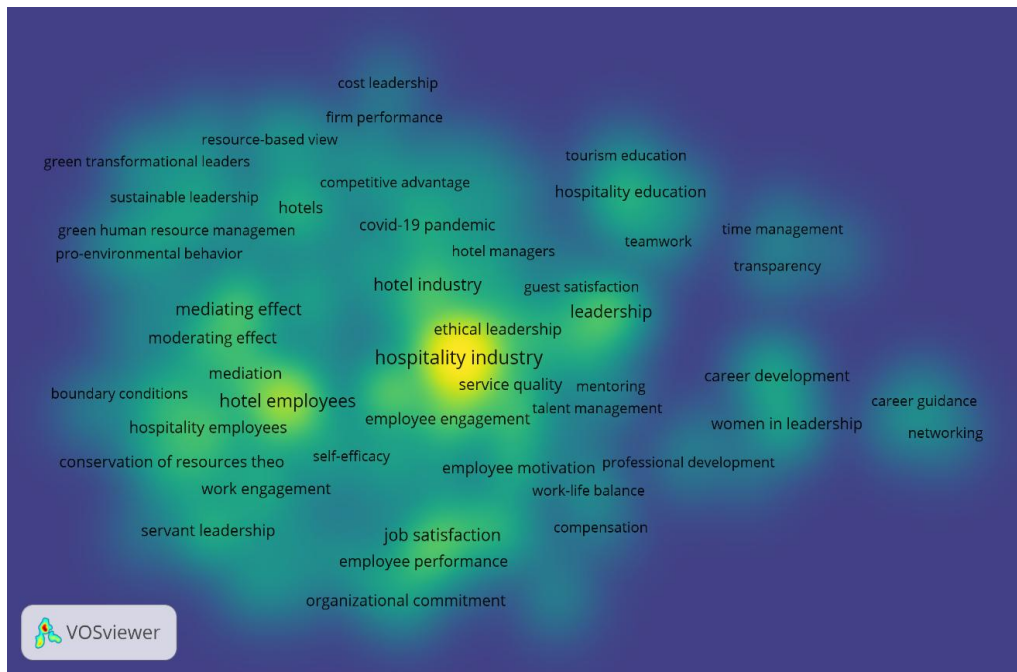


Figure 5. Item density visualisation

Source: VOSviewer output based on OpenAlex data (2026)

Discussion

The discussion interprets the results along the three research questions and relates them to the earlier reviews summarised in the introduction.

Growth and the geography of influence

The shape of this growth carries an interpretation. The steepest increase follows the pandemic, when labour shortages and burnout pushed retention and well-being to the top of the industry's agenda (Baum et al., 2020). The rise also coincides with the expansion of journals in emerging economies that OpenAlex indexes. The recent surge has not yet translated into citations, so the field's newest work still has to show whether it shapes later research or adds volume to established questions.

The country results separate volume from influence. Recency explains part of Indonesia's citation gap but not all of it, since Pakistan and Malaysia publish somewhat smaller volumes with far higher impact. The divergence between productivity and impact among the leading authors points in the same direction: in this field, output alone does not secure influence.

Several explanations for the Indonesian pattern deserve testing. Indonesian articles may appear in national journals with limited international visibility, may involve fewer cross-border collaborations, and may replicate established models without a contextual theoretical contribution. For Indonesian hospitality scholars and the institutions that fund them, the evidence points toward international co-authorship, publication in internationally indexed outlets, and studies that theorise local features of the sector, such as family-owned lodging, Muslim-friendly hospitality, and destination-based small enterprises. Recent Indonesian

evidence that memorable nature-based experiences and place attachment drive the environmentally responsible behaviour of Muslim tourists (Arissaputra et al., 2025) points to one way of doing so: in Muslim-friendly destinations where guests already show strong environmental commitment, future studies could test whether green leadership aligns employees' environmental behaviour with that of their guests.

Influential work and the conceptual structure

The presence of two off-topic articles, (Brammer & Clark, 2020) and (Carr, 2020), among the most cited records shows the precision cost of the search strategy and cautions readers against treating raw citation rankings from OpenAlex as a canon. The substantive pattern still holds: the most influential hospitality leadership research links leader behaviour to employee conduct beyond formal job duties, such as citizenship behaviour and creativity, and to the environmental performance of the firm.

The strong links between Cluster 1 and Cluster 2, and between Cluster 2 and Cluster 4, indicate that firm-level questions about green and digital strategy draw on the same employee-level mechanisms that explain engagement and retention. Green, digital, and strategic leadership has not developed as a separate stream but as an extension of the established psychology of frontline employees.

Compared with earlier maps, this structure confirms the centrality of transformational and servant leadership reported in previous reviews (Guchait et al., 2023; Huertas-Valdivia et al., 2022). It departs from them in two respects. The largest cluster now centres on green, digital, and strategic leadership, a theme that earlier reviews recorded as peripheral or emerging (González-Torres et al., 2025). A distinct human resource cluster also appears, populated by studies that link leadership to retention, culture, and compensation, many of them from the emerging economies that OpenAlex indexes more fully than subscription databases. The persistence of the classic-styles cluster also deserves comment, because comparisons of styles do not always favour transformational leadership: in a study of employee creativity in the digital era, transactional leadership showed a stronger effect than transformational leadership, although both effects were significant (Sentika et al., 2024).

The three further reviews summarised in the introduction help to place these results. The six-decade mapping of hospitality leadership research placed leader-member exchange at the centre of the field and reported growing attention to abusive supervision (Arici et al., 2021). In the present map, leader-member exchange sits inside the mechanism cluster rather than among the items with the highest link strength, and abusive supervision does not reach the keyword threshold, which suggests that research on destructive leadership has not kept pace with the post-2021 growth of positive and green leadership research. The meta-analytic evidence that cultural differences moderate the effects of transformational leadership (Gui et al., 2020) gains weight given the strong output from Asia, the Middle East, and Africa documented here, because effects estimated in one cultural setting may not transfer to another. The rise of the green cluster is consistent with the conclusion that leadership styles shape environmental sustainability initiatives in tourism and hospitality, and the low impact of guest-related keywords in the present map echoes the observation that customer outcomes remain under-examined in that literature (Mahran et al., 2025).

The inflation of Cluster 5 by non-scholarly records also matters for gender research. Gender research in hospitality has long called for more critical work on women's advancement (Mooney, 2020), and this map suggests that peer-reviewed research has not yet answered that call at scale.

Thematic shift and methodological signature

Read together, the overlay and density maps show a field shifting from who the leader is toward what the leader enables. Earlier work catalogued styles, traits, and competencies. Recent work asks how leaders make employees behave in environmentally responsible ways,

adopt digital tools, and stay resilient under strain, and it relies on frontline psychology to explain those effects. Citation patterns reward this shift: the green and mechanism-oriented clusters draw more attention than studies that treat leadership as one more human resource practice.

The same evidence exposes a methodological signature. Mediation, moderation, moderated mediation, and serial mediation appear across clusters and attract above-average citations, which points to a reliance on survey-based models that test indirect effects. Most such models rest on cross-sectional data, which limits causal claims and raises concerns about common method variance unless researchers design their studies to address them (Spector, 2019). The impact premium for green and paradoxical leadership may also reflect the appeal of novel topics, and replication studies will show which of these effects hold.

Future research agenda

Table 5 organises the research agenda along the theory, context, characteristics, and methodology framework, which converts review findings into concrete directions for future studies (Lim et al., 2022).

Table 5. Research agenda for hospitality leadership

Dimension	Gap identified in the map	Directions for future research
Theory	Social exchange and conservation of resources theories serve as generic explanations across styles; dark-side leadership remains marginal	Test competing mechanisms within one model; integrate resource-based and dynamic capability views with micro-level mechanisms; study authoritarian and abusive leadership
Context	Hotels, especially upscale properties, dominate; high-volume countries show low impact	Examine restaurants, events, cruise and airline services, small family-owned lodging, and Muslim-friendly hospitality; theorise national and cultural contingencies
Characteristics	Digital, robotic, and gender themes are recent or thin; guest outcomes rarely enter the models	Study leadership of human-robot and AI-supported teams; examine women's career progression; link leader behaviour to employee and guest outcomes in one design
Methodology	Cross-sectional mediation models prevail	Use longitudinal, multilevel, experience-sampling, and experimental designs; apply text mining to employee reviews; share data openly

Source: Authors' synthesis based on the science mapping results (2026)

On theory, researchers can move beyond social exchange and conservation of resources theories as all-purpose explanations by testing competing mechanisms within the same model and by connecting firm-level views, such as the resource-based view and dynamic capabilities, to the employee-level processes that dominate Cluster 2. Destructive forms of leadership deserve more attention, given that authoritarian leadership appears in the map while abusive supervision does not appear among the mapped keywords. On context, the prominence of hotel employees and upscale properties leaves restaurants, events, cruise and airline services, and small family-run lodging under-examined, a gap that matches the call to treat the hospitality setting as a contingency (Guchait et al., 2023). The high-volume, low-impact countries offer settings where contextual theorising could raise both relevance and visibility.

On characteristics, the recency of digital leadership and artificial intelligence keywords invites research on how managers lead teams that include service robots and algorithmic tools (Tuomi et al., 2021). Guest satisfaction ranks among the newest keywords yet carries low impact, which signals an opportunity for multilevel designs that trace leadership effects from

managers to employees to guests. Gender research needs rigorous peer-reviewed evidence on the career progression of women into hospitality leadership (Mooney, 2020). Generational composition also deserves attention in a sector that employs many young workers, since employees of different generations value different aspects of the same leadership style (Sentika et al., 2022). On methodology, longitudinal, multilevel, experience-sampling, and experimental designs would strengthen the causal claims that mediation-heavy research makes, and text mining of employee reviews offers behavioural evidence at scale (Stamolampros et al., 2019).

Practical implications

The findings carry practical implications. Hotel managers who want employees to adopt green practices can draw on servant, inclusive, and green transformational leadership behaviours, which the most cited studies connect to employees' environmental conduct and creativity (Bhutto et al., 2021; Darvishmotevali & Altinay, 2022). Leaders who empower and support frontline staff protect them from exhaustion and lower their intention to quit, according to the mechanism cluster. Hospitality schools can add digital and sustainability leadership to curricula that still emphasise general soft skills. Research funders in Indonesia and comparable countries can reward international collaboration and contextual contribution alongside publication counts.

Limitations

The study has limitations. It relies on one database and on an all-field query, which together admitted off-topic articles and a batch of non-scholarly records. The keywords come from OpenAlex's automated assignment, and the absence of a thesaurus left generic terms and near-synonyms as separate items. Country data cover about three quarters of the records, and citation counts for recent years remain immature. Future bibliometric studies can restrict queries to titles and abstracts, merge several databases, apply a cleaning thesaurus, and add co-citation analysis to trace the intellectual foundations of the field

CONCLUSION

This study set out to map how hospitality leadership research developed over the past decade, which themes structure it, and where its frontier lies. The field grew fastest after the pandemic, driven in large part by researchers in emerging economies, yet influence remains concentrated in a few countries, and Indonesia combines high output with low visibility. Six thematic clusters organise the literature, and the frontier has moved from cataloguing leadership styles and competencies toward green, digital, and strategic leadership explained through the psychology of frontline employees. Studies of environmentally oriented leadership and of the mechanisms that connect leaders to employees attract the most attention, while research that treats leadership as one more human resource practice draws less. The next stage of the field calls for tests of competing theories, settings beyond upscale hotels, stronger evidence on digital and gender questions, and designs that support causal claims. Researchers in high-output countries such as Indonesia are well placed to supply contextual evidence of this kind and to raise the visibility of their work.

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