

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

Marc ALIANA

*Universitat Autònoma de Barcelona, Av. de l'Eix Central, b2, 08193, Cerdanyola del Vallès, Barcelona, Spain
marc.aliانا@uab.cat*

Diego PRIOR

*Universitat Autònoma de Barcelona, Av. de l'Eix Central, b2, 08193 Cerdanyola del Vallès, Barcelona, Spain
diego.prior@uab.cat*

Abstract

Internal promotions allow businesses to fill vacant positions through their current workforce, as an alternative to external recruitment. In this study, we present the findings of the first quantitative review on promotions as a complete field, including publications spanning over the last fifty years and incorporating the branches of social science relevant to this topic: business and management, psychology, sociology, and economics. First, we provided the number of publications, the most prolific authors, and journals over time. Second, we organized the dispersed literature by identifying the six main research trends, and analyzing their relationship with promotions: (i) Internal promotions and career success, (ii) Employee job satisfaction, (iii) Chief Executive Officer (CEO) and tournament theory, (iv) Racial discrimination in leadership positions, (v) Gender inequality, (vi) Job performance and employee personality. Third, we conducted a content analysis of recent publications (2017-2023), outlining key findings from each of the six identified research trends in internal promotions, thus evaluating their present-day relevance. We further identified promising areas for future investigation, particularly in employee job satisfaction, organizational commitment, turnover intention, and human resource management practices.

Keywords: Bibliometric analysis, career success, internal promotion, job satisfaction, literature review

1. INTRODUCTION

Internal promotions in organizations have both interested and fascinated scholars for decades. The interest comes from the multiple potential approaches to this field and its numerous research trends in the major branches of social science. On the one hand, for employees, it refers to a career opportunity and a shift in job tasks with increased responsibilities. Promotions can also reveal the merit and worth that firms place on the promoted employees and provide direct economic and psychological reinforcement (Sheridan et al., 1997; Zeytinoglu & Cooke, 2008). On the other hand, for employers, it is a means to generate worker incentives (e.g., promotion-based incentive systems) and to fill open positions with suitable candidates (Campbell, 2008).

Promotions are a transversal subject that affects all members of an organization, ranging from the board of directors to the newest junior employees. Consequently, research in this area was not limited to examining promotions to Chief Executive Officer (CEO) positions (Lee et al., 2008), but to middle-management (Wailerdsak & Suehiro, 2004), and blue-collar employees (Bayo-Moriones & Ortín-Ángel, 2006).

Previous literature on internal promotions has covered a diverse array of subtopics, including the influence of mentoring on career success (Bozionelos, 2006), factors that predict promotions (such as schooling or tenure) (Sheridan et al., 1997) or the promotion policies in multinational organizations (Mahnke et al., 2007). Researchers have employed literature reviews (LRs) and meta-analyses to synthesize the extensive body of publications on these various research trends. Chen et al. (2022) examined past research on the effects of political skills on enhancing the chances of career success. Schleu & Hüffmeier (2021) conducted a review of studies investigating the merit-based nature of promotions within companies.

In this study, we identified gaps in the literature on internal promotions that the existing LRs have not addressed. This paper aims to shed light on the following unexplored missing pieces:

First, prior literature reviews have primarily utilized qualitative methods to synthesize previously published research, resulting in data sets that are typically smaller and more manageable for manual examination (Donthu et al., 2021). Additionally, literature reviews are often tailored to address specific research questions in narrow

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

subtopics within the field of promotions (Palmatier et al., 2018; Snyder, 2019). However, this study represents a novel approach, as it is the first to analyze the last fifty years of internal promotions research as a complete field, including all of its subtopics and several hundred publications. Rather than focusing exclusively on a single academic discipline, this study incorporates all relevant branches of social science, including business and management, psychology, sociology, and economics.

Second, as already indicated, earlier analyses have solely focused on qualitative features of the literature. Our review differs from those of other authors as it provides, not only a qualitative approach; but also a quantitative interpretation and evaluation of earlier publications covering both, contemporary and former studies.

Third, due to their fragmentation and limited concentration on certain subtopics, the aforementioned LRs lack a comprehensive understanding of the most significant trends on internal promotions as a complete field. Scattered literature makes it difficult for interested scholars to review and become knowledgeable about the current research trends on a given topic. On account of these arguments, the next objective of this paper is to provide a scientific map by clustering the most relevant research trends.

Fourth, the research trends in our scientific map have been formed through fifty years of literature and thus, it remains uncertain whether these trends, formed over such an extended period, continue to have relevance or spark interest in today's academic community. To alleviate this uncertainty, we undertook a quantitative investigation, thoroughly examining the volume of publications from 2017 to 2023, the most recent period included in our analysis. We reveal the number of publications associated with each cluster, and conduct a content analysis of the latest trending topics and major findings within each research trend. By doing this, we aim to steer scholars toward the dominant trends in the field of internal promotions, providing crucial insights that can influence the direction of future research.

We investigated the formerly pinpointed issues by answering the following research questions (RQs):

- RQ1: How have the patterns of publication evolved in the field of internal promotions?
- RQ2: What are the primary research trends that have emerged from five decades of literature on internal promotions?
- RQ3: Which research trends currently sustain the highest level of academic engagement?

In this study, we utilized a blend of systematic literature review and bibliometric analysis techniques to shape our investigation. A cornerstone of our methodology is the R-package 'bibliometrix', particularly its interactive application, Biblioshiny. This software provides an expansive set of tools for comprehensive and insightful exploration and visualization of our dataset. Serving as an invaluable tool for quantitative literature analysis and science mapping (Aria & Cuccurullo, 2017). Bibliometrix allows for more extensive techniques and visualization options than the rest of the available science mapping analysis tools (i.e., VOSviewer, SciMAT, or ScientoText) (Moral-Muñoz et al., 2020).

2. METHODOLOGY

In this section, we describe the process through which we refined our dataset for bibliometric analysis. The search protocol process is summarized in Figure 1.

We selected the databases Thomson Reuters' Web of Science (WoS) and Elsevier's Scopus, the most universal databases used for discerning existing literature in various fields (Guz & Rushchitsky, 2009). Scopus has a broader article coverage in social sciences than WoS (Norris & Oppenheim, 2007).

We followed the guidance of Cooper (2010) in selecting keywords that are broad enough to encompass a wide range of literature but specific enough to ensure that only studies directly related to the topic are captured. To ensure a comprehensive search, we included the keywords 'internal promotion' OR 'upward mobility' OR 'career advancement'. These keywords were selected due to their relevance to the topic and their consistent usage in previous literature reviews that encompassed various aspects of internal promotions (Chen et al., 2022; Schleu

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

& Hüffmeier, 2021). By searching for these keywords in titles and abstracts, we aimed to capture studies that directly addressed the concept of internal promotions. The initial extraction resulted in 7,625 hits.

To ensure the quality and relevance of the literature included in our analysis, we implemented several exclusion criteria. Firstly, we limited our search to peer-reviewed articles, excluding non-source items and grey literature such as conference papers, working papers, reports, or theses. Additionally, we focused on publications published in the English language, which accounted for 93% of the initial search results. Furthermore, we excluded literature published before 1972 due to a substantial discontinuity in total publications during that period.

To prevent the exclusion of relevant academic fields, we meticulously reviewed the content in every category provided by Web of Science (WoS) and Scopus. Our investigation revealed that the concept of promotion was relevant not only in business and management fields (57%), but also in economics (18%), psychology, sociology, and their respective sub-fields (18%), such as applied psychology. Consequently, we selected not only business and management-related peer-reviewed papers but also other disciplines that provided different perspectives on internal promotions. When articles are strongly aligned with a specific category, WoS and Scopus perform well at classifying those journals into their categories (Wang & Waltman, 2016). Previous studies have demonstrated that WoS exhibits the highest journal classification accuracy, followed by Scopus (Pranckute, 2021). After refining the inclusion criteria based on these considerations, the extraction count was reduced to 3,938 articles.

To ensure the integrity of our dataset, a rigorous examination of all titles and abstracts was conducted to identify and eliminate duplicates, reducing our sample to 2,393 unique publications. Abstracts were meticulously reviewed to ensure the inclusion of studies that directly aligned with our definition of 'internal promotions', outlined in the introduction. We implemented a blind review process where two independent reviewers assessed each sample. Only those papers that met our definition and received agreement from both reviewers were included in the final sample (Neuendorf, 2002; Levy and Ellis, 2006). We discarded papers that discussed outcomes related to the regulatory focus theory but did not directly address the concept of internal promotions as per our definition.

This systematic and rigorous approach ensured that our final bibliometric dataset, consisting of 642 publications, was directly and exclusively relevant to our research questions.

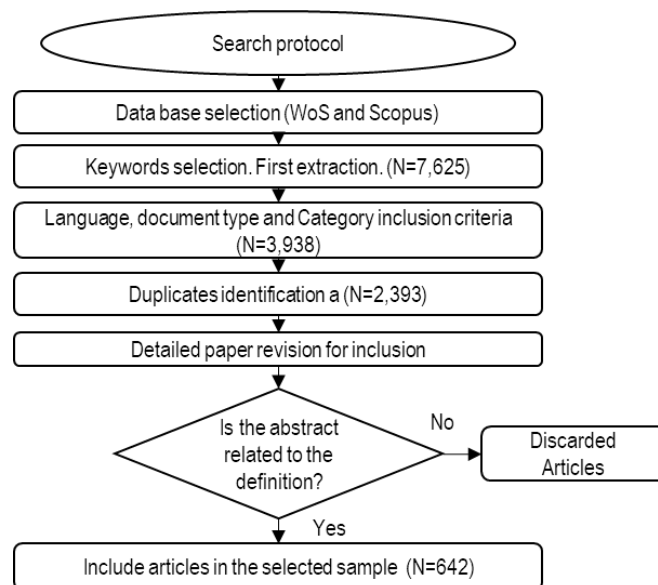


FIGURE 1 - SEARCH PROTOCOL PROCESS

3. INTERNAL PROMOTIONS RESEARCH PERFORMANCE

In the following section, we performed a quantitative overview of the last five decades of literature on promotions. We provided the number of publications, the most prolific authors, and journals over time.

3.1. Internal promotions publications over time

The review analyzed a total of 642 relevant articles published between 1972 and 2023. We illustrated the growing pattern of the literature in Figure 2 showing an increasing interest from researchers in the field of promotions. We aggregated data every 5 years due to the number of years included in this study, and for the latest period, spanning from 2017 to 2023, which encompasses 7 years.

We identified two momenta in the growth of the literature on promotions: the first explosion of the topic, from 1972 to 1996, and the second growth, from 2007 to 2023.

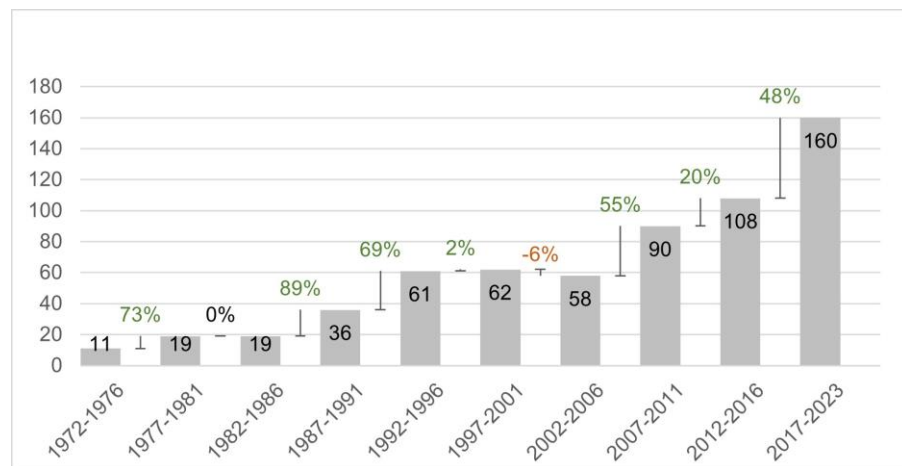


FIGURE 2 - INTERNAL PROMOTIONS PUBLICATIONS OVER TIME

3.2. Authors researching internal promotions

Authors researching the field of employee promotions tend to collaborate with other academics, 642 papers were written by 1317 authors (2.05 authors per paper). We showed in Figure 3 the top 20 authors that published more works on promotions in our sample. The most relevant was DeVaro with 8 publications and a local h-index of 7. Local h-index is defined as the authors or journals that have published h papers contained in our sample, and they have been cited at least h times. Spileman and Kalleberg issued 5 publications each with a local h-index of 5 for both authors.

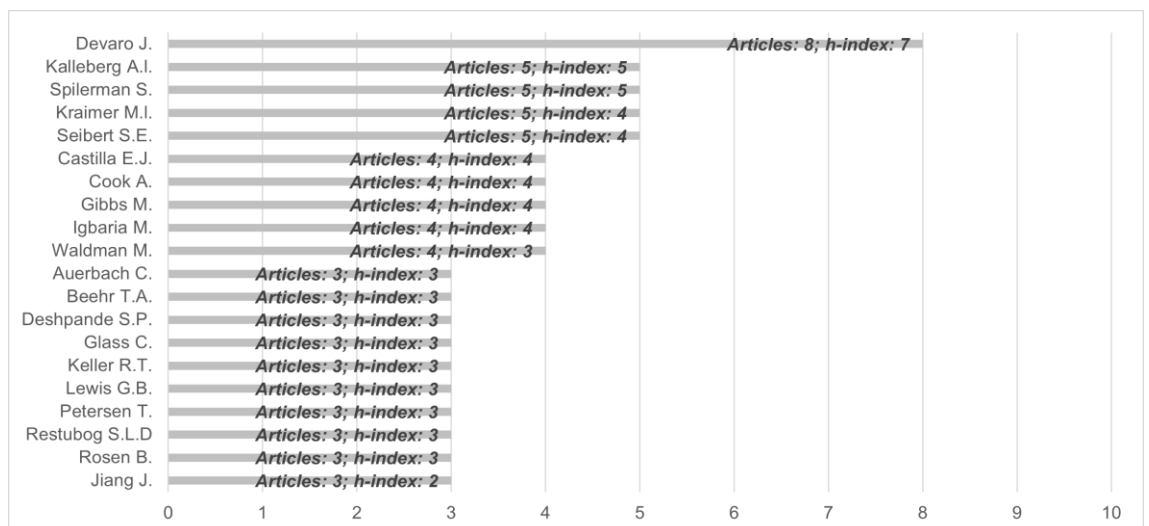


FIGURE 3 - AUTHORS RESEARCHING INTERNAL PROMOTIONS

3.3. Journals publishing literature on promotions

The 642 articles of the sample were published in 226 journals. We illustrated the top 20 sources that published more studies in Figure 4. The top 5 are the International Journal of Human Resource Management, Journal of Vocational Behavior, Industrial Relations, Journal of Applied Psychology, and Journal of Business Research. The average local h-index for the top 5 is 13 and the average Journal Impact Factor is 8.54.

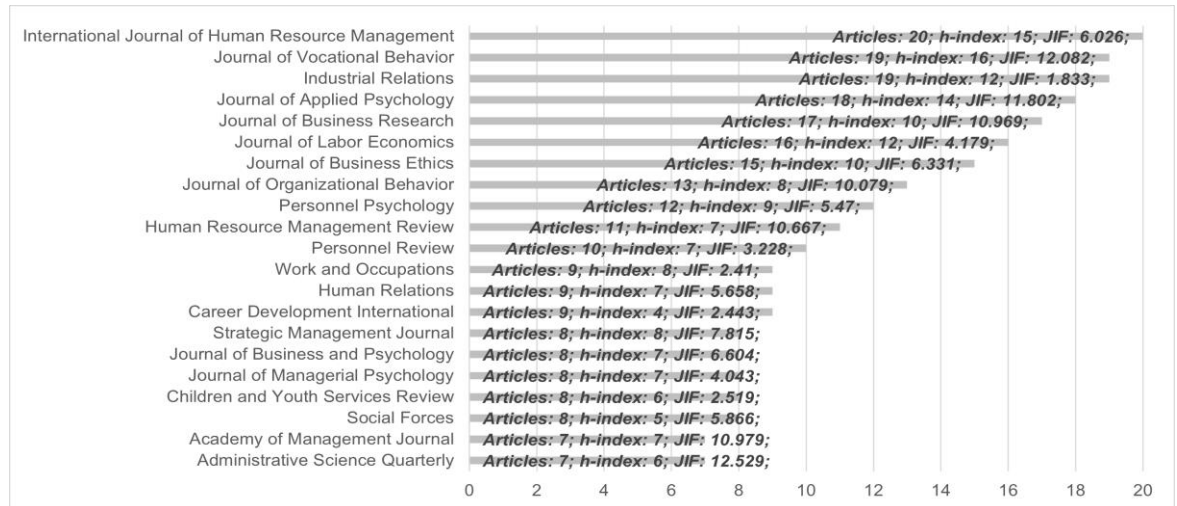


FIGURE 4 - JOURNALS PUBLISHING LITERATURE ON PROMOTIONS

4. SCIENTIFIC MAP: RESEARCH TRENDS ON INTERNAL PROMOTIONS

In subsection 4.1, we defined the methodology used to identify and segment the most prominent research trends in internal promotions, derived from five decades of studies. In subsection 4.2, the findings from each cluster are comprehensively discussed.

4.1. Methodology: keywords co-occurrence analysis

The author's keywords are used as a representation of the main themes of promotions. The co-occurrence of keywords is a means to cluster different research areas from a corpus of scientific literature on a given topic (Callon et al., 1991). Two keywords, i and j, co-occur if they simultaneously appear in the same document (Cambrosio et al., 1993). This methodology is based on the assumption that if keywords appear together in a research paper, they have a topic connection. The more frequently they appear together, the stronger the correlation will be in the network. Thus, a co-occurrence network will allow us to pinpoint the distinct research trends belonging to promotions (Cambrosio et al., 1993; Czachesz, 2017). To obtain the conceptual structure and the scientific map, the following steps were taken:

We reviewed the author's keywords of the sample to ensure the robustness of the results. We converted singular and plural keywords to match (e.g., promotions to promotion), and we coupled the synonyms that were expressing the same meaning (e.g., work satisfaction to job satisfaction).

Based on the co-occurrence of the keywords in the articles, Biblioshiny, the web interface for bibliometrix, generated a network map of the different subtopics on promotions that can be visualized in Figure 5. The more frequently they co-occur in the publications, the stronger their link is. As a result, they have been clustered in the same group of keywords belonging to a specific research trend on promotions.

PageRank was calculated for every keyword included in the sample to define the role and importance within the network. PageRank centrality (PR) (Brin & Page, 1998; Page et al., 1999), is an algorithm originally developed to rank the importance of web pages. However, the mathematics behind it can be implemented in any network (Gleich, 2015). It indicates the importance of a node in the network by assigning scores, the higher the score, the more important the node is in the network:

$$PR(a) = (1 - d) + d \sum_{i=1}^n \frac{PR(i)}{C(i)}$$

Where PR(a) is the PageRank score of node a, d is the damping constant value between 0 and 1, PR(i) are the PageRank scores of the nodes i connected to node a, and C(i) are the total number of outgoing links of node i to other nodes. These links can or cannot go to node a. PR will form a probability distribution over nodes. Thus, the sum of all nodes' PR scores must equal one (Brin & Page, 1998).

4.2. Results of the scientific map: research trends on internal promotions

In Figure 5 we presented the scientific map and its most significant research trends. In Table I we showed the keywords of each cluster and the results of the PageRank centrality measure.

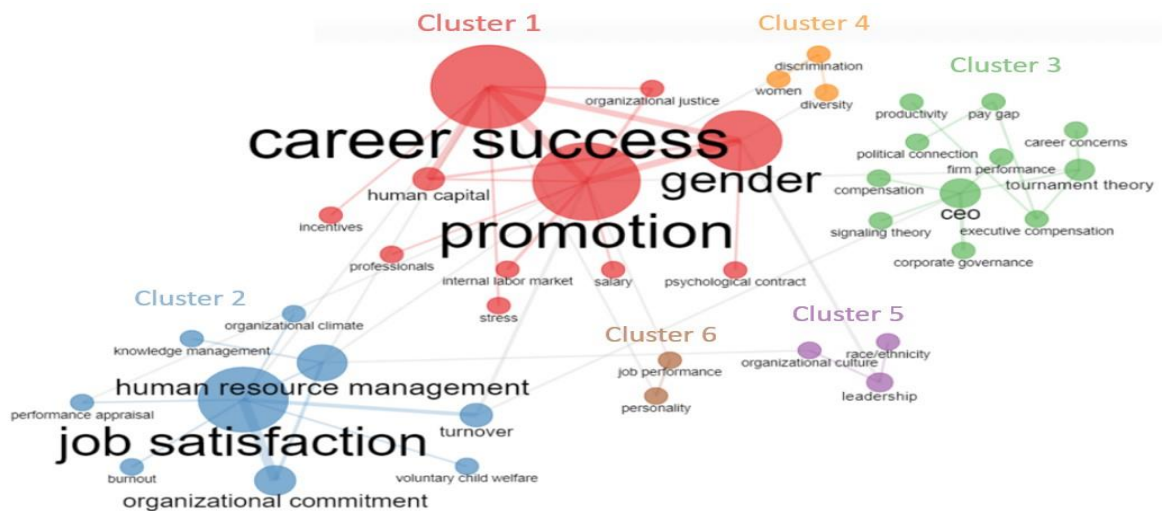


FIGURE 5 - RESEARCH TRENDS ON INTERNAL PROMOTIONS: NETWORK MAP OF THE KEYWORDS CO-OCCURRENCE

Cluster #1: Internal promotions and career success

This cluster contains the fundamental theme of this article: promotion, with the highest PR value, closely followed by career success. Internal promotion and career success are closely related topics throughout their literature and thus, frequently co-occur. Career success can be understood as professional achievements that can be observed and evaluated by others (Jaskolka et al., 1985). Promotion, in this context, is used as a predictor of objective career success (Ng et al., 2005). Gender also appertains to this cluster as it regularly appears together with promotions and career success in researching family-to-work gender roles (Abele, 2003). Gender in this research front does not refer to discrimination suffered by women in terms of promotion opportunities. With hundreds of publications, this subtopic has developed to the point where it has its own research trend (cluster #5). Human capital is defined as an increase in cognitive skills, knowledge, and professional experience, leading to a growth in employee productivity (Becker, 1964; Davidsson & Honig, 2003). It belongs to this research trend as it is significantly tied to the rest of the topics, researchers on human capital investigate the impact that it has on potential promotions (Hedge et al., 2006; Kassis et al., 2017) and career success (Ng et al., 2005; Rieger et al., 2023).

Cluster #2: Employee job satisfaction, organizational commitment, human resource management, turnover, and performance appraisal

Job satisfaction is the central theme of this cluster with the most relevant centrality score, it refers to an individual's inner opinion on their employment. It is strongly related to promotions research since employee job satisfaction is influenced by prospects of promotions (Bettencourt & Brown, 1997). An individual who reports higher levels of job satisfaction can also increase their organizational commitment, rated second most important topic, and defined as the strength of a person's identification within an organization (Dirani & Kuchinke, 2011;

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

Dougherty et al., 1985; Nantavisit et al., 2023; Porter et al., 1974). Lack of internal promotions can weaken employee organizational commitment and increase staff turnover or intention to leave the company (Walsh & Deery, 2006). Human resource management is included in this cluster jointly with employee performance appraisal, as both can impact job satisfaction (Fletcher & Williams, 1996; Kaya et al., 2010) and organizational commitment (Fletcher & Williams, 1996; Jenkins & Delbridge, 2013).

Cluster #3: Chief Executive Officer (CEO) and tournament theory

Chief Executive Officer (CEO) and tournament theory are the key topics of this cluster. This research trend suggests that little differences in performance can cause large differences in reward (Connelly et al., 2014; Lazear & Rosen, 1981). Tournament theory frequently co-occurs with the most relevant topics of this research trend: CEO, pay gap, and executive compensation (Kim & Jang, 2023). It is also connected with the central theme, internal promotions. Tournament theory attempts to explain why there is a disproportionate pay gap between CEOs' compensation and employees in lower ranks. This large pay gap motivates a broader base of workers to compete for a promotion in a winner-loser contest and thus, to increase their performance (Eriksson, 1999).

Cluster #4: Racial discrimination in leadership positions

Leadership is clustered with race/ethnicity as this research trend attempts to explain the limited access of various races to leadership roles and fewer promotions in different contexts (Eagly & Chin, 2010; Khatibi, 2023; Walumbwa et al., 2007). Furthermore, different leadership roles can determine the organizational culture defined as the set of shared ideals and principles that influence how people behave and think in an organization. (Cooke & Rousseau, 1988).

Cluster #5: Gender inequality

Discrimination has the highest PR score. Diversity and women are then listed after it, sorted by relevance in the cluster. Gender discrimination is an important subtopic of the promotions literature. It includes the glass ceiling and gender inequality concepts. This research trend aims to investigate the barriers that prevent women from advancing in a profession (Chen et al., 2023; Liff & Ward, 2001; Rowe, 1990; Weyer, 2007).

Cluster #6: Job performance and employee personality:

This cluster grouped job performance and personality according to their similar PR ratings. The literature on the big five personality traits: neuroticism, extraversion, openness, agreeableness, and conscientiousness, frequently contains both subtopics to study how personality affects job performance and prospects of promotion (Costa & McCrae, 1992; Kassis et al., 2017; Stephan et al., 2023).

TABLE 1 - RESEARCH TRENDS ON INTERNAL PROMOTIONS: KEYWORDS CO-OCCURRENCE PAGERANK MEASURES

Cluster #1		Cluster #2	
Keyword	PR	Keyword	PR
Promotion	.11	Job Satisfaction	.07
Career Success	.08	Organizational Commitment	.03
Gender	.06	Human Resource Management	.03
Human Capital	.02	Turnover	.02
Incentives	.01	Performance Appraisal	.01
Cluster #3		Cluster #4	
Keyword	PR	Keyword	PR
CEO	.04	Leadership	.02
Tournament Theory	.02	Organizational Culture	.01
Executive Compensation	.03	Race/Ethnicity	.01
Pay Gap	.01		
Corporate Governance	.01		
Cluster #5		Cluster #6	
Keyword	PR	Keyword	PR
Discrimination	.01	Job Performance	.02
Diversity	.01	Personality	.01
Women	.00		

PR: PageRank score

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

Research trends on internal promotions	Trending topic	Key findings	Observed in:
	<p>Human Resource Management (HRM) practices: employee appraisals</p> <p>Effects of promotion-based tournament incentives on several aspects of the organizations</p>	<p>How employees view fairness in promotion systems and evaluations within their organization can have an impact on their attitudes toward the company, organizational commitment, and job satisfaction.</p> <p>Appraisals are differentiated between those that have monetary effects, such as promotions, and those that do not. The findings show that appraisals connected to promotion outcomes are an effective HR management tool to increase employee job satisfaction.</p> <p>Despite being tedious and unpleasant activities, appraisals have a direct impact on promotion decisions.</p> <p>Even though narrative text comments are frequently collected as part of the performance appraisal process, traditional research has been almost exclusively focused on conventional numerical ratings. This study demonstrates how narrative text comments might improve performance assessment.</p> <p>The pay differential between the CEO and its subordinate executives is the tournament incentive that in turn, motivates executives to compete for a promotion. The risk of failure of Initial Public Offerings (IPOs) is significantly reduced by higher tournament incentives, and this effect is more pronounced when internal promotion contests are more likely to take place.</p>	<p>(Qureshi et al., 2017)</p> <p>(Kampkötter, 2017)</p> <p>(Cappelli & Conyon, 2018)</p> <p>(Speer, 2018)</p> <p>(Colak et al., 2021)</p>
<p>Cluster #3 Chief Executive Officer (CEO) and tournament theory</p> <p>67 publications</p>		<p>The authors investigated tournament incentives' effects on the performance of corporate acquisitions. Stronger tournament incentives lead to worse acquisition performance. A deeper analysis reveals that senior executives' risk-seeking behavior, which was encouraged by tournament incentives, is what is responsible for the negative effect.</p> <p>Applying tournament theory the authors examine the impact of manager proactivity on career outcomes, revealing that proactivity enhances promotion through leader schema matching but is hindered by unethical behavior, resulting in derailment instead of advancement in senior leadership roles.</p> <p>Competition for promotion among non-CEO senior executives could be detrimental to Corporate Social Responsibility (CSR) performance.</p>	<p>(Hasan et al., 2020)</p> <p>(Crossley et al., 2023)</p> <p>(Zhao et al., 2021)</p>
<p>Cluster #4 Racial discrimination in leadership Positions</p> <p>51 publications</p>		<p>The authors discovered that in some academic fields, full professor promotions for members of racial or ethnic minorities are less common than for their white peers. Some candidates also reported that racism has been present in the promotion process to full professor positions.</p> <p>Organizations use claims of equality, diversity management, and silencing practices to avoid addressing underrepresentation, ultimately perpetuating the exclusion of Indigenous Australians from leadership position, termed as 'discrimination by avoidance.'</p>	<p>(Croom, 2017; Durodoye et al., 2020)</p> <p>(Khatibi, 2023)</p>
<p>Cluster #5 Gender inequality</p> <p>39 publications</p>	<p>Differences in promotion opportunities for men and women in the academia</p>	<p>In Italian universities, men are about 24% more likely than women to be promoted to full professor when scientific production is equal. A similar pattern in Turkey where there is evidence of the existence of gender inequality, especially in promotions from associate professor to full professor levels.</p> <p>In France and Norway, women are promoted later and less frequently than men. Discrimination against women with children in particular due to a lower scientific production after having children.</p>	<p>(Bülbul, 2021; Marini & Meschitti, 2018)</p> <p>(Loison et al., 2017)</p>

Academics have long concurred that employee organizational commitment, or the degree of attachment and loyalty to an organization, is positively impacted by prospects of promotions (DeConinck & Bachmann, 1994). The conventional wisdom on this subject, however, has recently been put in doubt by Cicekli & Kabasakal (2017), who discovered that while promotions have no effect, positive or negative, on organizational commitment, recognition, and development opportunities do. Internal promotions were found to be negatively associated with affective commitment and normative commitment (both types of organizational commitment described in Table II); but positively associated with continuance commitment (the third type of organizational commitment also described in Table II) (Nalla et al., 2020).

It is reasonable to assume that there is a lack of consensus regarding how promotions affect organizational commitment given the fact that different publications and authors present contradicting results. Do internal promotions affect organizational commitment? If they do, is it a positive effect or a negative effect? How much internal promotions are responsible for organizational commitment? It is crucial to reach a common understanding of how promotions affect employees' organizational commitment because that commitment directly affects the intention of leaving or staying in the firm (Rawashdeh & Tamimi, 2020). These proposed questions have significant ramifications for human resource management practices. If scholars determine that internal promotions do not affect organizational commitment, a counterintuitive argument, employers might prioritize providing opportunities for recognition rather than promotions (Cicekli & Kabasakal, 2017) or promote supervisor and organizational support (Panaccio et al., 2023). If scholars determine that promotions do affect organizational commitment, practitioners need to consider them if they want to keep their employees committed to the firm and reduce turnover intentions.

Research on Human Resource Management (HRM) practices has emphasized the importance of performance appraisals on internal promotions decisions and how they can increase employee job satisfaction. Past publications have solely gathered and examined data from on-site workers to gauge the influence of performance appraisals for promotions purposes. Since the widespread adoption of teleworking and the emerging importance of this topic, future research can investigate how HRM practitioners currently assess homeworking candidates for promotions. Future researchers may also explore if HRM departments are offering the same prospects for promotion to teleworking employees as to on-site ones as well as compare the promotion speed. Scholars might also compare the rates of promotion at businesses that generally permit employees to work from home with those that do not.

6. CONCLUSIONS AND LIMITATIONS

This paper uses systematic literature review and bibliometric analysis to investigate internal promotions in organizations. The conclusions of this research are presented as follows:

First, the initial contribution of this study has been to provide, emerging and established researchers on internal promotions, with a holistic review of the past fifty years of literature to set the ground for future investigations. It is the first one to include all perspectives and research trends from the principal academic disciplines researching this field: business and management, psychology, sociology, and economics. We showed in the performance analysis an increasing interest from researchers and practitioners in the field of promotions. Particularly, there are two points in time where the literature has rapidly advanced: from 1972 to 1996, and the second growth, from 2007 to 2023.

Second, the scientific map obtained through the keywords co-occurrence analysis will allow scholars, regardless of the academic discipline, to identify the six principal research trends: (1) internal promotions and career success, (2) employee job satisfaction, organizational commitment, human resource management, turnover and performance appraisal, (3) Chief Executive Officer (CEO) and tournament theory, (4) racial discrimination in leadership positions, (5) gender inequality and, (6) job performance and employee personality. The content analysis revealed a perfect match between the research trend identified through the keywords selected by the authors and the actual content of the articles. These findings demonstrate that the keywords co-occurrence analysis is an effective method to identify research trends for mature topics with thousands of publications, such as promotions, where authors meticulously select the keywords for their publications.

It is important to acknowledge the limitations of this study, as bibliometric analysis is a research tool that provides a comprehensive overview of any particular field, highlighting connections and relationships among different topics. It is a method that has certain limitations. This type of analysis alone cannot capture the nuances and complexity of the research areas, and it should not be used as the sole method for evaluating the research trends. A deeper understanding of the subject requires a thorough examination of each subtopic, which can be obtained through in-depth reviews and other research methods (Andersen, 2021). It is also important to note that the results obtained through a bibliometric analysis can be subject to bias due to the choices made regarding the keywords, software, and techniques used. Additionally, while PageRank centrality is a commonly used statistic, future researchers may want to consider alternative methods to rank the importance of the topics within the clusters.

REFERENCES

- Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: Findings from a prospective study. *Journal of Personality and Social Psychology*, 85(4), 768–776.
- Andersen, N. (2021). Mapping the expatriate literature: a bibliometric review of the field from 1998 to 2017 and identification of current research fronts. *The International Journal of Human Resource Management*, 32, 4687–4724.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975.
- Bayo-Moriones, A., & Ortín-Ángel, P. (2006). Internal Promotion versus External Recruitment in Industrial Plants in Spain. *ILR Review*, 59(3), 451–470.
- Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*, First Edition. National Bureau of Economic Research.
- Bentley, T., Teo, S., McLeod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207–215.
- Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction, and prosocial service behaviors. *Journal of Retailing*, 73(1), 39–61.
- Bozonelos, N. (2006). Mentoring and expressive network resources: their relationship with career success and emotional exhaustion among Hellenes employees involved in emotion work. *The International Journal of Human Resource Management*, 17, 362–378.
- Brin, S., & Page, L. (1998). The anatomy of a large-scale hypertextual Web search engine. *Computer Networks and ISDN Systems*, 30(1-7), 107–117.
- Bülbül, S. (2021). Glass ceiling in academia revisited: evidence from the higher education system of Turkey. *International Journal of Sociology*, 51(2), 87–104.
- Callon, M., Courtial, J. P., & Laville, F. (1991). Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemistry. *Scientometrics*, 22(1), 155–205.
- Cambrosio, A., Limoges, C., Courtial, J. P., & Laville, F. (1993). Historical scientometrics? Mapping over 70 years of biological safety research with cword analysis. *Scientometrics*, 27(2), 119–143.
- Campbell, D. (2008). Nonfinancial Performance Measures and Promotion-Based Incentives. *Journal of Accounting Research*, 46(2), 297–332.
- Cappelli, P., & Conyon, M. J. (2018). What do performance appraisals do? *ILR Review*, 71(1), 88–116.

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

- Casallas-Vanegas, A., Guío-Sánchez, C., Reyes-Mantilla, M. I., Restrepo-Aristizábal, C., Navas-Granados, A., Guerrero-Gómez, A., & Zuluaga, M. I. (2022). Gender disparities in multiple sclerosis research and leadership: A Colombian perspective. *Frontiers in Neurology*, 13.
- Chen, H., Jiang, S., & Wu, M. (2022). How important are political skills for career success? A systematic review and meta-analysis. *The International Journal of Human Resource Management*, 33, 3942–3968.
- Chen, S., Chen, Y., & Jebran, K. (2023). Beyond the glass ceiling: Informal gender-based status hierarchy and corporate misconduct. *Journal of Business Research*, 169, 114281.
- Cicekli, E., & Kabasakal, H. (2017). The opportunity model of organizational commitment: Evidence from white-collar employees in Turkey. *International Journal of Manpower*, 38(2), 259 – 273.
- Colak, G., Gounopoulos, D., Loukopoulos, P., & Loukopoulos, G. (2021). Tournament incentives and IPO failure risk. *Journal of Banking and Finance*, 130, 106193.
- Connelly, B. L., Tihanyi, L., Crook, T. R., & Gangloff, K. A. (2014). Tournament Theory: Thirty Years of Contests and Competitions. *Journal of Management*, 40(1), 16–47.
- Cooke, R. A., & Rousseau, D. M. (1988). Behavioral Norms and Expectations: A Quantitative Approach To the Assessment of Organizational Culture. *Group & Organization Management*, 13(3), 245–273.
- Cooper, H. M. (2010). *Research Synthesis and Meta-Analysis. A Step-by-Step Approach*. 4th ed. Thousand Oaks, CA: Sage
- Costa, P. T., & McCrae, R. R. (1992). The Five-Factor Model of Personality and Its Relevance to Personality Disorders. *Journal of Personality Disorders*, 6(4), 343–359.
- Croom, N. N. (2017). Promotion beyond tenure: Unpacking racism and sexism in the experiences of black womyn professors. *Review of Higher Education*, 40(4), 557–583.
- Crossley, C., Taylor, S. G., Treviño, L. K., Taylor, R., & Rice, D. (2023). Welcome to the club? Unethical behavior and proactivity in promotion and derailment decisions. *Journal of Organizational Behavior*, 1–22.
- Czachesz, I. (2017). Network Analysis of Biblical Texts. *Journal of Cognitive Historiography*, 3(1-2), 43–67.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331.
- DeConinck, J., & Bachmann, D. (1994). Organizational commitment and turnover intentions of marketing managers. *Journal of Applied Business Research (JABR)*, 10(3), 87–95.
- Dirani, K. M., & Kuchinke, K. P. (2011). Job satisfaction and organizational commitment: validating the Arabic satisfaction and commitment questionnaire (ASCQ), testing the correlations, and investigating the effects of demographic variables in the Lebanese banking sector. *The International Journal of Human Resource Management*, 22, 1180–1202.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296.
- Dougherty, T. W., Bluedorn, A. C., & Keon, T. L. (1985). Precursors of employee turnover: A multiple-sample causal analysis. *Journal of Organizational Behavior*, 6(4), 259–271.
- Durodoye, R., Gumpertz, M., Wilson, A., Griffith, E., & Ahmad, S. (2020). Tenure and promotion outcomes at four large land grant universities: Examining the role of gender, race, and academic discipline. *Research in Higher Education*, 61, 628–651.
- Eagly, A. H., & Chin, J. L. (2010). Diversity and leadership in a changing world. *American Psychologist*, 65(3), 216–224.

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

- Eriksson, T. (1999). Executive Compensation and Tournament Theory: Empirical Tests on Danish Data. *Journal of Labor Economics*, 17(2), 262–280.
- Fletcher, C., & Williams, R. (1996). Performance Management, Job Satisfaction, and Organizational Commitment. *British Journal of Management*, 7(2), 169–179.
- Frederiksen, A., & Kato, T. (2018). Human capital and career success: Evidence from linked employer-employee data. *The Economic Journal*, 128(613), 1952–1982.
- Gara Bach Ouerdian, E., & Mansour, N. (2019). The relationship of social capital with objective career success: the case of Tunisian bankers. *Journal of Management Development*, 38(2), 74–86.
- Gleich, D. F. (2015). PageRank Beyond the Web. *SIAM Review*, 57(3), 321–363.
- Guz, A. N., & Rushchitsky, J. J. (2009). Scopus: A system for the evaluation of scientific journals. *International Applied Mechanics*, 45(4), 351–362.
- Harun, S., Shahid, S. A. M., & Othman, A. K. (2017). Promoting employees' loyalty: Incorporating the turnover models approach. *Advanced Science Letters*, 23(8), 7355–7358.
- Haryono, S., Supardi, S., & Udin, U. (2020). The effect of training and job promotion on work motivation and its implications on job performance: Evidence from Indonesia. *Management Science Letters*, 10(9), 2107–2112.
- Hasan, I., Navone, M., To, T., & Wu, E. (2020). Tournament incentives and acquisition performance. *The Review of Corporate Finance Studies*, 9(2), 384–419.
- Hedge, J. W., Borman, W. C., & Bourne, M. J. (2006). Designing a system for career development and advancement in the U.S. Navy. *Human Resource Management Review*, 16(3), 340–355.
- Jaskolka, G., Beyer, J. M., & Trice, H. M. (1985). Measuring and predicting managerial success. *Journal of Vocational Behavior*, 26(2), 189–205.
- Jenkins, S., & Delbridge, R. (2013). Context matters: examining 'soft' and 'hard' approaches to employee engagement in two workplaces. *The International Journal of Human Resource Management*, 24, 2670–2691.
- Jokinen, J., & Pehkonen, J. (2021). The role of personal and relative job performance in promotion decisions. *Labour*, 35(4), 485–499.
- Kampkötter, P. (2017). Performance appraisals and job satisfaction. *The International Journal of Human Resource Management*, 28(5), 750–774.
- Kang, I. G., Croft, B., & Bichelmeyer, B. A. (2021). Predictors of Turnover Intention in U.S. Federal Government Workforce: Machine Learning Evidence That Perceived Comprehensive HR Practices Predict Turnover Intention. *Public Personnel Management*, 50(4), 538–558.
- Kassis, M., Schmidt, S. L., Schreyer, D., & Torgler, B. (2017). Who gets promoted? Personality factors leading to promotion in highly structured work environments: evidence from a German professional football club. *Applied Economics Letters*, 24(17), 1222–1227.
- Kaya, N., Koc, E., & Topcu, D. (2010). An exploratory analysis of the influence of human resource management activities and organizational climate on job satisfaction in Turkish banks. *The International Journal of Human Resource Management*, 21(11), 2031–2051.
- Khatibi, M., Elgenius, G., Turner, P., & Ferrer, J. (2023). Discrimination by avoidance: The underrepresentation of Indigenous Australians in leadership positions within the Australian Football League. *Australian Journal of Management*, 0(0).
- Kim, H. S., & Jang, S. (shawn). (2023). Is a high pay disparity harmful to productivity? Findings from the restaurant industry. *International Journal of Hospitality Management*, 115, 103580.

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

- Lazear, E. P., & Rosen, S. (1981). Rank-Order Tournaments as Optimum Labor Contracts. *Journal of Political Economy*, 89(5), 841–864.
- Lee, K. W., Lev, B., & Yeo, G. H. H. (2008). Executive pay dispersion, corporate governance, and firm performance. *Review of Quantitative Finance and Accounting*, 30(3), 315–338.
- Lee, S. Y., & Ohtake, F. (2018). Is being agreeable a key to success or failure in the labor market? *Journal of the Japanese and International Economies*, 49, 8–27.
- Levy, Y., and T. J. Ellis. (2006). A Systems Approach to Conduct an Effective Literature Review in Support of Information Systems Research. *Informing Science* 9, 181–212.
- Liff, S., & Ward, K. (2001). Distorted Views Through the Glass Ceiling: The Construction of Women's Understandings of Promotion and Senior Management Positions. *Gender, Work & Organization*, 8(1), 19–36.
- Loison, A., Paye, S., Schermann, A., Bry, C., Gaillard, J.-M., Pelabon, C., & Bråthen, K.-A. (2017). The domestic basis of the scientific career: gender inequalities in ecology in France and Norway. *European Educational Research Journal*, 16(2-3), 230–257.
- Lu, Z., Zhuang, W. (2023). Can Teleworking Improve Workers' Job Satisfaction? Exploring the Roles of Gender and Emotional Well-Being. *Applied Research Quality Life* 18, 1433–1452.
- Mahnke, V., Venzin, M., & Zahra, S. A. (2007). Governing entrepreneurial opportunity recognition in mnes: Aligning interests and cognition under uncertainty. *Journal of Management Studies*, 44(7), 1278–1298.
- Marini, G., & Meschitti, V. (2018). The trench warfare of gender discrimination: evidence from academic promotions to full professor in Italy. *Scientometrics*, 115(2), 989–1006.
- Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software tools for conducting bibliometric analysis in science: An up-to-date review. *El Profesional de la Información*, 29(1), 1–20.
- Nalla, M. K., Akhtar, S., & Lambert, E. G. (2020). Exploring the connection between job satisfaction and different forms of organizational commitment among police. *Criminal Justice and Behavior*, 47(5), 511–528.
- Neuendorf, K. A. (2002). *The Content Analysis Guidebook*. Thousand Oaks, CA: Sage.
- Nantavisit, N., Kim, L., and Dorn, U., (2023). A meta-analysis of determinants influencing bank employees' satisfaction. *Banks and Bank Systems*, 18(3), 49-60.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: a meta-analysis. *Personnel Psychology*, 58(2), 367–408.
- Norris, M., & Oppenheim, C. (2007). Comparing alternatives to the Web of Science for coverage of the social sciences' literature. *Journal of Informetrics*, 1(2), 161–169.
- Page, L., Brin, S., Motwani, R., & Winograd, T. (1999). *The PageRank Citation Ranking: Bringing Order to the Web*. Technical Report Stanford InfoLab.
- Palmatier, R. W., Houston, M. B., & Hulland, J. (2018). Review articles: purpose, process, and structure. *Journal of the Academy of Marketing Science*, 46(1), 1–5.
- Panaccio, A., Tang, W.-G., & Vandenberghe, C. (2023). Agreeable Supervisors Promoting the Organization – Implications for Employee Commitment and Retention. *Journal of Personnel Psychology*, 22(3), 146–157
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603–609.
- Pranckute, R. (2021). Web of Science (WoS) and Scopus: The Titans of Bibliographic Information in Today's Academic World. *Publications*, 9(1).

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY REVIEW AND BIBLIOMETRIC ANALYSIS

- Price, J. L., & Mueller, C. W. (1981). A Causal Model of Turnover for Nurses. *The Academy of Management Journal*, 24(3), 543–565.
- Qureshi, H., Frank, J., Lambert, E. G., Klahm, C., & Smith, B. (2017). Organisational justice's relationship with job satisfaction and organisational commitment among Indian police. *Police Journal*, 90(1), 3–23.
- Rawashdeh, A. M., & Tamimi, S. A. (2020). The impact of employee perceptions of training on organizational commitment and turnover intention: An empirical study of nurses in Jordanian hospitals. *European Journal of Training and Development*, 44(2-3), 191–207.
- Rieger, V., Wilken, J. and Engelen, A. (2023). Career Booster or Dead End? Entrepreneurial Failure and Its Consequences for Subsequent Corporate Careers. *Journal of Management Studies*, 60, 800–833.
- Rowe, M. P. (1990). Barriers to equality: The power of subtle discrimination to maintain unequal opportunity. *Employee Responsibilities and Rights Journal*, 3(2), 153–163.
- Schleu, J. E., & Hüffmeier, J. (2021). Simply the best? A systematic literature review on the predictive validity of employee performance for leader performance. *Human Resource Management Review*, 31(2), 100777.
- Sheridan, J. E., Slocum, J. W., & Buda, R. (1997). Factors influencing the probability of employee promotions: A comparative analysis of human capital, organization screening and gender/race discrimination theories. *Journal of Business and Psychology*, 11(3), 373– 380.
- Single, L., Donald, S., & Almer, E. (2018). The relationship of advocacy and mentorship with female accountants' career success. *Advances in Accounting*, 42, 12–21.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.
- Speer, A. B. (2018). Quantifying with words: An investigation of the validity of narrative derived performance scores. *Personnel Psychology*, 71(3), 299–333.
- Stephan, B., Lechner, D., Stockkamp, M., Hudecek, M. F. C., Frey, D., & Lermer, E. (2023). Where a psychopathic personality matters at work: a cross-industry study of the relation of dark triad and psychological capital. *BMC Psychol* 11, 236.
- Thelwall, M. (2020). Female citation impact superiority 1996–2018 in six out of seven English-speaking nations. *Journal of the Association for Information Science and Technology*, 71(8), 979–990.
- Van Miegroet, H., Glass, C., Callister, R. R., & Sullivan, K. (2019). Unclogging the pipeline: advancement to full professor in academic STEM. *Equality, Diversity, and Inclusion: An International Journal*, 38(2), 246–264.
- Volmer, J., Orth, M., & Wolff, H.-G. (2018). Multidimensional Networking Behavior in Germany and China: Measurement Invariance and Associations With Objective Career Success. *Journal of Career Assessment*, 26(4), 678–696.
- Wailersak, N., & Suehiro, A. (2004). Promotion systems and career development in Thailand: a case study of Siam Cement. *The International Journal of Human Resource Management*, 15, 196–218.
- Walsh, J., & Deery, S. (2006). Refashioning organizational boundaries: Outsourcing customer service work. *Journal of Management Studies*, 43(3), 557–582.
- Walumbwa, F. O., Lawler, J. J., & Avolio, B. J. (2007). Leadership, Individual Differences, and Work-related Attitudes: A Cross-Culture Investigation. *Applied Psychology*, 56(2), 212–230.
- Wang, Q., & Waltman, L. (2016). Large-scale analysis of the accuracy of the journal classification systems of Web of Science and Scopus. *Journal of Informetrics*, 10(2), 347–364.
- Wen, T., Zhang, Y., Wang, X., & Tang, G. (2018). Factors influencing turnover intention among primary care doctors: a cross-sectional study in Chongqing, China. *Human Resources for Health*, 16(1).

FIFTY YEARS OF RESEARCH ON INTERNAL PROMOTIONS: WHERE ARE WE GOING? AN INTERDISCIPLINARY
REVIEW AND BIBLIOMETRIC ANALYSIS

- Weyer, B. (2007). Twenty years later: explaining the persistence of the glass ceiling for women leaders. *Women in Management Review*, 22(6), 482–496.
- Xie, L., & Yang, L. (2021). The influence of perceptions of promotion opportunities on job performance and its mechanisms: A case study of chinese junior civil servants. *Journal of Contemporary China*, 30(127), 118–135.
- Zeytinoglu, I. U., & Cooke, G. B. (2008). Non-standard Employment and Promotions: A Within Genders Analysis. *Journal of Industrial Relations*, 50(2), 319–337.
- Zhao, X., Zhou, G., & Rezaee, Z. (2021). Tournament incentives and corporate social responsibility performance. *Journal of Accounting, Auditing and Finance*, 38(4), 225-271.