Performance Appraisal within Human Resource Management: A Bibliometric Analysis of Structure and Evolution

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A B S T R A C T

The purpose of this paper is to outline the position of employee performance appraisal (PA) within human resource management (HRM) and its recent evolution. Based on a bibliometric analysis of keywords, citations and co-occurrence networks conducted between 2020 and 2025, the results indicate a stable EP-HRM core, supported by three related directions: (i) the operational-processual dimension (training, career development, HR practices), (ii) employee outcomes (engagement, satisfaction, retention), (iii) the technological component (artificial intelligence – AI, data analytics). In 2025, the network is more integrated and structured; AI is solidly connected to HRM, but the link with PA remains incipient. We conclude that the field is conceptually consolidating, with a close connection between practices and organisational objectives, while the integration of digital tools in professional performance evaluation is still developing. Future research directions are suggested regarding standardisation, transparency, and evaluation of effects on organisational outcomes.

1. Introduction

Performance appraisal is a basic component of human resource management, through which the individual performance of employees is systematically and periodically evaluated in order to inform critical organisational decisions (Fletcher, 2001). This basic human resource practice covers various uses - administrative, developmental and strategic - each contributing to organisational success (Lameque et al., 2023). In practical terms, professional performance appraisal frameworks establish mechanisms for assessing employee contributions, identifying areas for improvement, and aligning individual efforts with organisational objectives (Alkhyeli & Hazmilah, 2025).

The design of the assessment, as well as the design parameters of the assessment – the criteria used, sources of feedback, frequency of assessments, and tools used – influence both the quality of implementation and confidence in its fairness (Iqbal et al., 2014). Despite its critical role, performance appraisal often faces challenges such as: appraiser bias, reliability and fairness issues, difficulties in accepting feedback, which requires the design and implementation of a well-defined system (Moreira et al., 2025).

However, the relevance of performance appraisal in contemporary HR—particularly in the context of hybrid working models and the increasing use of data—underscores its continued importance for strengthening organisational performance and employee development (Lameque et al., 2023). The shift from traditional models to developmental and technology-supported approaches highlights a significant transformation in assessment practices (Alkhyeli & Hazmilah, 2025). This evolution aims to increase the validity and reliability of assessments so that they become a real resource for individual and organisational development, not just a formal exercise (Corso et al., 2019).

Given its strategic importance, contemporary organisations adopt formal performance appraisal processes to measure the degree of employee compliance with job requirements, facilitating informed managerial decisions that impact organisational performance (Ibrahim & Madzoke, 2024). Such a systematic approach ensures the optimal use of human resources and their continuous development in order to achieve organisational goals. In addition, artificial intelligence-based assessment tools are emerging as innovative solutions to traditional assessment challenges, promising objectivity and efficiency in performance evaluation

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(Djunaedi, 2024). However, despite all these technological advances, significant gaps remain, particularly in terms of the contextual understanding of assessment implementation and the influence of organisational culture and social factors on assessment outcomes (Moreira et al., 2025).

This paper aims to synthesise current research on professional performance appraisal in the field of human resource management, highlighting the main connections, results and impact of emerging trends. The paper examines the relationship between employee performance appraisal and various human resource practices—including training, compensation, recruitment, and career development—while also considering the mediating role of leadership and feedback quality. It also aims to explore the relationship between performance appraisal and organisational performance, the impact on critical attitudinal outcomes (employee engagement, satisfaction and retention) and the expanding role of artificial intelligence and algorithmic approaches in transforming appraisal practices.

2. Literature review

From a strictly evaluative and measurement tool, professional performance appraisal has become, in the current context, a central element that supports various human resource functions, such as compensation, training, and talent management (Lameque et al., 2023). Its scope has expanded significantly, from a measurement function to integration into strategic performance management systems (Li & Estacio, 2024). This change emphasises the role of assessment in supporting continuous employee development and organisational success (Brown et al., 2018).

Recent studies increasingly position performance appraisal as a developmental tool, essential for identifying training needs and stimulating continuous improvement, going beyond its traditional role of grading (Devi, 2024). Cross-sectional analyses highlight positive relationships between the quality of assessment and participation in targeted training programmes, provided that the feedback is highly specific (Phan et al., 2021).

Contemporary literature frequently emphasises the critical role of perceived fairness and clarity in assessment systems, along with a focus on employee development, as key factors in positive organisational outcomes (Taneja et al., 2023). For example, fair and transparent evaluation procedures are essential to reduce employee mistrust and dissatisfaction, directly influencing their engagement and retention (Mouratidou et al., 2023). However, structured performance appraisals remain standard practice globally, highlighting the need for continuous refinement of implementation, not abandonment (Murphy & DeNisi, 2023).

In the context of validity and reliability limitations, supervisors often perceive existing systems as ineffective when used exclusively for promotion decisions or when confidentiality clauses prevent open dialogue on results and collaborative goal setting for employee development (Bhurtel & Adhikari, 2016). Practical improvement strategies include: strengthening feedback mechanisms, simplifying complex processes, clarifying objectives, and focusing evaluations on behaviours and results—measures that contribute to increasing the perception of fairness in the process (Roberts, 2003).

With regard to artificial intelligence in professional performance evaluation, research indicates that the integration of AI enhances the objectivity, fairness, and efficiency of evaluation processes (Nath et al., 2025). However, gaps remain regarding the application of AI in various industries and the ethical implications for employees and organisational culture (Venugopal et al., 2024). Concerns about data privacy, algorithmic bias, and the transparency of AI-based decision-making processes require further investigation to ensure a fair implementation of the evaluation process (Biswas et al., 2024).

In conclusion, professional performance evaluation has become a central pillar of HR, acquiring a developmental function and connecting closely with training and reward processes. The positive effects on engagement and results are determined by the quality of the criteria and tools, the credibility of the feedback, and the perception of fairness. AI promises greater efficiency but raises issues of privacy, algorithmic bias, and transparency. This highlights the need for research to test mechanisms and define frameworks for the responsible integration of digital technologies into employee performance evaluation.

3. Methodology

The study uses a bibliometric analysis to highlight the connections between employee performance appraisal and human resource management in the literature. The data was extracted from the Web of Science database, using keywords related to the phrase *employee performance appraisal* (*performance appraisal, performance review, employee performance evaluation)* in combination with specific terms *related to human resource management* (*human resource, HRM, personnel management)*. Filters were applied for the period 2020-2025 and for the document types *Article* and *Review.* After applying all these filters, the set comprised 225 papers.

In the pre-processing stage, terms with the same meaning were merged using a thesaurus file, and terms outside the scope of the research were excluded. This stage aimed to reduce terminological variability in order to ensure the comparability of results.

The analysis was performed using RStudio software, with the Bibliometrix package, using the Biblioshiny interface. The following were constructed:

1. Co-occurrence networks based on authors' keywords and terms extracted from titles/abstracts, in which the size of the nodes reflects the frequency of occurrence and the thickness of the edges indicates the intensity of co-occurrence;
2. Thematic map for assessing the centrality and density of themes;
3. Analyses by time section to capture the dynamics of the theme in the researched interval.

The main objective of this paper is to identify gaps in the literature on professional performance evaluation in order to outline further directions for research. The paper also aims to describe the conceptual structure of the field and identify emerging themes and their positioning in the network.

4. Result

To present the results, we first summarise the basic indicators of the corpus, followed by interpretations and thematic/citation analyses.

Figure 1. Bibliometric Dataset Overview (2020–2025)
Source: Export Biblioshiny

To delimit the descriptive framework of the corpus, Figure 1 summarises the basic indicators resulting from the Web of Science database query for the period 2020–2025. The set includes 225 papers published in 136 sources, indicating a high degree of thematic and editorial diversity, and the distribution by source indicates that the topic is addressed in both specialist journals and publications with a broader scope of interest. The average annual growth rate of production (4.68%) indicates a moderate upward trend in this field.

Author participation is extensive (696 authors; 3.2 co-authors/article), with an international co-authorship level of 31.11%. The informational density of the corpus is supported by 14,646 references and 896 author keywords, and the average age of the documents is 2.36 years, which indicates a high level of interest in this topic and recent dynamics in research in the field. Also, the average number of citations per article (≈9.60) highlights a moderate level of visibility of the papers included in the corpus.

4.1. Structure and Impact of Citations

The analysis of the structure of citations provides an overview of the internal structure of the field and the relationships between the main thematic areas identified in the corpus. From the analysis of citation patterns, it is possible to identify the most influential topics, the level of interconnection between them, and their degree of centrality within the literature. Table 1 summarises the main journals that publish articles in this field, ordered by the number of papers identified for each source.

Table 1. Most relevant sources

Sources	Articles
COGENT BUSINESS \& MANAGEMENT	9
GLOBAL BUSINESS REVIEW	7
INTERNATIONAL JOURNAL OF MANPOWER	6
INTERNATIONAL JOURNAL OF ORGANIZATIONAL ANALYSIS	6
INTERNATIONAL JOURNAL OF PRODUCTIVITY AND PERFORMANCE MANAGEMENT	6
EMPLOYEE RELATIONS	5
PACIFIC BUSINESS REVIEW INTERNATIONAL	5
PERSONNEL REVIEW	5
HUMAN RESOURCE MANAGEMENT	4
HUMAN RESOURCE MANAGEMENT JOURNAL	4
INTERNATIONAL JOURNAL OF HUMAN RESOURCE MANAGEMENT	4
SA JOURNAL OF HUMAN RESOURCE MANAGEMENT	4
ADMINISTRATIVE SCIENCES	3

Sources	Articles
ASIA PACIFIC JOURNAL OF HUMAN RESOURCES	3
EUROPEAN JOURNAL OF TRAINING AND DEVELOPMENT	3
HUMAN SYSTEMS MANAGEMENT	3
JOURNAL OF ASIAN FINANCE ECONOMICS AND BUSINESS	3
MANAGEMENT RESEARCH REVIEW	3
TRANSFORMATIONS IN BUSINESS \& ECONOMICS	3
ACCESS-ACCESS TO SCIENCE BUSINESS INNOVATION IN THE DIGITAL ECONOMY	2

The structure of sources indicates a pronounced interest in HRM–productivity: Cogent Business & Management (9) and Global Business Review (7), followed by titles focused on performance/HR (International Journal of Productivity and Performance Management, International Journal of Manpower, International Journal of Human Resource Management) (10), and finally titles focused on management (Journal of Management and Business Administration (11) and Journal of Management and Business Administration (12)). Management (9) and Global Business Review (7), followed by titles focused on performance/HR (International Journal of Productivity and Performance Management, International Journal of Manpower, International Journal of Organizational Analysis – 6 each; Employee Relations, Personnel Review – 5 each).

Table 2 summarises the papers with the greatest global impact, ranked by total number of citations and total number of citations per year, an indicator of the rate of annual visibility in the literature.

Table 2. Most cited documents

Paper	DOI	Total Citations	TC per Year
GIERMINDL LM, 2022, EUR J INFORM SYST	10.1080/0960085X.2021.1927213	139	34.75
ARSLAN A, 2022, INT J MANPOW		129	32.25
ALRAJA MN, 2022, INF SYST FRONT	10.1007/s10796-022-10250-z	118	29.5
MEMON MA, 2021, INT J MANPOW	10.1108/IJM-04-2018-0127	97	19.40
ABORAMADAN M, 2020, INT J EDUC MANAG	10.1108/IJEM-04-2019-0160	92	15.33
DE SOUZA FREITAS WR, 2020, BENCHMARKING	10.1108/BIJ-12-2019-0543	65	10.83
SCHLOEMER-JARVIS A, 2022, INT J HUM RESOUR MANAG	10.1080/09585192.2021.1996433	53	13.25
TORDERA N, 2020, J VOCAT BEHAV	10.1016/j.jvb.2020.103444	53	8.83
AGUINIS H, 2021, BRQ-BUS RES Q		53	10.60
PRENTICE C, 2023, J RETAIL CONSUM SERV	10.1016/j.jretconser.2023.103376	48	16.00
KUBIAK E, 2022, HUM RESOURCE MANAGEMENT REVIEW	10.1016/j.hrmr.2020.100792	47	11.75
ALAVI S, 2023, INT J PRODUCT PERFORM MANAG	10.1108/IJPPM-05-2020-0232	47	15.67
FROESE FJ, 2020, HUM RESOURCE MANAGEMENT REVIEW	10.1016/j.hrmr.2020.100776	46	7.67
AGARWAL V, 2022, INT J MANPOW	10.1108/IJM-03-2021-0192	42	10.50
TULSI P, 2020, J ASIAN FINANC ECON BUS	10.13106/jafeb.2020.vol7.no1.195	41	6.83
MEMON MA, 2020, MANAG DECIS		41	6.83
ANLESINYA A, 2020, EUR J TRAIN DEV	10.1108/EJTD-07-2019-0114	39	6.50
YAHIAOUI D, 2021, HUM RESOURCE MANAGEMENT	10.1002/hrm.22063	30	6.00
ALSAFADI Y, 2021, J ASIAN FINANC ECON BUS	10.13106/jafeb.2021.vol8.no1.519	29	5.80
AHMED U, 2020, GLOB BUS REV	10.1177/0972150919837813	27	4.5

The structure of the hierarchy of the most cited works indicates a focus on recent publications (mainly 2020–2023) and a high rate of annual visibility in the literature (frequent *TC per Year* values >10), highlighting that the topics are in the process of expansion. The titles and journals point in two directions:

1. human resources–labour (International Journal of Manpower, Human Resource Management Review, International Journal of Human Resource Management, Int J Hum Resour Manag), where topics such as employee performance evaluation, engagement and talent management appear;
2. digital–analytical (European Journal of Information Systems, Information Systems Frontiers, Benchmarking), which discuss HR analytics, data and the integration of technologies (AI, platforms) into performance processes. The simultaneous presence of economic informatics and HR/management journals suggests that professional performance evaluation is increasingly analysed using digital tools and indicators.

4.2. Keyword Co-occurrence Structure

Based on the authors' keywords, the structure of the corpus terms is described by frequencies, which indicate the relative presence of each term in the literature. High values refer to the core theme, while medium values suggest related directions still under development.

Table 3 presents the top 15 keywords by number of occurrences, highlighting the share of terms that dominate the corpus during the analysed period.

Table 2. Most Frequent Words

No.	Words	Occurrences
1	performance appraisal	96
2	human resource management	95
3	training	18
4	engagement	17
5	satisfaction	17
6	retention	15
7	artificial intelligence	13
8	human resource practices	12
9	leadership	9
10	career development	8
11	commitment	8
12	innovation	7
13	organizational performance	7
14	data analytics	6
15	recruitment	6

Source: Export Biblioshiny

Table 3 outlines a clear hierarchy of terms: *performance appraisal* (96) and *human resource management* (95) constitute the thematic direction of the corpus. After this almost balanced peak, frequencies decrease towards an operational dimension centred on *training* (18) and towards a results/attitudes-oriented group — *engagement* (17), *satisfaction* (17), *retention* (15) — which indicates interest in the effects of performance appraisal on staff. The technological dimension is visible through *artificial intelligence* (13) and *data analytics* (6); and *human resource practices* (12), l*eadership* (9) and *career development* (8) refer to managerial tools and processes associated with evaluation. The terms *commitment* (8), *innovation* (7), *organisational performance* (7) and *recruitment* (6) suggest connections with organisational performance.

The frequency of the terms is also illustrated by a word cloud (Figure 2), in which the size of each word reflects the number of occurrences in the corpus.

Figure 2. WordCloud
Source: Export Biblioshiny

As in Table 4, Figure 2 highlights the core *Performance appraisal–HRM* surrounded by three related directions:

1. the operational-procedural direction, which integrates terms such as *training*, *human resource practices, leadership*, and *career development* and targets the procedural structure of the appraisal (designing criteria, developing skills, calibrating managerial decisions);
2. the attitudinal direction, in which *engagement, satisfaction, retention*, and *commitment* function as target results of the appraisal cycle, suggesting the role of feedback and reward mechanisms in supporting the desired results;
3. the technological direction, marked by artificial intelligence and data analytics, which indicates a shift towards digital tools for collecting, integrating and interpreting performance data.

Figure 3 shows the co-occurrence network of keywords, where the nodes are terms and the thickness of the edges indicates the intensity of their joint occurrence.
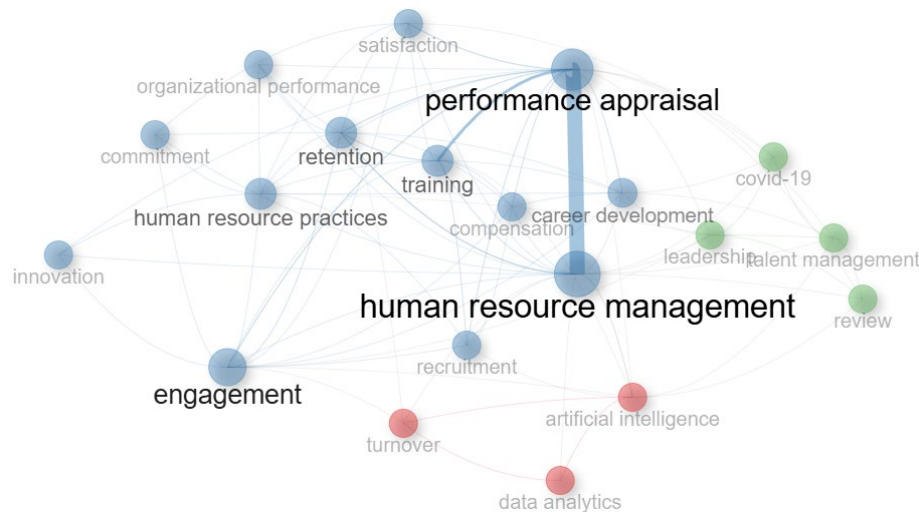

Figure 3. Network of occurrences by keywords
Source: Export Biblioshiny

The graphic structure indicates two dominant nodes, *human resource management* and *performance appraisal*, linked by a pronounced connection, which indicates their appearance in the same articles. Around *performance appraisal* there is a direction towards processes with *training*, *career development* and *compensation*, suggesting that evaluation is treated together with development and reward mechanisms. From here, links also extend to *retention* and *satisfaction*, indicating an approach that links appraisal to staff outcomes (retention, satisfaction, engagement). The *human resource management* node links the operational area to *engagement*, *human resource practices*, and *organisational performance*, highlighting the orientation of evaluation towards organisational results. Terms such as *leadership*, *talent management*, and *recruitment* appear as bridges between clusters, indicating thematic connections between development, selection, and evaluation.

Towards the periphery, *artificial intelligence* and *data analytics* form a technological subgroup connected mainly through *human resource management*, indicating a growing segment, but one that is still less directly integrated with *performance appraisal*. The presence of contextual terms such as *covid-19* and review appears towards the edge of the network, with weak connections, suggesting episodic or methodological contributions without changing the central structure of the network.

4.3. Evolution of the Co-occurrence Structure

The analysis of co-occurrence networks tracks, on an annual basis (2020–2025), the transformations in the co-occurrence structure of keywords in the corpus. The analysis compares the annual maps obtained with the same parameters, tracking three indicators:

1. the relative positioning of nodes and their membership in clusters (thematic groupings);
2. the size of the nodes (frequency in the respective year);
3. the thickness of the links.

These indicators allow the identification of thematic continuity, changes in emphasis (approximations or distances between concepts) and the identification of new terms.

Figure 4 shows the structure of co-occurrences in 2020, highlighting the dominant terms and the intensity of the relationships between them.
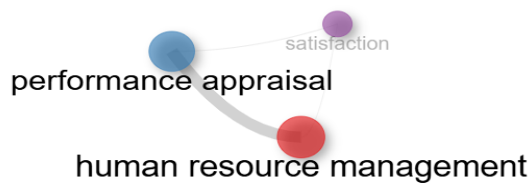
Figure 4. Keyword Co-occurrence Network (2020)
Source: Export Biblioshiny

In 2020, the co-occurrence structure is sparse and organised around the nodes *performance appraisal–human resource management*, connected by a prominent link, which indicates the integration of the conceptual framework of *performance appraisa* within HRM. The term *satisfaction* appears peripherally and is weakly connected, suggesting that attitudinal dimensions were not yet systematically integrated into the analytical framework of employee performance appraisal. The structured configuration with few nodes and thin edges indicates an early stage of the subject, with an emphasis on definitions and positioning rather than on the interconnection of operational themes (such as training, engagement, analytics) that will emerge later.
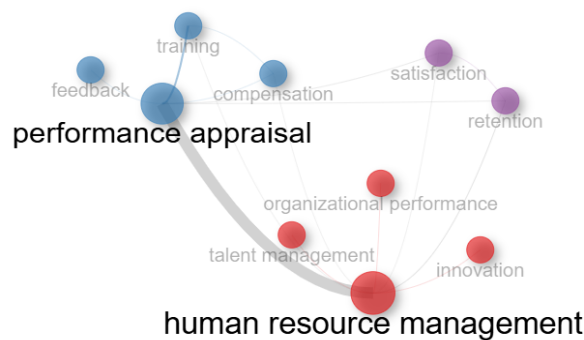

Figure 5. Keyword Co-occurrence Network (2021-2023)
Source: Export Biblioshiny

Compared to the 2020 network, the structure for the period 2021–2023 takes on a complex form. Nodes appear around *performance appraisal*: *training*, *feedback* and *compensation*, marking the transition from definitions to implementation mechanisms. A strategic-organisational group is taking shape around *human resource management*: *talent management*, *organisational performance* and *innovation*, highlighting the link between assessment and managerial decisions and results at the organisational level. The area of psycho-social results is expanding through *satisfaction* and *retention*, which are beginning to be connected, albeit moderately, to the ends of the network.

Figure 6. Keyword Co-occurrence Network (2024)
Source: Export Biblioshiny

In 2024, the *performance appraisal-human resource management* axis remains central, but the thematic field expands on three levels:
1. Operational: the terms *recruitment* and *compensation* emerge alongside *training*, indicating the integration of assessment into recruitment and reward processes, not just skills development;
2. Individual results: in addition to *satisfaction* and *retention*, the term *engagement* appears, marking the emphasis on motivational and involvement effects.

3. Strategic-organisational direction: *organisational performance* becomes more visible, while *innovation* and *commitment* are placed closer to HRM, emphasising the links between evaluation, innovative capacity and staff retention within the organisation.

At the same time, *turnover* is more clearly connected to HRM, indicating the use of assessment and personnel data to diagnose the risk of departure.
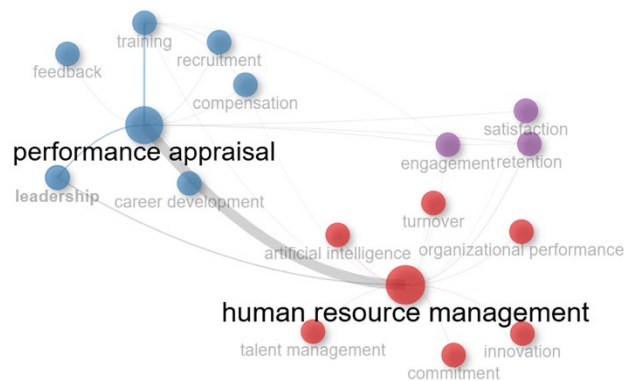

Figure 7. Keyword Co-occurrence Network (2025)
Source: Export Biblioshiny

Unlike the 2020–2024 period, the 2025 network is more integrated and structured, and around the *performance appraisal* node, there are additional terms that complement the operational-processual axis – *leadership* and *career development* – marking the transition from isolated procedures to a unified set of practices. Around *human resource management*, *artificial intelligence* is taking shape, highlighting a stage of development and integration of artificial intelligence into human resource processes; in contrast, the link with *performance appraisal* remains almost non-existent, indicating that AI applications in performance appraisal are still in their infancy.

Overall, the 2020–2025 dynamic outlines a *performance appraisal–human resource management* core that is shifting from a sparse structure to an integrated network, in which performance appraisal links operational mechanisms (training, leadership, career development, practices) to human resource outcomes (engagement, satisfaction, retention) and the strategic-organisational dimension (organisational performance, talent management, innovation).

5. Discussion

The analysis for the period 2020–2025 indicates the stabilisation of a thematic core consisting of *performance appraisal* and *human resource management*, around which three conceptual directions are consolidating. The operational-procedural direction encompasses works that treat employee evaluation as part of a chain of personnel practices: defining criteria and standards, calibrating tools, training evaluators, integrating feedback into development plans, and linking it to rewards (Alkhyeli & Hazmilah, 2025). The connections with *leadership* and *career development* indicate that professional performance appraisal is no longer seen as a simple measurement tool, but as a mechanism that supports development, dialogue and internal mobility (Attipoe et al., 2021). There is also an openness to digital support, but with links to the *performance appraisal* node still moderate.

The results-oriented approach at employee level positions employee appraisal as a determining variable for engagement, satisfaction or retention. The emphasis is on the quality of the process (clarity of criteria, frequency and usefulness of feedback, competence of appraisers) rather than on the type of tool used (Abugu & Othman, 2025). In this branch, appraisal defines and communicates expectations and standards of recognition, and positive effects occur when the process is predictable, transparent and accompanied by opportunities for development (Kakkar & Vohra, 2021). The strategic-organisational orientation connects employee evaluation with organisational performance, talent management, and innovation.

The descriptive indicators of the corpus (225 papers, 136 sources; average annual growth rate ~4.68%; 696 authors; international co-authorship 31.11%; ~14,646 references; average age 2.36 years; ~9.6 citations/article) support the upward trend in the field. The publications are distributed between HR/management journals and titles focused on information and analytical systems. The editorial profile places performance evaluation simultaneously in the sphere of HR practices and in the area of analytical and algorithmic developments.

However, in relation to the results obtained, there are some gaps in the literature. AI integration appears in proximity to the *human resource management* orgent node, but with a weaker or almost non-existent connection to *performance appraisal*, suggesting that AI is studied at the HR function level, while its application in performance appraisal remains insufficiently researched. The lack of studies dedicated to the application of AI in professional

performance evaluation raises major issues related to the ethics, transparency and fairness of the process (Djunaedi, 2024).

In the co-occurrence networks and thematic maps analysed between 2020 and 2025, 'organisational performance' appears more frequently in proximity to the 'human resource management' node than directly connected to 'performance appraisal'. The connection between *performance appraisal* and *organizational performance* exists in these representations, but it is less dense than the connection with HRM; the long-term effects of evaluation on organizational performance are less studied in the analyzed corpus (Yang et al., 2023).

Also, in the maps analysed, the procedural component of appraisal (criteria, feedback) and the strategic-organisational component (organisational performance, talent management, innovation) appear to be indirectly connected, mainly through bridge nodes such as *leadership* and *career development*. The low density of direct links between the two areas suggests an intermediate link in the path: the literature frequently addresses the operational segment and, separately, the strategic results, but rarely follows the complete chain (Ramola & Rangnekar, 2021).

6. Conclusions

The bibliometric analysis of performance appraisal in human resource management for the period 2020–2025, using keyword co-occurrence networks and citation networks, indicates the existence of a stable core between *performance appraisal* and *human resource management*.

Specifically, the results indicate a connection between effective trainer training and the perceived quality of feedback, suggesting that investments in trainer skills development are essential for optimising employee appraisal outcomes. Furthermore, process clarity and transparent communication channels are consistently correlated with higher employee engagement and reduced evaluation ambiguity (Hamidi, 2023). Strengthening professional development and career paths, complemented by recognition mechanisms, are associated with higher retention (Săcuiu & Micu, 2024). In addition, well-structured performance management practices—which include consistent goal setting, continuous feedback, and fair reward systems—promote greater employee engagement (Lameque et al., 2023).

The maps also indicate a growing proximity between artificial intelligence and HRM, although the direct link to performance appraisal is comparatively weaker, implying that future research should address ethical considerations and transparency in AI-assisted employee appraisal systems. The results suggest an increase in the integration of AI into HRM functions, such as workforce planning and talent attraction, which indirectly influence performance appraisal processes (Maghsoudi et al., 2025). However, the emerging role of AI in HR analytics and decisions, highlighted by recent bibliometric analyses, points to a future direction in which AI could provide direct support to performance management, including the potential for more objective evaluations and strategic planning (Maghsoudi et al., 2025). This calls for a cautious approach to AI implementation in performance management, emphasising the importance of human–AI collaboration in providing feedback to mitigate negative employee perceptions (Biswas et al., 2024). Still in its infancy, the process of integrating AI highlights the need for ethical frameworks and employee perceptions: the adoption of AI brings both benefits (efficiency, decision support) and concerns about data security, transparency and stress, which requires explicit mechanisms for governance and communication of algorithmic decision-making (Lungu & Micu, 2024).

In conclusion, future research could focus on developing specific frameworks for integrating AI into professional performance evaluation, examining its long-term effects on organisational culture and addressing employee perceptions of AI-generated feedback (Taslim et al., 2025). Further studies are needed on the role of assessor training quality and process clarity in the context of AI-assisted assessment systems to ensure fair and effective outcomes.

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