

Mapping Research Trend in Psychological Empowerment and Job Satisfaction in the Era of Industrial Revolution 5.0: A Bibliometric Analysis

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ABSTRACT

In the context of Industry 5.0, which emphasizes the integration of advanced technology with human-centered values, psychological empowerment has emerged as an important factor in shaping an adaptive, flexible, and meaningful work environment. Understanding its relationship to job satisfaction is essential to improving organizational effectiveness. This study uses bibliometric analysis to map global research trends on psychological empowerment and job satisfaction. A total of 73 articles indexed in the Scopus database between 1994 and 2024 were analyzed using RStudio and VOSviewer to identify thematic patterns, keyword co-occurrence, and publication dynamics. The analysis reveals a consistent increase in academic interest in these topics over the past three decades. Psychological empowerment is often associated with increased job satisfaction, especially through mechanisms such as perceived autonomy, intrinsic motivation, self-efficacy, and workplace meaning. The co-emergence analysis further highlights a strong relationship with organizational commitment, leadership, and organizational culture. These findings confirm that in the Industry 5.0 era, synergy between technology and human empowerment is the main key in maintaining employee welfare. In addition, this research makes a practical contribution for managers in designing a more humanistic and adaptive human resource management strategy. This study also maps the direction of future research to deepen understanding of psychological dynamics in an increasingly digitized work environment.

ABSTRAK

Dalam konteks Industri 5.0, yang menekankan integrasi teknologi canggih dengan nilai-nilai yang berpusat pada manusia, pemberdayaan psikologis telah muncul sebagai faktor penting dalam membentuk lingkungan kerja yang adaptif, fleksibel, dan bermakna. Memahami hubungannya dengan kepuasan kerja sangat penting untuk meningkatkan efektivitas organisasi. Studi ini menggunakan analisis bibliometrik untuk memetakan tren penelitian global tentang pemberdayaan psikologis dan kepuasan kerja. Sebanyak 73 artikel yang terindeks dalam database Scopus antara tahun 1994 dan 2024 dianalisis menggunakan RStudio dan VOSviewer untuk mengidentifikasi pola tematik, kemunculan bersama kata kunci, dan dinamika publikasi. Analisis tersebut mengungkapkan peningkatan yang konsisten dalam minat akademis pada topik-topik ini selama tiga dekade terakhir. Pemberdayaan psikologis sering dikaitkan dengan peningkatan kepuasan kerja, terutama melalui mekanisme seperti otonomi yang dirasakan, motivasi intrinsik, efikasi diri, dan makna tempat kerja. Analisis kemunculan bersama lebih lanjut menyoroti hubungan yang kuat dengan komitmen organisasi, kepemimpinan, dan budaya organisasi. Temuan ini menegaskan bahwa dalam era Industri 5.0, sinergi antara teknologi dan pemberdayaan manusia menjadi kunci utama dalam menjaga kesejahteraan karyawan. Selain itu, penelitian ini memberikan kontribusi praktis bagi manajer dalam merancang strategi manajemen sumber daya manusia yang lebih humanis dan adaptif. Studi ini juga memetakan arah penelitian masa depan guna memperdalam pemahaman mengenai dinamika psikologis di lingkungan kerja yang semakin terdigitalisasi.

1. Introduction

Much of the literature has examined organisational transformation in the face of the Industrial Revolution 5.0 from the perspective of digital technology adoption, particularly in the context of countries with advanced technological infrastructure such as South Korea,

Japan, and Germany [1], [2], [3]. This research focuses on the application of artificial intelligence (AI), Internet of Things (IoT) and Big Data to improve efficiency and product innovation. On the other hand, there are studies on the potential development of Human Resources in the context of digitalisation, many

of which are conducted in developing countries that are starting to enter the digital transformation phase such as Indonesia and India [4], [5], [6]. In addition, the issues of organisational culture and transformational leadership have begun to be raised in studies focusing on organisational adaptability in the face of technological disruption [7], [8]. However, studies investigating the full integration of technological, human and organisational structure factors together are still very limited. When categorised by geographical context, it is clear that most of the works are from developed countries, while in-depth research in the context of developing countries is still relatively minimal.

In the workplace, this revolution will emphasise human intelligence (AI) more than ever before. The main challenge is to understand how soft skills can improve the quality of the workforce so that they are ready for Industry 5.0. One important soft skill is emotional intelligence. A study involving 110 executives showed that emotional intelligence does make the workforce perform better. Evidently, the ability to recognise and express emotions, as well as understand them directly, has a great impact on work outcomes [9]. While this topic has been extensively explored in previous research, there are still limited studies published specifically within the context of the Industrial Revolution 5.0 [10], [11], [12]. However, there are not many studies that have been published and thoroughly researched in the context of the Industrial Revolution 5.0.

In the context of psychological empowerment, research assumes that individuals feel empowered through internal experiences such as meaning, which is the feeling that work has personal value; competence, which is the belief in one's ability to succeed; self-determination, which is autonomy in decision-making; and impact, which is the belief that their actions have a significant effect. High psychological empowerment is also assumed to have a direct impact on increased job satisfaction, which is also influenced by digital transformation through efficiency and adaptation challenges, effective leadership that creates a supportive work environment, and organisational practices such as compensation, career development and corporate culture. Within the scope of Industrial Transformation 5.0, industrial evolution is assumed to focus on the harmonisation of technology with the human element through a human-centered approach, improved communication and collaboration through technology, increased employee engagement through empowerment and retraining, and a priority on physical and mental well-being reflected in workplace design and stress reduction [10], [13], [14].

Psychological empowerment was first discussed as a relational construct in management practice, defined by the sharing of power between leaders and subordinates

within a dynamic relationship. This concept is also understood as a motivational construct that can have significant impacts both positive and negative on employees [15].

Low psychological empowerment can cause employees to feel insecure and lose control over their work, which in turn results in feelings of burden, withdrawal, and decreased productivity. These impacts can lead to emotional exhaustion, deteriorating work relationships, and stunted career growth. Employees who lack organisational support under these conditions are likely to experience symptoms of emotional exhaustion, resource depletion and strained relationships, which negatively impact their job satisfaction and performance [16].

On the other hand, psychological empowerment is generally perceived positively, with a trend that the higher the level of empowerment employees feel, the greater their responsibility, work motivation, and involvement in organisational activities [17], [18], [19]. Psychological empowerment gives employees a feeling of control, autonomy and influence over their work, which can increase self-confidence and intrinsic motivation. This contributes to active involvement in the achievement of organisational goals as well as increasing overall job satisfaction. However, it should be noted that in some situations, empowerment can also have a negative impact, for example when increasing excessive responsibilities without adequate support, leading to stress and decreased job satisfaction. Thus, it is important for organisations to create a supportive environment for psychological empowerment to deliver maximum benefits to employees and the organisation as a whole.

This study aims to map global trends in scholarly publications that address the topic of psychological empowerment and job satisfaction in the context of the Industrial Revolution 5.0 through a bibliometric approach. The research focuses on identifying the development of the literature over time, including geographical distribution as well as the institutions and countries most active in the field. In addition, this research reveals frequently used keywords to explore the thematic focus and conceptual dynamics in the study of psychological empowerment and job satisfaction, as well as analysing collaboration patterns between authors, institutions and countries to see the global scientific network. This study also aims to find research gaps, especially in developing countries such as Indonesia, where studies related to psychological empowerment and job satisfaction in the Industry 5.0 era are still limited.

In addition to providing an academic overview, this research relates the findings to the context of the real world of work, given that some companies in developing countries have adopted the principles of the Industrial Revolution 5.0 which balances technological

efficiency and human empowerment. For example, PT Telkom Indonesia actively develops digital talent with an approach that promotes a balance between technology and employee work values, Gojek and Tokopedia implement work flexibility and data-driven empowerment with a focus on employee well-being and autonomy, and Unilever Indonesia integrates psychological empowerment through a supportive organisational culture and human-centred leadership. By linking these bibliometric findings and organisational practices, this research is expected to contribute both theoretically in literature development and practically in providing insights for companies and policy makers to create an adaptive, empowering, and humane work environment in the Industry 5.0 era.

Psychological empowerment is an important corporate strategy to understand how individuals experience and respond to their work environment. This model shows that empowerment is not just about giving control to employees, but also about creating an environment that allows them to feel meaningful, competent, have choices, and be able to make an impact [20]. Meaning is the feeling that a person experiences when they have successfully understood the work and activities needed to complete their work. Competence is a person's trust/belief in their own ability to do a job using the skills they have [21].

Self-determination is the state of being in control of one's choices in initiating and managing one's own work and impact is the degree to which one can influence the strategy, administration, or operation of the company's work. Psychological empowerment refers to a set of psychological states that reflect how much employees believe in their role and its influence on the organisation, as well as their confidence to succeed [22], [23], [24]. Psychological empowerment is a complex construct defined by multiple dimensions and attributes that increase an individual's autonomy and effectiveness in various contexts. Its measurement and impact may vary, but it consistently contributes to positive outcomes such as job satisfaction, organisational commitment, and community participation.

Job satisfaction is an emotional feeling possessed by each individual in the form of pleasant feelings resulting from an assessment of one's job, this reaction occurs to one's job, and attitudes towards one's job. There are various factors that can affect the level of job satisfaction; some of these factors include salary and benefits, fairness obtained in the promotion system in a company, working conditions, the quality of individuals' relationships with their superiors, social relationships, and the work itself [25]. This theory is further supported by the perspective that job satisfaction is a favorable feeling arising from an individual's perception of completing tasks and fulfilling needs to obtain meaningful work values.

Furthermore, job satisfaction is defined as the result of a job evaluation based on work experience, manifested through positive or pleasant emotional states. These feelings generally take two forms: cognitive (the rational evaluation of one's work) and affective (one's emotional state) [26], [27].

Job satisfaction is the most important thing for workers for organisational development, workers expect to get more satisfaction with their jobs than in the past [28]. Job satisfaction is a pleasant feeling that is the result of individual perceptions in order to complete tasks or meet their needs to obtain work values that are important to themselves, job satisfaction is also a level of positive and pleasant emotions for individuals [29].

In today's work climate, employee well-being and engagement are of the utmost importance to the overall success of the company and that management techniques such as empowerment are the most effective way to achieve this goal. Based on empirical studies examining job satisfaction among employees of several private sector, public sector, and new generation banks in Kerala, India emphasised that the role of psychological empowerment in improving job satisfaction both locally and internationally. Then, it was conducted to analyse the four dimensions of psychological empowerment and the role of job satisfaction in the relationship between psychological empowerment and work-related stress [30].

In addition, research has examined the impact of psychological empowerment and perceived organizational support on job satisfaction and organizational commitment. The results showed that psychological empowerment and perceived organizational support have a positive relationship with job satisfaction and organizational commitment for public sector employees in Tamil Nadu [31]. Employees show higher satisfaction and commitment when they have high empowerment and organizational support. Research has further explored how psychological empowerment mediates the relationship between structural empowerment and job satisfaction. A total of 400 bank employees, from both the public and private sectors in India, participated in this study by completing an online questionnaire during the Covid-19 pandemic [10].

To analyse the data and test the hypotheses, researchers used confirmatory factor analysis (CFA) and path analysis. The results show that both psychological empowerment and structural empowerment have a positive and significant effect on job satisfaction. Furthermore, it was revealed that psychological empowerment partially mediates between structural empowerment and job satisfaction.

This study adopts an integrative approach based on Social Cognitive Theory to predict empowerment. In this study, psychological empowerment, structural

empowerment, and job satisfaction are treated as unidimensional constructs in the context of the Indian banking sector. This study makes an important contribution to theory and practice by offering insights into the benefits that bank employees, in both the public and private sectors, derive from implementing empowerment policies during the Covid-19 pandemic. A cross-sectional survey study and collected 439 valid responses from service employees in Spain. Hypotheses were tested using structural equation modelling (SEM) with confidence intervals based on 10,000 resamples (i.e., bootstrapping technique) [32].

Our results show that psychological empowerment partially mediates the relationship between structural empowerment and job satisfaction. It also fully mediates the relationship between structural empowerment and personal initiative at work. Conclusion: These findings emphasise the importance of HR practices that can empower employees as a key determinant of job satisfaction and personal initiative in service firms. Furthermore, the structural empowerment approach is a valid theoretical framework for studying and understanding employees' affective evaluations of work and, more specifically, their personal initiative.

The Industrial Revolution 5.0 brings many advantages, one of which is a more personalised way of job searching for candidates [9]. This new era sees industrial power not just for profit and growth, but also as a responsible driver of societal prosperity. This means production will be organised to respect the limits of nature and put workers' well-being at the core of the entire process. In contrast to Industry 4.0, which was highly technology-orientated and sometimes lacked attention to the human side, Industry 5.0 will instead return to serving humanity.

2. Research Method

This research uses a qualitative method with a bibliometric analysis approach. In its role, bibliometric analysis is a study of bibliographic analysis of scientific activities, based on the assumption that the results of its research can become the basis for subsequent researchers [33]. The steps that need to be taken in this analysis are to collect data and then carry out descriptive bibliometric analysis based on the level [34]. The data obtained from the Scopus database and analysed were 73 articles. The data was converted into

Bimtex and CSV formats and imported into bibliometrix software. Data analysis was performed using Rstudio and Vosviewer. Overall main information for this research can be seen on Table 1.

Table 1. Main Information

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1994:2024
Sources (Journals, Books, etc)	62
Documents	73
Annual Growth Rate %	7,18
Document Average Age	8,75
Average citations per doc	60,4
References	0
DOCUMENT CONTENTS	
Keywords Plus (ID)	91
Author's Keywords (DE)	192
AUTHORS	
Authors	203
Authors of single-authored docs	10
AUTHORS COLLABORATION	
Single-authored docs	10
Co-Authors per Doc	2,85
International co-authorships %	23,29
DOCUMENT TYPES	
Article	73

Scopus is one of the most significant publication indexers in the world. The database provided covers all international journals in the world. The Scopus academic database was chosen because it can provide access to research information [35]. The Scopus database conducted Bibliometric analysis on 17 February 2025. The keywords used are psychological empowerment and Job Satisfaction, which are used in English so that they can be detected by Scopus. The years covered in this research are all years, namely from 1994-2024, from the range of these years has produced 73 articles which results are stored to be visualised and analysed. Using stages in data collection and data analysis, which can be seen on Figure 1.

The study screening process conducted by the authors for this systematic review began with the identification of 279 records from the Scopus data retrieved in 1994-2024. After that, 206 automatically irrelevant data were further evaluated at the screening stage, where the authors screened the data by filtering subject area, document type, publication stage, and language. This left 73 data that were assessed for eligibility and thus, met the inclusion criteria and will be analysed in this systematic review, demonstrating a careful stepwise screening process to obtain relevant literature.

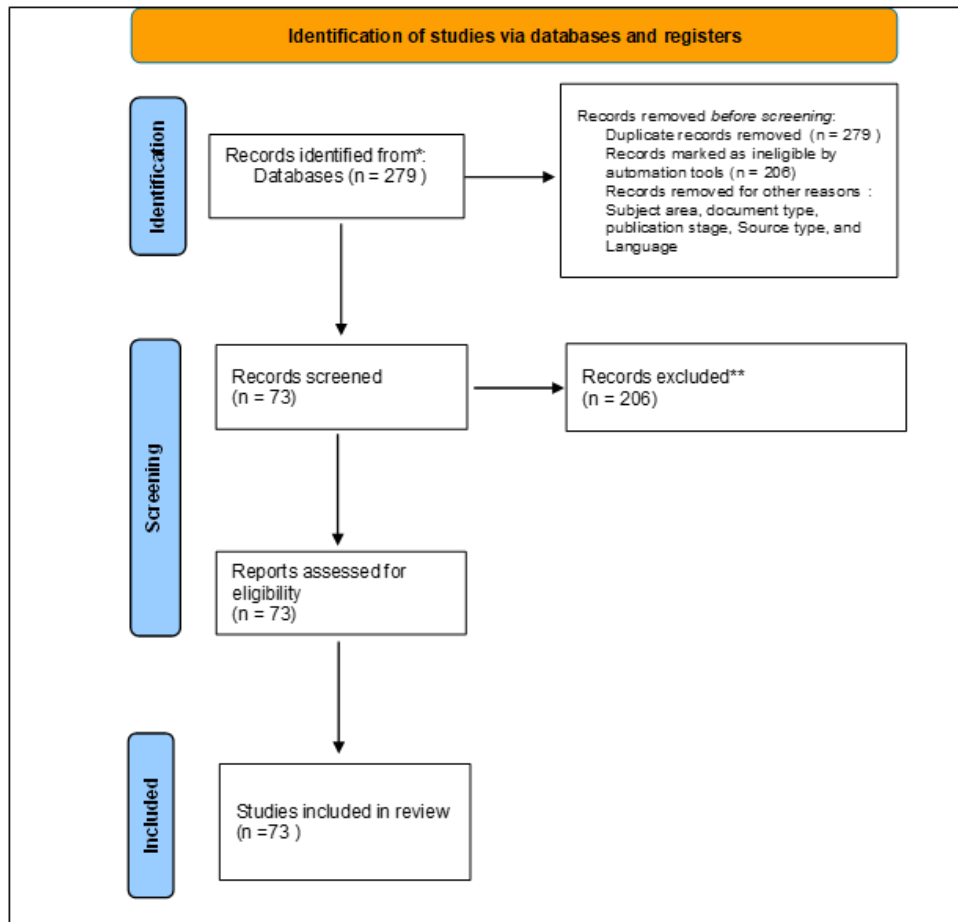


Figure 1. Stages Of Data Collection and Data Analysis

3. Result and Discussion

In recent years, psychological empowerment and job satisfaction have become attractive research topics. This is evident from the increasing number of studies addressing this topic, as seen in the annual growth of research output displayed on Figure 2.

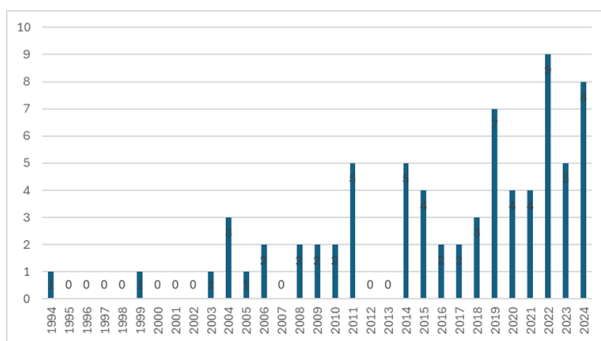


Figure 2. The Evolution of Annual Scientific Production

The evolution of annual scientific production shows an increase in the number of scientific publications on psychological empowerment and job satisfaction from year to year. This trend reflects the growing interest of academics in researching the relationship between psychological empowerment and job satisfaction. The peak of scientific production occurs in 2022, indicating

that this topic is increasingly relevant in research. Since the beginning of the analysis period in 1994 until recent years, the number of publications has gradually increased, with significant spikes likely influenced by the changing dynamics of work in the modern era. The effect of psychological empowerment on job satisfaction in preschool teachers by examining the mediating role of professional identity [36].

Based on motivation theory and the Job Demands-Resources model, the results showed that psychological empowerment significantly predicts increased job satisfaction, with professional identity acting as a partial mediator in the relationship. The findings emphasise the importance of strengthening psychological empowerment and professional identity to improve teacher well-being and retention in the context of early childhood education. This result is supported by studies before [37], [38], [39].

In addition, research reveals how participative leadership increases job satisfaction of UKMM employees through psychological empowerment (including competence, meaning, independence, and influence) and work engagement [40]. Participative leadership not only directly increases job satisfaction, but also through increasing employees' sense of control and emotional engagement. This article suggests that

measure and effectively improve employee job satisfaction becomes increasingly imperative. Psychological empowerment, which includes the dimensions of control, competence, meaningfulness, and impact, is positioned as a significant mediating mechanism in improving job satisfaction, adaptability, as well as employee engagement, as confirmed by a cross-sectoral study that examined 954 employees and supervisors across five service industries [12]. The study significantly demonstrated a positive correlation between psychological empowerment and employee job satisfaction and performance, while highlighting gender and sectoral differences in perceptions of empowerment.

Furthermore, the evolving employment landscape in Industry 5.0 emphasises a human-centred approach, going beyond the technocentric focus of Industry 4.0 [48]. This era prioritises personalised job search experiences, community well-being, sustainable production and worker safety. In this context, soft skills, particularly emotional intelligence, are emerging as crucial competencies in preparing the workforce. Understanding and developing emotional intelligence is seen as a strategic imperative to enhance staff readiness for the people-oriented Industry 5.0 paradigm, with significant implications for the

integration of socio-emotional competencies in workforce development curricula.

As a synthesis of these findings, it can be concluded that there is an inherent and mutually reinforcing relationship between psychological empowerment and job satisfaction, where a sense of autonomy, competence, meaningfulness and impact significantly enhance employee satisfaction and performance. More crucially, an understanding of the dynamics of psychological empowerment is becoming increasingly relevant in the context of the Fifth Industrial Revolution. This human-centric era not only demands the integration of advanced technologies, but also recognises the fundamental value of human contributions. The development of emotional intelligence and nontechnical skills, facilitated by a psychologically empowering work environment, are crucial elements to prepare the workforce to succeed and thrive in an Industry 5.0 employment landscape that increasingly emphasises intelligent and ethical collaboration between people and technology. As such, psychological empowerment is not only a driver of satisfaction and performance, but also a critical foundation for building a resilient and adaptive workforce in this transformative industrial era.

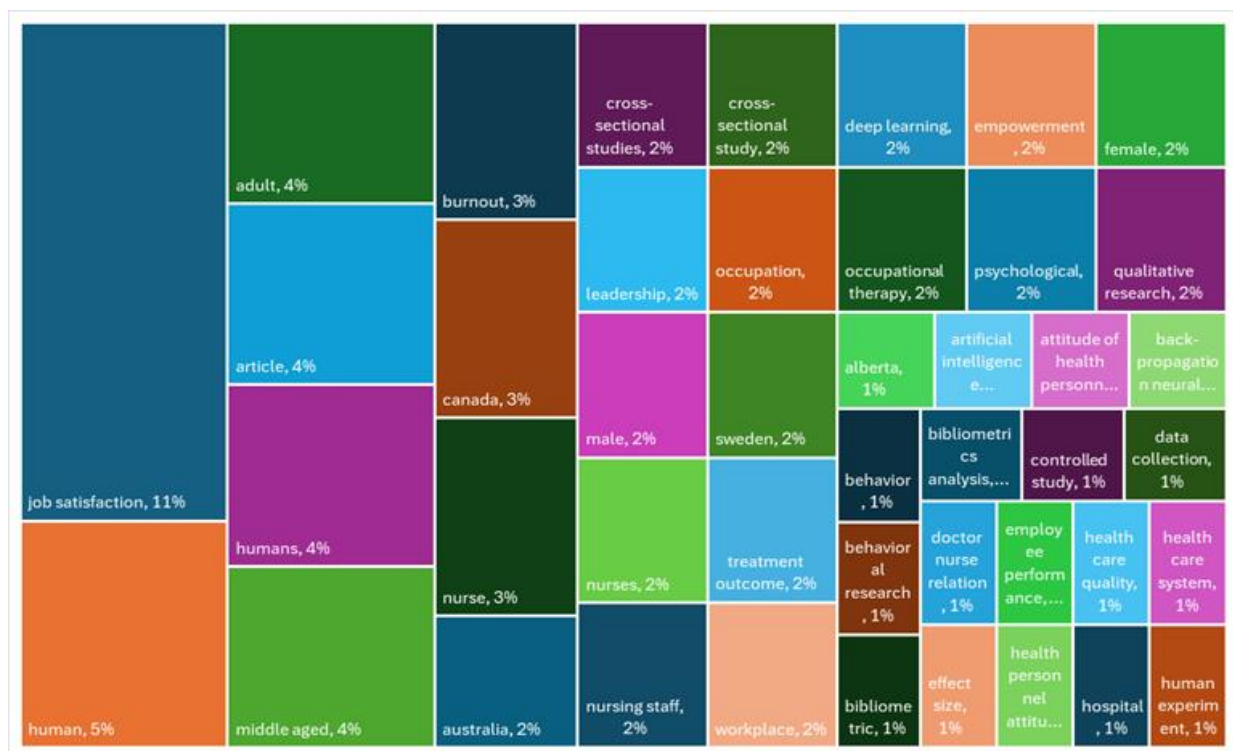


Figure 4. Treemap On Psychological Empowerment and Job Satisfaction

The bibliometric analysis used keyword frequency tables to visualise the main themes and concepts in the reviewed literature, which can be seen on Figure 4. The interpretation of this analysis is based on the frequency of occurrence of each keyword, where higher

frequencies indicate greater significance in the literature corpus. In this context, 'job satisfaction' emerged as the most frequent keyword, with a frequency of 11%, confirming the central focus on this topic in the studies analysed. This finding emphasises

the significance of job satisfaction as a dominant theme in the relevant literature. Job satisfaction, in the context of psychological empowerment, is often seen as the result of individuals feeling a sense of autonomy, competence, meaning in work, and the ability to make an impact.

While 'job satisfaction' dominates, the keyword 'empowerment' also appears, albeit with lower frequency, at 2% in one document and 2% in another. Psychological empowerment, which is the cornerstone of 'empowerment', refers to an individual's sense of personal control and belief in their ability to influence work outcomes. Therefore, despite its lower frequency, 'empowerment' remains an important concept that is closely linked to how individuals feel satisfied in their jobs. Other keywords that appeared in the analysis include 'human' (5 times), 'article' and 'humans' (4

times each), as well as other keywords such as 'adult', 'middle aged', 'canada', and 'nurse' (3 or more times each). These keywords provided additional context to the literature analysed, indicating a focus on human studies, academic publications, demographics and health professions.

Overall, this keyword frequency analysis provides insight into research trends and key foci in the analysed literature. The dominance of the keyword 'job satisfaction', coupled with the relevance of 'empowerment', highlights the importance of understanding psychological dynamics in the workplace. Mapping themes through keyword frequencies facilitates an understanding of the structure and content of bibliometric research, particularly with regard to psychological empowerment and job satisfaction.

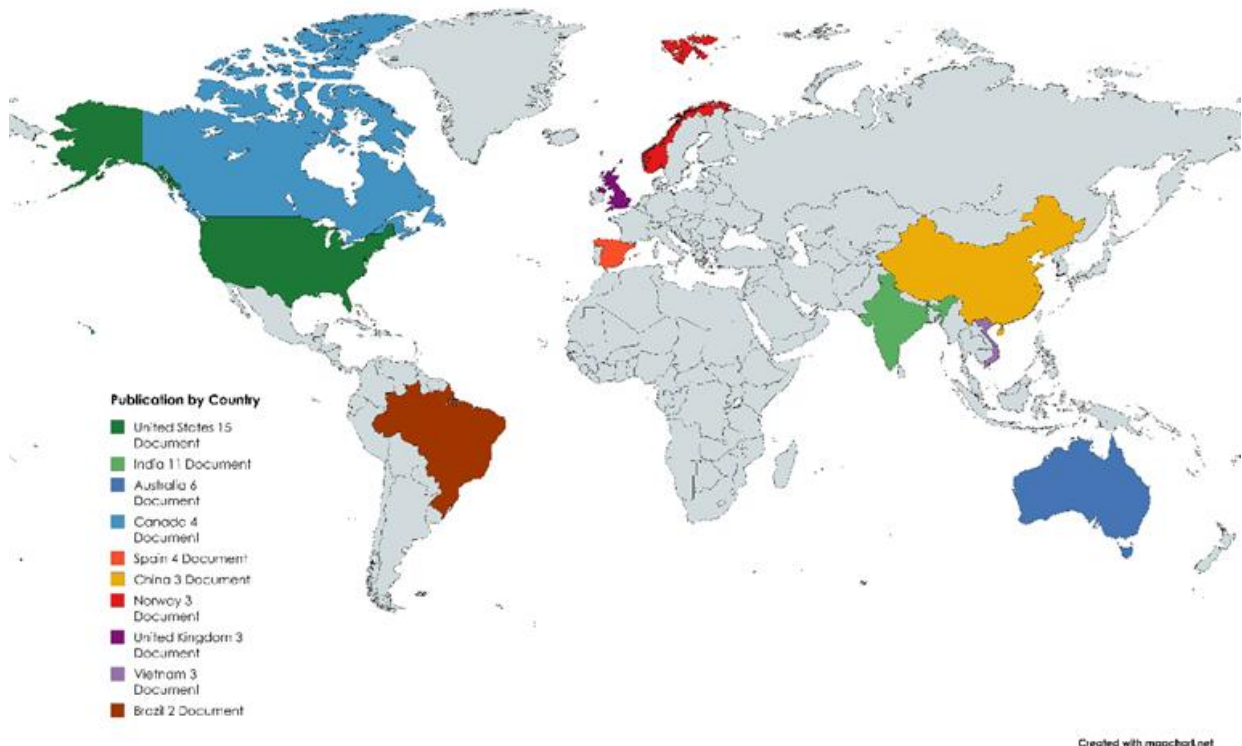


Figure 5. Publications by Country

Figure 5 illustrates the number of scientific publications by country where the visualisation shows the contribution of each country to the analysed literature. The colours on the map indicate the number of publications from each country, with different colours representing a range of publications. Based on the legend, the United States (dark green) leads with 15 documents, followed by India (green) with 11 documents. Australia (blue) has 6 documents, Canada (light blue) and Spain (red) have 4 documents each. China (yellow) has 3 documents, the same as Norway (dark red), the United Kingdom (purple) and Vietnam (brown). Brazil (brick red) has 2 documents. This map visualisation allows direct identification of the country

of origin of scientific publications, providing a representation of the geographical distribution of research contributions. Chromatic differences on the map indicate variations in publication productivity among the countries covered.

Based on the data, the United States is a hub of research and development in the field of management and organisational psychology, with many academic institutions and research institutes actively publishing studies related to these topics. In addition, the work culture and organisational structure in the US tend to support in-depth empirical research, resulting in a wealth of relevant literature. There is a significant alignment between the individual and the organisation

(P-O fit) [49]. That, psychological empowerment, and perceived impact have a significant influence on job satisfaction and employee performance. Thus, an in-depth understanding of these mechanisms is crucial for organisations seeking to improve the effectiveness and well-being of their employees. P-O fit refers to the extent to which an individual's values, goals, and characteristics align with the organisation's culture, structure, and goals. When there is a good fit, employees tend to feel more comfortable, motivated and engaged. They feel that they "fit in" at work, which directly contributes to higher job satisfaction. Furthermore, psychological empowerment is an

employee's internal feeling that they have control, competence, meaning, and impact in their work. When employees feel psychologically empowered, they are more proactive, responsible and innovative. These feelings also drive job satisfaction as they feel valued and have control over their work. Perceived impact, then, is an employee's belief that their efforts and contributions have a meaningful influence on work outcomes or larger organisational goals. When employees see that their work matters and makes a difference, this increases a sense of ownership and satisfaction.

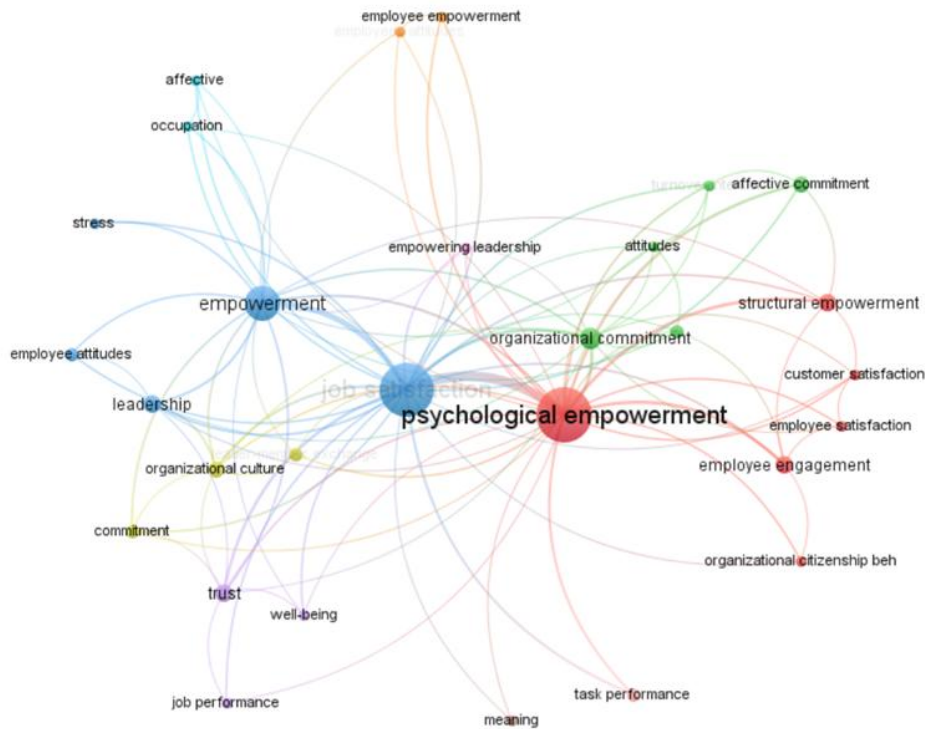


Figure 6. Co-occurrences Network Analysis

The data presented on Figure 6 illustrates the close relationship between various concepts related to psychological empowerment. This visualisation presents a keyword map, where the size of each keyword indicates its frequency of occurrence in research on psychological empowerment. The lines connecting the keywords indicate their frequency of occurrence in the literature, thus illustrating the interconnectedness of the topics. The concepts "psychological empowerment" and "job satisfaction" lie at the core of this network, indicating that psychological empowerment is a very important and widely researched topic. From the data, the 5 groups of records can be interpreted as follows:

- a. Red: This cluster centres on the concepts of psychological empowerment and job satisfaction. In addition, employee satisfaction and employee engagement are also connected in this cluster. The main theme that emerged was the role of psychological empowerment in influencing employee satisfaction and engagement.
- b. Green: This cluster centres on the link between affective commitment and structural empowerment, which significantly influence customer satisfaction.

The main theme of this cluster highlights how employees' emotional commitment and structural empowerment within the organisation are positively correlated with customer satisfaction. Employees who have a strong emotional commitment and feel structurally empowered are likely to provide high quality service, which in turn increases customer satisfaction and loyalty [53], [54], [55].

- c. Blue: This cluster highlights the centrality of organisational commitment and leadership. Other important nodes include empowerment, organisational culture, trust, work performance, and employee attitudes. The main themes of this cluster revolve around organisational commitment, the role of leadership, organizational culture and trust, and how these elements affect employee performance and attitudes. Organisational commitment shows a positive correlation with employee performance, while leadership, organisational culture and trust play crucial roles as mediators and moderators in influencing these outcomes. The establishment of a supportive and trust-based work environment under effective leadership is seen as a key strategy to improve commitment and performance. Nonetheless, more comprehensive validation requires in-depth research and further empirical evidence [56], [57], [58].
- d. Yellow: The "meaning" cluster in psychological empowerment research shows a different pattern of relationships with other concepts. The main theme of this cluster is the "meaning" dimension of work or empowerment, which is rooted in shared individual and organisational values, decision-making freedom, and belief in the impact of work. The study confirms the importance of autonomy, psychological aspects of empowerment (meaning, competence, self-determination, impact), social interaction, and communication in achieving effective empowerment, which collectively increases worker satisfaction, engagement, and well-being. Furthermore, "meaning" in work is subjective, predictive of work outcomes, and interacts with other factors. Empowerment is a complex concept with multiple interpretations and potential internal conflicts. Although the OPA! Way® offers a new perspective for finding meaning at work, and meaning in IT contexts tends to be individualistic, this abstract does not explore in depth the psychological and sociological perspectives related to empowerment. The OPA! Way® paradigm, inspired by Greek philosophy, proposes an approach to finding meaning through three principles: Others (meaningful connections and sense of community), Purpose (engagement with deeper purpose and values), and Attitude (resilience, optimism, and positive outlook). Thus, true meaning is found through strong social

connections, a clear life purpose, and a positive attitude [59], [60], [61].

- e. Purple: This research focuses on employee turnover intention and its strong and inverse relationship with organisational commitment. This study aims to investigate in depth the psychological factors that influence both employees' intention to leave and their level of commitment to the organisation. Furthermore, it explores the causal impact of turnover intention on organisational commitment, particularly in the context of employee retention strategies. The practical implications of understanding and managing these psychological factors in improving employee retention are also a key concern. In addition, this research also examines the potential variation of turnover intention and organisational commitment across different industries and organisational cultural contexts, assuming that sectoral characteristics and organisational values may moderate the relationship between the two constructs. As such, this research is expected to contribute significantly to the theoretical understanding and practical application of the dynamics of turnover intention and organisational commitment [62], [63], [64].

The co-occurrence network in the bibliometric analysis shows that psychological empowerment and job satisfaction are core concepts that are interrelated in improving the quality of human resources amid technological interruptions in the era of the Industrial Revolution 5.0. In this context, psychological empowerment is not only an internal aspect of individuals, but also the result of an organisational environment that is adaptive to technological change. Digital transformations such as the implementation of Artificial Intelligence (AI), Internet of Things (IoT), and Big Data have changed the way of working, organisational structures, and expectations of employees. Organisations are not only required to improve efficiency, but also maintain a balance between machines and humans. Under these conditions, psychological empowerment becomes crucial as it allows employees to feel in control of their work, understand the meaning of the tasks performed, and feel that their contributions have an impact on the success of the organisation. Rapid technological change also brings challenges such as uncertainty, new skill demands, and higher work pressure. In these situations, transformational leadership, an inclusive and adaptive organisational culture, and flexible work design play an important role in creating a sense of psychological safety, increasing motivation, and strengthening work commitment. Job satisfaction also increases when employees feel valued, able to grow, and have opportunities to innovate in a changing environment. The implications of these findings are particularly relevant for organisations that are digitalising or integrating advanced technologies. They

must ensure that their technology transformation strategies are not only oriented towards systems and processes, but also towards empowering the people within them. By adopting the principles of human-centered industry 5.0, organisations will not only survive the changes, but also grow sustainably through psychological empowerment and job satisfaction.

4. Conclusion

This research highlights the crucial role of psychological empowerment in increasing job satisfaction, a relationship that has received significant attention in organizational literature and shows a marked upward trend through a bibliometric analysis of 73 Scopus-indexed articles. This trend is particularly relevant within the demands of Industrial Revolution 5.0, which emphasizes balancing technological advances with human values. The findings confirm that psychological empowerment effectively improves work experiences—specifically through autonomy, competence, meaning, and impact—which in turn contribute positively to job satisfaction levels. Furthermore, co-occurrence analyses reveal that these variables are closely intertwined with other significant organizational themes, such as organizational commitment, leadership, and organizational culture. Ultimately, this analysis reinforces the view that psychological empowerment is a vital factor for long-term success in dynamic environments, where the combination of participative leadership and a supportive organizational culture is critical to maximizing employee satisfaction and achieving optimal organizational outcomes.

References

- [1] Locke, E. A. (1976). The nature and causes of job satisfaction. *In Handbook of Industrial and Organizational Psychology*.
- [2] Conger, J. A., & Kanungo, R. N. (1988). The Empowerment Process: Integrating Theory and Practice. *Academy of Management Review*, 13(3), 471–482. <https://doi.org/10.5465/amr.1988.4306983>
- [3] Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of management review*, 15(4), 666–681. <https://doi.org/10.5465/amr.1990.4310926>
- [4] Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5), 1442–1465. <https://doi.org/10.5465/256865>
- [5] Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology press.
- [6] Hechanova, M. R. M., Alampay, R. B. A., & Franco, E. P. (2006). Psychological empowerment, job satisfaction and performance among Filipino service workers. *Asian Journal of Social Psychology*, 9(1), 72–78. <https://doi.org/10.1111/j.1467-839X.2006.00177.x>
- [7] Franěk, M., & Večeřa, J. (2008). Personal characteristics and job satisfaction. *Ekonomika A Management*, 4(1), 63–76.
- [8] Gregory, B. T., Albritton, M. D., & Osmonbekov, T. (2010). The Mediating Role of Psychological Empowerment on the Relationships between P-O Fit, Job Satisfaction, and In-role Performance. *Journal of Business and Psychology*, 25(4), 639–647. <https://doi.org/10.1007/s10869-010-9156-7>
- [9] Perryer, C., Jordan, C., Firms, I., & Travaglione, A. (2010). The Interactive effect of organizational commitment and perceived organizational support. *Management Research Review*, 33(9), 911–923.
- [10] Zhang, X. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Development and Learning in Organizations: An International Journal*, 24(5), 4–9. <https://doi.org/10.1108/dlo.2010.08124ead.007>
- [11] Fock, H., Chiang, F., Au, K. Y., & Hui, M. K. (2011). The moderating effect of collectivistic orientation in psychological empowerment and job satisfaction relationship. *International Journal of Hospitality Management*, 30(2), 319–328. <https://doi.org/10.1016/j.ijhm.2010.08.002>
- [12] Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and Consequences of Psychological and Team Empowerment in Organizations: A Meta-Analytic Review. *Journal of Applied Psychology*, 96(5), 981–1003. <https://doi.org/10.1037/a0022676>
- [13] Wallace, J. C., Johnson, P. D., Mathe, K., & Paul, J. (2011). Structural and Psychological Empowerment Climates, Performance, and the Moderating Role of Shared Felt Accountability: A Managerial Perspective. *Journal of Applied Psychology*, 96(4), 840–850. <https://doi.org/10.1037/a0022227>
- [14] Hu, F. F., Sang, Q. S. (2013). The relationship among occupational identity, social support and job satisfaction of kindergarteners. *Stud Psychol Behav*, 11(5), 666–670.
- [15] Angelina, A., & Subudi, M. (2014). Pengaruh Kompensasi Finansial Dan Gaya Kepemimpinan Terhadap Kepuasan Kerja Karyawan Dan Organizational Citizenship Behavior (Ocb) Pada Hotel Alit’S Beach Bali. *E-Jurnal Manajemen Universitas Udayana*, 3(4), 243085.
- [16] Alexander-Albritton, C., & Hill, N. R. (2015). Familial and institutional factors: Job satisfaction for female counselor educators. *Counselor Education and Supervision*, 54(2), 109–121. <https://doi.org/10.1002/ceas.12008>
- [17] Meilina, R. (2016). Pengaruh Karakteristik Pekerjaan, Kepuasan Kerja, dan Komitmen Organisasi terhadap Organizational Citizenship Behavior pada Karyawan BRI Kediri. *Eksis: Jurnal Riset Ekonomi dan Bisnis*, 11(1). <https://doi.org/10.26533/eksis.v11i1.32>
- [18] Akbar, D. M. (2017). *Pengaruh Motivasi Kerja Dan Kepuasan Kerja Terhadap Komitmen Organisasi Pegawai Rumah Sakit PKU Muhammadiyah Bantul* (Doctoral dissertation, MMR UMY).
- [19] Hogg, M. A., Abrams, D., & Brewer, M. B. (2017). Social identity: The role of self in group processes and intergroup relations. *Group Processes and Intergroup Relations*, 20(5), 570–581. <https://doi.org/10.1177/1368430217690909>
- [20] Aggarwal, A., Dhaliwal, R. S., & Nobi, K. (2018). Impact of Structural Empowerment on Organizational Commitment: The Mediating Role of Women’s Psychological Empowerment. *Vision*, 22(3), 284–294. <https://doi.org/10.1177/0972262918786049>
- [21] George, E., Zakkariya, K. A. (2018). *Psychological empowerment and job satisfaction in the banking sector* (16th ed.). Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-94259-9>
- [22] Shahab, M. A., Sobari, A., & Udin, U. (2018). Empowering leadership and organizational citizenship behavior: The

- mediating roles of psychological empowerment and emotional intelligence in medical service industry. *International journal of economics and business administration*, 6(3), 80-91.
- [23] Mwaisaka, D. M. (2019). Influence Of Supportive And Directive Leadership Styles On Employee Job Satisfaction In Commercial Banks In Kenya. *Journal of Research in Management*, 2(3), 42–53. <https://doi.org/10.32424/jorim.v2i3.76>
- [24] Vinodhini, R. L., & Vijayanthi, P. (2019). The effects of psychological empowerment (PE) and perceived organizational support (POS) on job satisfaction (JS) and organizational commitment - Among public sector employees. *Journal of Advanced Research in Dynamical and Control Systems*, 11(8 Special Issues), 834–836.
- [25] Farida, N., & Firmansyah, A. H. (2020). Analisis Bibliometrik Berdasarkan Pendekatan Co-Word. *Jurnal Pengembangan Kearsipan*, 13(2), 91–109.
- [26] Koo, B., Yu, J., Chua, B. L., Lee, S., & Han, H. (2020). Relationships among Emotional and Material Rewards, Job Satisfaction, Burnout, Affective Commitment, Job Performance, and Turnover Intention in the Hotel Industry. *Journal of Quality Assurance in Hospitality and Tourism*, 21(4), 371–401. <https://doi.org/10.1080/1528008X.2019.1663572>
- [27] Weidenstedt, L. (2020). Employee Empowerment and Paternalism: A Conceptual Analysis of Empowerment's Embeddedness in Communicative Contexts. *Management Revue*, 31(4), 444–464. <https://doi.org/10.5771/0935-9915-2020-4-444>
- [28] Busro, B., Mailana, A., & Sarifudin, A. (2021). Pendidikan islam dalam publikasi internasional: analisis bibliometrik pada database scopus. *Edukasi Islami: Jurnal Pendidikan Islam*, 10(02).
- [29] Chin, S. T. S. (2021). Influence of emotional intelligence on the workforce for industry 5.0. *IBIMA Business Review*, 2021. <https://doi.org/10.5171/2021.882278>
- [30] Els, V., Brouwers, M., & Lodewyk, R. B. (2021). Quality of work life: Effects on turnover intention and organisational commitment amongst selected south african manufacturing organisations. *SA Journal of Human Resource Management*, 19, 1–10. <https://doi.org/10.4102/sajhrm.v19i0.1407>
- [31] Fadhillaini, C. R., Tjahjono, H. K., & Susanto, S. (2021). Improving employee engagement of muhammadiyah teachers with organizational trust, distributive justice, and psychological empowerment. *Journal The Winners*, 22(2), 113-122. <https://doi.org/10.21512/tw.v22i2.7085>
- [32] Marin-Garcia, J. A., & Bonavia, T. (2021). Empowerment and employee well-being: A mediation analysis study. *International Journal of Environmental Research and Public Health*, 18(11). <https://doi.org/10.3390/ijerph18115822>
- [33] Selimović, J., Pilav-Velić, A., & Krndžija, L. (2021). Digital workplace transformation in the financial service sector: Investigating the relationship between employees' expectations and intentions. *Technology in Society*, 66(February). <https://doi.org/10.1016/j.techsoc.2021.101640>
- [34] Wicaksono, T., & Gazali, M. (2021). Pengaruh Kepuasan Kerja Terhadap Kinerja Karyawan Dengan Organizational Citizenship Behavior (OCB) Sebagai Variabel Intervening. *At-Tadbir: Jurnal Ilmiah Manajemen*, 5(1), 22-34. <https://doi.org/10.31602/atd.v5i1.3219>
- [35] Zhou, H., & Chen, J. (2021). How Does Psychological Empowerment Prevent Emotional Exhaustion? Psychological Safety and Organizational Embeddedness as Mediators. *Frontiers in Psychology*, 12(July). <https://doi.org/10.3389/fpsyg.2021.546687>
- [36] Arathy, C., & Biju, A. V. (2022). Are Bank Employees Psychologically and Structurally Empowered? an Assessment from the Indian Banking Sector. *Employee Responsibilities and Rights Journal*, 34(4), 463–485. <https://doi.org/10.1007/s10672-021-09393-z>
- [37] Narbariya, S., Nayeem, M. A., & Gupta, R. (2022). Does HPWS amplify employees' change readiness for digital transformation? A study through the "work-from-anywhere" prism. *Personnel Review*, 51(8), 1948–1966. <https://doi.org/10.1108/PR-01-2022-0068>
- [38] Park, Y. W., & Shintaku, J. (2022). Sustainable Human–Machine Collaborations in Digital Transformation Technologies Adoption: A Comparative Case Study of Japan and Germany. *Sustainability (Switzerland)*, 14(17). <https://doi.org/10.3390/su141710583>
- [39] Callado, A., Teixeira, G., & Lucas, P. (2023). Turnover Intention and Organizational Commitment of Primary Healthcare Nurses. *Healthcare (Switzerland)*, 11(4), 1–11. <https://doi.org/10.3390/healthcare11040521>
- [40] Pacheco, P. O., & Coello-Montecel, D. (2023). Does psychological empowerment mediate the relationship between digital competencies and job performance?. *Computers in Human Behavior*, 140, 107575. <https://doi.org/10.1016/j.chb.2022.107575>
- [41] Ozpamuk, M., Bolatan, G. I., VanDerSchaaf, H., & Daim, T. (2023). Exploring empowerment as an enabler of effective knowledge management. *Journal of Knowledge Management*, 27(9), 2434–2461. <https://doi.org/10.1108/JKM-09-2022-0747>
- [42] Schröder, M., Mokudai, T., Müller, M., & Metternich, J. (2024). Varieties of Digitalisation?: Theoretical Explanations of German and Japanese Digitalisation Approaches in the Automotive Industry. *Vienna Journal of East Asian Studies*, 15(1), 3-31. <https://doi.org/10.30965/25217038-01501002>
- [43] Datta, A., & Lakshmi Narayanamma, P. (2024). An Empirical Investigation Examining the Correlation between Organizational Culture and Employee Commitment in Manufacturing Companies in India. *Lecture Notes in Networks and Systems*, 1056, 519–536. https://doi.org/10.1007/978-981-97-4892-1_43
- [44] Farliana, N., Murniawaty, I., & Hardianto, H. (2024). Sustainability of the Digital Economy in Indonesia: Opportunities, Challenges and Future Development. *Review of Business and Economics Studies*, 11(4), 21–28. <https://doi.org/10.26794/2308-944x-2023-11-4-21-28>
- [45] Khalayleh, W., Rohaida, S., & Al-Khazaleh, S. M. (2024). The Impact of Leadership Practices on the Adoption of Digital Transformation: The Moderating Role of Organizational Culture in Jordanian Manufacturing Sector. *International Review of Management and Marketing*, 14(6), 178–185. <https://doi.org/10.32479/irmm.17079>
- [46] Llorente-Alonso, M., Garcia-Ael, C., & Topa, G. (2024). A meta-analysis of psychological empowerment: Antecedents, organizational outcomes, and moderating variables. *Current Psychology*, 43(2), 1759–1784. <https://doi.org/10.1007/s12144-023-04369-8>
- [47] Nadeem, K., Wong, S. I., Za, S., & Venditti, M. (2024). Digital transformation and industry 4.0 employees: Empirical evidence from top digital nations. *Technology in Society*, 76. <https://doi.org/10.1016/j.techsoc.2023.102434>
- [48] Udin, U., & Dananjoyo, R. (2024). Exploring three-mediation paths of transformational leadership and innovative work behavior. *Journal of Social Economics Research*, 11(2), 126-142. <https://doi.org/10.18488/35.v1i2.3615>

- [49] Xiang, X., Wei, Y., Lei, Y., Li, W., & He, X. (2024). Impact of psychological empowerment on job satisfaction among preschool teachers: mediating role of professional identity. *Humanities and Social Sciences Communications*, *11*(1), 1–10. <https://doi.org/10.1057/s41599-024-03706-x>
- [50] Chompukum, P., & Vanichbuncha, T. (2025). Building a Positive Work Environment: The Role of Psychological Empowerment in Engagement and Intention to Leave. *Behavioral Sciences*, *15*(2). <https://doi.org/10.3390/bs15020131>
- [51] Kellerer, M., & Süß, S. (2025). Implications of multiple commitment targets for turnover intentions and actual turnover: a systematic literature review. *Management Review Quarterly*, 1–46. <https://doi.org/10.1007/s11301-025-00500-0>
- [52] Mohapatra, I., Sundaray, B. K., Dash, M., & Patnaik, T. (2025). Understanding the Role of Employee Empowerment in Shaping Workplace Relationships. “A Study on NTPC Odisha. *Journal of Information Systems Engineering and Management*, *10*, 712–719. <https://doi.org/10.52783/jisem.v10i5s.762>
- [53] Olaya, H. D. A., Atocha, M. R. Á., Ruiz, G. Z., & Claudio, B. M. (2022). Empowerment as a driver of job performance: evidence from the literature and theoretical perspectives. *Health Leadership and Quality of Life*, *1*, 11. <https://doi.org/10.56294/hl202211>
- [54] Albasal, N. A., Eshah, N., Minyaw, H. E., Albashtawy, M., & Alkhalwaldeh, A. (2022). Structural and psychological empowerment and organizational commitment among staff nurses in Jordan. *Nursing Forum*, *57*(4), 624–631. <https://doi.org/10.1111/nuf.12721>
- [55] Schermuly, C. C., Creon, L., Gerlach, P., Graßmann, C., & Koch, J. (2022). Leadership styles and psychological empowerment: A meta-analysis. *Journal of Leadership & Organizational Studies*, *29*(1), 73–95. <https://doi.org/10.1177/15480518211067751>
- [56] Da Cruz, A. P. C., Frare, A. B., Accadrolli, M. C., & Horz, V. (2022). Effects of informal controls and psychological empowerment on job satisfaction. *Revista Contabilidade e Finanças*, *33*(88), 29–45. <https://doi.org/10.1590/1808-057x202114660>
- [57] Hein-Pensel, F., Winkler, H., Brückner, A., Wölke, M., Jabs, I., Mayan, I. J., Kirschenbaum, A., Friedrich, J., & Zinke-Wehlmann, C. (2023). Maturity assessment for Industry 5.0: A review of existing maturity models. *Journal of Manufacturing Systems*, *66*, 200–210. <https://doi.org/10.1016/j.jmsy.2022.12.009>
- [58] Mahmood, A., Akhtar, M. N., Talat, U., Shuai, C., & Hyatt, J. C. (2019). Specific HR practices and employee commitment: the mediating role of job satisfaction. *Employee Relations*, *41*(3), 420–435. <https://doi.org/10.1108/ER-03-2018-0074>
- [59] Muñoz-Márquez, C. E., Barrera, R. M., & Domínguez-Espinosa, A. (2021). Model of psychological empowerment based on structural equations for predicting autonomy. *Revista Colombiana de Psicología*, *30*(2), 55–69. <https://doi.org/10.15446/RCP.V30N2.82149>
- [60] Orgambidez, A., Benítez, M., León-Pérez, J. M., & Cantero-Sánchez, F. J. (2024). Structural empowerment, personal initiative, and job satisfaction in service employees: Exploring the mediating role of psychological empowerment. *Scandinavian Journal of Psychology*, 911–918. <https://doi.org/10.1111/sjop.13040>
- [61] Pasumarthy, R., Mohammed, S., Laxman, V., Krishnamoorthy, V., Durga, S., & Boopathi, S. (2024). Digital transformation in developing economies: Forecasting trends, impact, and challenges in industry 5.0. *Convergence of Human Resources Technologies and Industry 5.0, November*, 47–68. <https://doi.org/10.4018/979-8-3693-1343-5.ch003>
- [62] Rodríguez-Soler, R., Uribe-Toril, J., & De Pablo Valenciano, J. (2020). Worldwide trends in the scientific production on rural depopulation, a bibliometric analysis using bibliometrix R-tool. *Land Use Policy*, *97*(August 2019), 104787. <https://doi.org/10.1016/j.landusepol.2020.104787>
- [63] Riedel, E. (2016). *Work-Life Balance Programs to Improve Employee Performance* (Doctoral dissertation, Walden University).
- [64] Vajravelu, A., Thanikachalam, Y., Waha, M. H. B. A., Jamil, M. M. B. A., & Sivaranjani, S. (2024). Human-machine collaboration and emotional intelligence in industry 5.0. *Human-Machine Collaboration and Emotional Intelligence in Industry 5.0*, 220–232. <https://doi.org/10.4018/979-8-3693-6806-0.ch012>