



# GURUGRAM UNIVERSITY BUSINESS REVIEW (GUBR)

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## Foreword

I am really pleased to put forward yet another issue of the Bi-Annual International peer-reviewed Journal of repute; *Gurugram University Business Review (GUBR)* of the Department of Management. It is a matter of honour to be associated with GUBR.

World is witnessing brisk changes in the area of media and communication more than any other field; and this change is more noticeable in the area of digital content. However, a research journal is still perceived as an important and robust method of publishing despite innovations in the area of communication with regard to research work. It is through research journals that the exploration, including its logical and viable commitments, is dispersed to others in a specific field. This helps researchers with common interests to seek knowledge in their field and it assists with propelling information and its application. Publishing puts your research into larger context. Publishing helps establish you as an expert in your field of knowledge. Peer-reviewed publication provides evidence that helps in the evaluation of merit of research funding requests and adopting the research in industry.

GUBR has an inclusive ethos and is open to a wide range of methodological approaches and philosophical underpinnings. GUBR is a globally respected multidisciplinary international journal which provides an international forum for exchange of ideas and findings from researchers across different cultures. It publishes both empirical and conceptual articles with an objective to advance knowledge creation and dissemination in fields such as organizational behavior, accounting & finance, human psychology, strategy, international business, resource management, entrepreneurship, innovation, machine learning, data analytics, information technology and critical management studies.

In this endeavor of academic repute, I extend my immense gratitude to Prof. (Dr.) Dinesh Kumar, the Hon'ble Vice Chancellor of the Gurugram University for his worthy guidance and encouragement and also for having such a strong trust in the capabilities of the editorial team.

I sincerely acknowledge the contribution made by the very dedicated team especially Dr. Ritu Yadav for her unwavering efforts in bringing out the seventh issue of the Journal. I will urge the team to work hard to get the journal listed in citation databases of repute.

A journal is what is made by authors of its articles, albeit; I owe my sincere thanks to all the contributors of this journal. I feel privileged and humbled to be associated with GUBR which will constantly thrive upon high quality of research.

Happy Learning!!

**Prof. (Dr.) Amarjeet Kaur**  
*Editor-in-Chief*







## Editorial Note

Research is a continuous journey that transitions from acquiring knowledge to attaining wisdom. Researchers' revitalization and exploration of uncharted territories significantly contributes to society's advancement. In this context, we are delighted to present the first issue of Volume 4 of the *Gurugram University Business Review (GUBR)*. This renowned international bi-annual peer-reviewed journal is published by the esteemed Department of Management at Gurugram University, Gurugram.

The journal is organized into two sections: (i) research papers and (ii) book reviews. The first section publishes empirical and conceptual research pieces on a variety of business topics from a global viewpoint, while the second section focuses on book reviews, offering useful insights and comments.

In the opening section, readers will discover a collection of 11 research articles that explore a diverse array of topics related to business and management. Additionally, the book review segment offers an in-depth analysis of the intriguing book "Mindset: Changing the way you think to fulfill your potential," authored by Dr. Carol S. Dweck.

The first research paper, titled "Green Marketing Practices: Insights from the Green Brand Equity Framework," authored by Kavita Singla and Anand Thakur, explores the shift from traditional to sustainable marketing practices amid dynamic environmental conditions. The study presents a comprehensive Green Brand Equity (GBE) framework to help marketers re-evaluate their strategies, focusing on elements like green brand association, satisfaction, loyalty, trust, awareness, image, perceived quality, and attitude. These elements significantly influence environmentally responsible purchase intention (ERPI) and green word of mouth.

The second research paper, titled "Workforce Agility during a Pandemic Situation: A Systematic Literature Review and Bibliometric Analysis," authored by Vaishali and Dr. Vandana Singh, explores the impact of transformational technologies during the COVID-19 pandemic on workforce adaptability. Using bibliometric analysis with tools like VOS viewer and Biblioshiny, the study highlights emerging trends such as enterprise social media, work expertise, employee agility, and adaptability. The research reveals that workforce agility is still in its developmental stage, underscoring the need for further growth and exploration in this field.

The subsequent paper titled "Analyzing Symmetry and Disparities in Higher Education Enrollment Patterns in India: An Exploratory Study," authored by Dr. Prabha Arya, Prof. (Dr.) Dinesh Chandra Agarwal, and Prof. (Dr.) Sapna Dadwal, investigates enrollment patterns in higher education across India, emphasizing socio-economic, gender, regional, and caste dimensions. The study underscores the unequal accessibility to higher education nationwide, highlighting regional disparities, particularly the higher Gross Enrollment Ratio (GER%) in the South Zone due to the concentration of state public universities.

The next research paper, "Career Ambiguity and Its Impact on Mental Wellness of MBA Graduates," authored by Dr. Krishna Kumari, addresses the prevalent issue of career uncertainty among MBA graduates in India. The study highlights how the proliferation of management institutes and online courses has affected the career trajectories of students, often leading to unemployment and its detrimental effects on mental health.

The fifth paper, titled "A Bibliometric Analysis of Workplace Deviant Behavior (2000–2023)," authored by Aishwerya and Prof. (Dr.) Satyawar Baroda, provides a comprehensive review of research trends and thematic evolution in the study of workplace deviant behavior. Analyzing 1340 articles from the Scopus database using VOS viewer and Biblioshiny, the study maps out key contributors, influential authors, and thematic clusters

in this field. The research highlights global contributions to understanding workplace deviance, emphasizing psychological structures, prominent journals, and emerging topics.

The subsequent research titled “The Role of Women-led Development in a Changing Society” by Sarita and Dr. Pyla Narayan Rao discusses India’s commitment to gender equality through the concept of women-led development, particularly highlighted during its presidency of the G20. This shift emphasizes empowering women not just as beneficiaries but as leaders driving economic, social, and political progress. It underscores the evolving landscape of gender equality efforts, showcasing India’s strategic focus on integrating women into leadership roles for sustainable development.

The seventh paper titled “An Empirical Investigation of Millennials’ Perception Towards Rewards in the IT Sector” by Deepanshi Sharma and Dr. Sulochna Syal explores how millennials working in the IT industry perceive rewards, focusing on demographic factors such as gender, age, income, and job level. The study reveals significant variations in preferences for monetary and non-monetary benefits across different demographic groups. This research contributes valuable insights for HR professionals aiming to optimize reward strategies in the dynamic IT sector.

The eighth research paper, titled “An Empirical Study of Work-Life Balance Among Women Employees in the IT Sector,” by Dr. Asha investigates the factors critical to achieving work-life balance (WLB) among women in the IT sector. Using exploratory factor analysis, the study identifies key factors like satisfaction and rewards, flexible work schedules, and work-life integration and policies as significant contributors to WLB.

The next paper, titled “Diving into the Data Stream: A Bibliometric Analysis of Digital Finance Literature and Involvement of Corporate Governance Using Systematic Literature Review,” authored by Kapil Soni, Geetanjali, Dr. Akanchha Singh, Dr. Lata Suresh, and Dr. Sunil Kumar Roy, explores the evolving landscape of digital finance and its intersection with corporate governance principles. Employing ‘R’ software, the study analyzes a wide array of articles to uncover trends, patterns, and key areas of focus in digital finance research.

The tenth research paper, titled “Mediating Role of Green Mindfulness on Green Transformational Leadership and Innovative Work Behavior,” authored by Dr. Luxmi Malodia, Priya Kumari Butail, and Dr. Sumit Goklaney, examines the increasing focus on “greening” in reducing industrial hazards and waste. The study investigates the relationship between green transformational leadership, green mindfulness, and employees’ innovative work behavior.

The next research of Ms. Rachna Kumari, titled “The Impact of Human Resource Management Practices on Innovative Work Behavior: A Study of Employees in the Indian IT Industry,” investigates how HRM practices influence innovative work behavior among IT sector employees. The study evaluates HRM dimensions: reward and recognition, training and development, and career management. Structural equation modelling confirms the strong relationship between effective HRM practices and enhanced employee innovation. This research offers practical insights for organizations seeking to leverage HR strategies to foster innovation and maintain competitive advantage in the dynamic IT industry landscape.

The last research paper titled “An Analysis of Farmers’ Behaviour Towards Stubble Burning and Promoting Sustainability,” authored by Dr. Sandeep Kumar, Dr. Preeti Dabas, and Dr. Sunny Kapoor, elucidates the complex factors that act in conjunction with one another to influence farmers’ decisions regarding stubble burning and management. Divided into three sections, it addresses the reasons for and against stubble burning, sources of information available to farmers, and proactive measures for sustainable practices.

In the review section, Dr. Surabhi Goyal provided a book review of “Mindset: Changing the way you think to fulfill your potential,” authored by Dr. Carol S. Dweck. This book offers a compelling argument for the power of mindset in shaping personal and professional success. It also suggests practical strategies for fostering a growth mindset and achieving long-term goals.

We extend our heartfelt gratitude to all the authors for their valuable contributions through their research articles. We also sincerely thank our Editor-in-Chief, Prof. (Dr.) Amarjeet Kaur, for her invaluable guidance in curating this issue of GUBR. Our sincere appreciation goes to Prof. (Dr.) Dinesh Kumar, Chief Patron and Vice Chancellor of Gurugram University, Gurugram, for his unwavering support in fostering research activities at the university. We believe that this edition of GUBR will provide substantial value and stimulate thought among our readers.

**Dr. Naveen Kumar**  
*Editor*

**Dr. Hawa Singh**  
**Dr. Ritu Yadav**  
*Associate Editors*





# Green Marketing Practices

## *Insights from Green Brand Equity Framework*

Kavita Singla\* and Anand Thakur\*\*

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### ABSTRACT

*Amid deteriorating environmental conditions, traditional marketing practices have evolved into sustainable practices. Need of the hour is to revamp sustainable branding strategies to thrive in the contemporary business landscape. The present study offers a comprehensive framework of Green Brand Equity (GBE) to assist marketers in re-evaluating their strategic orientation to build brand equity and effectively navigate the dynamic realm of sustainable business practices. Based on exploratory qualitative design, past studies have been synthesized to unravel the antecedents and outcomes of GBE. The study posits that GBE elements (green brand association, green brand satisfaction, green brand loyalty, green brand trust, green brand awareness, green brand image, green perceived quality and green brand attitude) are the prominent dimensions influencing the GBE which further drive Environmentally Responsible Purchase Intention (ERPI) and green word of mouth. The study may provide useful insights to guide marketers in strategically enhancing their brand equity and fostering ERPI.*

**Keywords:** Green Brand Equity, Green Brand Loyalty, Green Brand Image, Green Brand Trust, Environmentally Responsible Purchase Intention, Word of Mouth.

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### INTRODUCTION

The wave of industrialization which started in the 18th century, has intensified environmental issues especially in low- and middle-income countries (World Bank, 2023). United nation 17 Sustainable Goals at the international level and various campaigns by regulatory authorities at the national level are steadily enhancing the environmental awareness of society (Kang and Hur, 2012). Companies are expected to integrate environment-friendly activities while performing their fundamental marketing practices (Ha, 2021; Grebmer and Diefenbach, 2020). In response to widespread environmental consciousness and increased legislative obligations, marketers are undertaking various measures to reduce carbon footprints of their activities (Delafruez and Goli, 2015; Kang and Hur, 2012). In this context, role of green marketing has transpired as an effective environmental and competitive weapon (Ho et al., 2019). Since last few decades, the concept

of green marketing has gained substantial attention of researchers. Green Marketing has been defined from different perspectives. It is also known as ecological marketing, environmental marketing, organic marketing and sustainable marketing. Green marketing is defined as a holistic marketing effort in which production, promotion, distribution and disposal of the products take place with minimal negative impact on environment (Jamal et al., 2022; Bathmathan and Rajadurai, 2019). Vaitone and Skackauskiene (2019) describe green marketing as organizational engagement in strategic, tactical and operational activities which are environmentally safe. In today's cut-throat competitive market, where majority of firms are minimizing the negative impact of their business activities, differentiation can only be possible through building GBE (Górska et al., 2021; Kang and Hur, 2012; Chen, 2010).

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## LITERATURE REVIEW

Since 1990, the term Brand Equity (BE) has gained popularity among practitioners and researchers (Srinivasan et al. 2005). Brand equity plays a substantial role in building a sustainable competitive advantage (Akturan, 2018). Brand equity is defined by Aaker (1992) as “a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers”. BE has emerged as a significant indicator of marketing performance (Ambler et al., 2004; Ambler 2003; Clark 1999). Based on the beneficiaries, BE can be analyzed at consumer and firm level (Christodoulides et al., 2010). Considering the relevance of consumer behavior in formulating marketing strategies (Keller 1993), branding literature is focused on Consumer-Based Brand Equity (CBBE) (Sharma et al., 2020; Davari and Strutton, 2014; Chen, 2010). In the words of Keller (1993), CBBE can be described as “differential effect of brand knowledge on consumer response to the marketing of the brand.” Favorable consumers’ response towards branded products create positive brand value (Yoo and Donthu, 2000; Christodoulides et al., 2010). It encourages the consumers’ purchase intention (Moreira et al., 2017) as higher BE is linked with quality perception that drives the emotional attachment of customers towards a particular brand (Atulkar, 2020). Brand equity along with financial advantages generates non-financial benefits in the form of empowered competitive advantage, elevated bargaining power over suppliers, positive public image and effective asset evaluation (Ha, 2021; Kotler and Armstrong, 2010).

Association of brand equity with the green aspect originates the Green Brand Equity (Bekk et al., 2016). The concept of Green Brand Equity (GBE) was first coined by Chen (2010). Dinh et al. (2023) defined GBE as conceptions and impressions of the brand in the consumer mind in context of environmental concerns. Whereas, Li et al. (2019) shed light on interaction-based GBE from the perspective of relationship interaction. A number of scholarly works have attempted to explore the determinants of BE (Ha, 2021; Bekk, 2016; Ng et al., 2014; Chen, 2010). Five interrelated and mutually influenced dimensions have been proposed by Aaker (1992, 1998) consisting of

brand loyalty, brand associations, brand awareness, perceived quality, and market behavior. Further, Keller (1993, 2008) elaborates on the brand equity chain which indicates the hierarchy among these dimensions. Author delineates that brand awareness will determine the brand association, which in turn affect the perceived quality. Perceived quality will strengthen the brand loyalty and market behavior. Strategic importance of brand communication elevates the role of brand association (Chen et al., 2020). Information store in the mind of consumers about a particular brand either positive or negative measures brand association (Sasmita and Suki, 2015). In the green context, Chen and Chang (2016) defined Green Brand Association (GBA) as the extent to which consumers know and feel connection with green brands. Perceived quality is the consumers’ judgement about the superiority of goods or services delivered as compared to the competitors (Zeithaml, 1988).

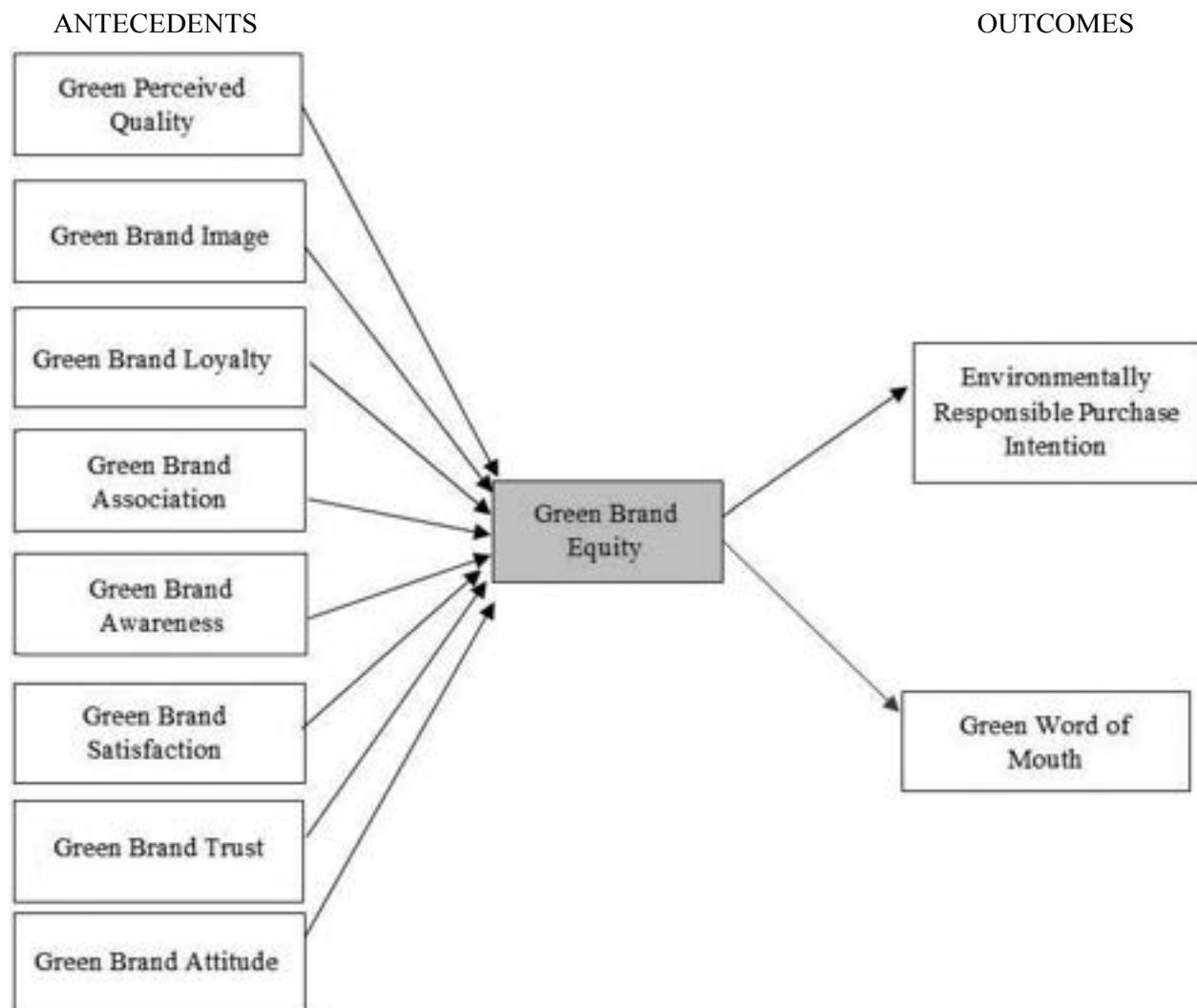
Keller (2009) described brand awareness as consumers’ ability to identify or recall a particular brand. Brand awareness is the precondition for building BE (Akturan, 2018) which influences the consumers’ decision-making process (Langaro et al., 2018; Keller, 1993). Pappu et al. (2005) suggested that when consumer perspective is considered, market behavior play less significant role in determining BE. Ha (2021) in order to maximize the GBE, integrates consumer values with brand knowledge and brand relationships. Author reveals that consumers’ attitude towards green products affects Green Brand Image (GBI), Green Brand Trust and Green Brand Satisfaction (GBS) which further drive the GBE (Chen, 2010). Chen (2010) examine the role of green brand image, green trust and green satisfaction in building GBE. Bekk et al., (2016) advocate that positive relationship between GBI and GBE is mediated by GBS and GBT. Further, brand attitude and positive word of mouth are hypothesized as consequences of GBE. Ng et al. (2014) concluded that in order to achieve high GBE, companies should focus on enhancing Green Perceived Quality (GPQ) and GBI. Moreover, Kang and Hur (2012) reveal the catalytic impact of GBS, GBT, Green Brand Loyalty (GBL) and Green Affect on building GBE. Recent study conducted by Valino et al. (2021) proposes green brand emotion as a novel dimension of GBE. Study asserted the fact that brand equity is reflected in traditional

as well as new dimension. Emotional branding is described as establishment of holistic emotional connection or experience where brand goes beyond mere benefit-based satisfaction to forms long-term relationship between brand and consumers (Morrison and Crane, 2007). Literature evident the relationship between emotion and brand in different ways (Abosag et al., 2012; Pinar et al., 2014; Christodoulides et al., 2010; So et al., 2013). Embracing brand emotion as an integral dimension can measure the GBE in a comprehensive manner (Valino et al., 2021).

### Research Gap

Past studies emphasize on conventional BE constructs including brand perceived quality, brand awareness and brand credibility (Yoo et al. 2000; Delgado and Munuera 2005; Mao and Zhang, 2013; Davari

and Strutton, 2014; Christodoulides, 2010). But a few studies have explored the association of brand constructs with green aspect (Ha, 2021; Ho et al., 2019; Delafrooz and Goli, 2015; Butt et al., 2017; Li et al., 2019; Valino et al., 2021; Ng et al. 2014; Kang and Hur 2012; Chen and Chang 2012; Chen 2010). Ng et al. (2014) have integrated the conventional and green branding construct to determine the GBE. However, consequences of GBE are unexplored. Bekk et al. (2016) explored GBI, GBS, and GBT as antecedents and Green Brand Attitude (GBAtt) and positive WoM as consequences of GBE. But a holistic framework exploring the conventional and green brand construct as antecedents and consequences of GBE is still missing. This study is an attempt to fill this gap by providing an integrated framework (Figure 1) portraying the antecedents and outcomes of GBE.



**Figure 1:** Conceptual Framework on Green Brand Equity

## DISCUSSION

### Antecedents of Green Brand Equity

#### *Green Brand Image*

Green brand image (GBI) is most widely used construct to determine GBE (Warsewicz et al., 2021). Building positive brand image and reputation in consumers' mind is prerequisite in today's competitive market (Javed et al., 2020; Fatma et al., 2015). Chen (2010) describes the GBI as the brand's perceptions linked to environmental concerns in consumer's mind (Chen, 2010) which induces their willingness to pay more for green products (Ho et al., 2019). Association of GBI with GBE is well established by Chen (2010), Bekk et al. (2016), Butt et al. (2017), Valino et al. (2021). Brand image generate brand trust and enhance brand satisfaction (Dangelico and Vocalelli, 2017). Higher self-expressive benefits and brand image lead to high level of GBE and purchase intention toward the brand (Ho et al., 2019; Baek et al., 2010). Thus, holistic sensory impression towards environment created through GBI affects the consumers' memory and generate GBE (Tsai et al., 2020).

#### *Green Brand Loyalty*

Brand loyalty generates long term benefits for the organization (Chi et al., 2009). In cut throat competition between several brands, survival of business is largely determined by brand loyalty (Jones and Sasser, 1995). GBL is the sustainable commitment or assurance of the consumers to repeatedly purchase green product or service (Kang and Hur, 2012; Ho et al., 2019). GBL has been identified as core construct of GBE (Aaker, 1998). Genuine utilitarian and self-expressive benefits have been endorsed by companies to enhance GBL (Li et al., 2019). When loyalty is associated with the brand, it strengthens the consumers' resistance to buy any other brands (Sharma, 2020). High GBL leads to high perceived value of customers towards GBE (Ho et al., 2019).

#### *Green Brand Association*

In the green context, Chen and Chang (2016) defined brand associations as the extent to which consumers know and feel connection with green brands. Three varied forms of brand association recognised by Aaker (1998) include Brand as a product, Brand as

an organization, and Brand as a personality. Brand awareness among consumers develops favourable brand association in the consumers' mind (Edward, 2015) which leads to positive brand equity (Christodoulides, 2010; Keller, 2008). GBA significantly induces the purchase intention (Chen et al., 2020). Valino et al. (2021) assert that GBA strengthens the GBE of organic Agri food. Stronger GBA not only diminishes the consumer scepticism about brands' green actions but also strengthen the GBE (Valino et al., 2021).

#### *Green Brand Awareness*

Keller (2009) described consumers' ability to recognise and recall a particular brand as two basic components of brand awareness. Consumers' capability to identify a brand, based on the intangible attributes, reflects brand recognition whereas brand recall is the consumers' ability link a particular brand to the specific product class (Kwun and Oh, 2007). Green Brand Awareness (GBAW) is significant for building brand equity (Akturan, 2018) which influence the consumers' decision-making process (Langaro et al., 2018; Keller, 1993). Consumers' perceived risk may arise uncertainty about products. But GBAW by reducing the information cost and enhancing the brand familiarity positively impact the purchase decision and develops brand value (Chen and Chang, 2013; Aaker, 1998; Erdem and Swait, 1998; Hoyer and Brown, 1990). Noorlitaria et al. (2020) highlighted the significance of GBAW in establishing the positive impression of brand in the consumers' mind. Brand awareness plays a major role in determining brand association thus impacts the brand equity (Keller, 2009). Chen and Chang (2013) asserted the relevance of GBAW in reducing the green perceived risk. Effective information channel, favourable product and service knowledge may help the companies to enhance GBAW the which further develop the GBE (Chen and Chang, 2013).

#### *Green Brand Satisfaction*

Brand satisfaction may be defined as level of contentment during post consumption in response to the quality or brand experience (Martenson, 2007). In green context, green satisfaction is "a pleasurable level of consumption-related fulfilment to satisfy a customer's environmental desires, sustainable expectations, and green needs" (Javed et al., 2020).



Brand Evaluation by consumers is reflected in GBT and GBS which are subject to varied based on consumers' perception and experience (Mourad and Ahmed, 2012; Khandelwal et al., 2019). Based on brand experience, Influencer of GBS on the formation of GBE is well evident in literature (Ng et al., 2014; Li et al., 2019). Kang and Hur (2012) opined that GBS builds GBL, further positive evolution of brand lead to development of brand relationship (Tsai et al., 2020) and GBE (Ha, 2021; Bekk et al., 2016; Khandelwal et al., 2019; Chen, 2009).

### ***Green Brand Trust***

Green Brand Trust (GBT) is considered as one of the novel determinants of GBE (Ng et al., 2014; Warsewicz et al., 2021). Consumers' perception towards the reliability, consistency and honesty of brand is referred as brand trust (Doney, 1997). In case of green brand, consumers these days, are highly sceptical due to prevalent practices of greenwashing (Singla et al., 2024; Thakur et al., 2023; Chen and Chang, 2013). Developing GBT is pre-requisite to build GBE (Chen, 2010; Butt et al., 2017; Kang and Hur, 2012; Li et al., 2019). Positive green image strengthens the green satisfaction which further develop GBT. GBE is positively influenced by GBT (Chen, 2010; Bekk et al., 2016).

### ***Green Perceived Quality***

Perceived quality is the consumers' judgement about the superiority of goods or services delivered as compared to the competitors (Zeithaml, 1988) and it influences customer's purchasing decision process (Garretson and Clow, 1999). Ho et al. (2019) considering the definition of perceived quality stated by Sweeney and Soutar (2001), explained GPQ as functional value. Earlier, inferior quality of green product was the prominent reason because of which consumers develop the tendency to reject such products (Ottman et al. 2006). Stiff competition has forced the companies to provide better quality green products which have changed the consumers' misconception towards green brands (Ottman et al. 2006). Consumers' preference for a specific brand depends on the GPQ (Delafrroz and Goli, 2015). GPQ not only ensures financial gain in the form of consumers acceptance with high prices but enhances reputation and positive image of

the company (Delafrroz and Goli, 2015). High GPQ minimises the consumers' perceived risk (Li et al., 2019) thus positively influences GBE (Ho et al., 2019; Yoo and Donthu, 1999; Aaker, 1992; Garretson and Clow, 1999; Sweeney and Soutar, 2001).

### ***Green Brand Attitude***

There is strong evidence of association between brand attitude and brand equity (Yoo and Donthu 2001). Literature suggests bidirectional relationship between these two constructs (Warsewicz et al., 2021). Bekk et al. (2016) asserted the GBE as predictor of GBAtt. Li et al. (2019) opined that GBE is conducive to determine consumers' attitude towards specific brand. Cognitive, affective and attitudinal factors are stimulated by GBE (Li et al., 2019; Yasin et al. 2007). However, overall effect size of GBE on attitude was found to be less, this implies that GBE is not the only factor determining GBAtt. Previous studies are mainly concentrated on measuring the impact of GBAtt on GBE. Ha et al. (2021) validate that attitude towards green products influences the brand association further strengthen GBE. Thus, the consumer attitude influences brand equity to a great extent.

### ***Outcomes of GBE***

#### ***Environmentally Responsible Purchase Intention***

Recent studies have explored ERPI in various context (Fernández et al., 2023; Salirrosas et al., 2023; Kumar et al., 2021; Afroz, 2015; Ramayah et al, 2010). Vision of sustainable society may be achieved by promoting ERPI (Correia et al., 2023; Szlachciuk et al., 2022; Si et al., 2022). Transformation in consumer attitude lead to induced green purchase intention (Kumar et al., 2021). GBE facilitates to comprehend the consumer attitude towards particular brand and stimulate ERPI (Li et al., 2019). GBE is an effective indicator of ERPI (Akturan, 2018). Improved brand reputation and credibility can be ensured by brand associations which influences the green purchasing decisions of customers (Akturan, 2018; Chen and Chang, 2016). Moreover, as consumers are always inclined towards high quality brands, GPQ drives their purchase intention (Gil and Jacob, 2018). As companies are increasingly adopting green endeavors, consumer loyalty towards sustainable behavior is substantial (Balmer et al., 2009). Consumer loyalty towards green behavior has a positive impact

on their purchase intention (Chen et al., 2020; Chen, 2010). High degree of commitment to buy green product is witnessed among those consumers who are emotionally involved with them (Valino et al., 2021). Brand association is another important dimension determining the ERPI. Brand association differentiates the brand from those of competitor and establishes the reputation in consumers' mind. Thus, by influencing the consumers' perception, GBA induces the ERPI (Chen et al., 2020).

### **Green Word of Mouth**

In addition to purchase intention, consumers' behaviour is also determined by word of mouth (Yoshida and Gordon, 2012). Word of mouth Communication is more Credible and persuasive technique as compare to other advertising tools (Godes and Mayzlin 2004; Herr et al. 1991). Word of mouth is highly affected by GBE (Bekk et al., 2016; Kozinets et al. 2010). Jr et al. (2000) and Ho et al., (2019) establish a significant relationship between brand equity and WoM. Chen et al. (2013) found the positive impact of GBE dimensions (GBS and GPQ) on green word of mouth. Thus, green brand equity is prominent determinant of green word of mouth.

### **IMPLICATIONS AND SUGGESTIONS**

Several implications can be derived from the research. GPQ determines GBE; therefore, companies must improve the quality of products to differentiate their brand in the market. High quality tangible and intangible attributes may increase the brand credibility and assure consumer confidence in that specific brand. Maintaining quality and incorporating green innovative idea may enhance GBS. Building GBT and GBI are another dimensions on which financial and intellectual investment are required. Further, to form positive brand attitude, it is imperative to enhance consumers' knowledge about companies' ecological practices. For this, marketers should disseminate genuine and authentic green information along with disclosing the environmental certification. Companies may participate and contribute to promote green campaign at national and international level. This will enhance the green brand awareness and help in establishing brand relationship with consumers. Align the features with the communication claim is crucial to maintain

and improve GBT and GBI and GBAtt. Despite high environmental consciousness and awareness, consumers' behaviour demonstrates a gap between values and behaviours. Fulfilling this gap is mandatory to develop brand satisfaction and loyalty. Integration of consumers' psychological impression and green brand attributes is crucial to establish the self-congruity. For this, marketer may explore the data of consumers' lifestyle to better align the brand personality with that of consumers. When conventional products and green product provide similar value, customer prefers environment friendly products over others. To generate substantial GBE, functional performance of green products must not be compromised. This will help the companies to inculcate ERPI and develop brand loyalty among consumers. Lastly, strategic implementation of authentic green practices may help the marketers to enhance brand affection and build stronger GBE.

### **CONCLUSION**

Despite tremendous efforts, companies are falling behind to strengthen their green brand equity. Need of the hour is to revisit their underlying process to build the brand equity in green context. By proposing the comprehensive framework, the present study integrates the conventional and modern green dimensions of brand equity which assist the marketers to strategically build strong GBE.

Future research may validate the proposed framework based on empirical data. Study is predominantly focused on brand related attributes. Other constructs for example, consumers personal values, personality traits, green marketing, role of social media marketing activities which directly influence the GBE may also be explored. Qualitative research design may also be adopted to delving into the roots of various stakeholders' perspective towards GBE.

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# Workforce Agility during Pandemic Situation

## *A Systematic Literature Review and Bibliometric Analysis*

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### ABSTRACT

*Transformational technologies and unforeseen circumstances like the COVID-19 pandemic have created numerous challenges for every sector. Therefore, every organization needs an adaptive workforce that helps organizations to readily adapt to changes and confront the problems. This study uses bibliometric analysis to explore the past development and scope of future research on the concept “Workforce agility.” The papers were taken from the Scopus database, which contained 40 articles from 2018 to 2022. The present paper used VOSviewer software and a biblioshiny package for bibliometric analysis. Bibliometric techniques like Three-Field Plot, Keywords Analysis, Co-occurrence of Keywords, Thematic map, and Country Collaboration Map were used in this study. This research study shows a network map of the countries, keywords, and author’s connections and collaborations and also displays the strategic diagram of workforce agility, which reveals that enterprise social media, work expertise, employee agility, and adaptability are the most emerging trends in the workforce agility field. After examining the literature, this paper found that workforce agility has not yet grown to the extent that it should have been as such we consider it in the development stage.*

**Keywords:** Agility, Employee, Workforce Agility, Bibliometric & COVID-19.

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### INTRODUCTION

We have experienced many workplace changes due to the turbulent business environment that organizations are currently facing. The business environment is impacted directly or indirectly by several factors, including competition, new technologies, and economic uncertainty. The importance of workforce agility and resilience was extensively discussed during the COVID-19 crisis in terms of managing unexpected change, and encountering difficulties (Childress, 2020). Agility is the capacity to identify areas for innovation, taking action on those areas, and rapidly restructuring systems to take advantage of the competitive environment (Darvishmotevali et al., 2020). Therefore, every organization needs an agile workforce that helps to face the dynamic business environment (Muduli & Pandya, 2018). An

agile workforce is not an indulgence but a necessity for every organization. During the pandemic situation, it becomes vital for every organization to adapt to changes. Workforce agility is a term used by Muduli (2013) to describe a workforce that is adaptable, well-trained, can rapidly take advantage of new opportunities. Agility also incorporates characteristics namely flexibility, adaptation, speed, collaboration, competence, etc. Agility enables businesses to adjust to market changes by fostering new capabilities, which enhances the performance of the company (Ashrafi et al., 2019). As a process of continual improvement, workforce agility requires HR functions to be flexible at all levels of involvement, both internal and external to the business (Neelam & Wiemann, 2021). They explored how information quality and innovation capacity affect organizational agility during pandemic. Workforce agility needs to be examined to gain

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theoretical and practical knowledge of competitiveness in a complex and dynamic environment. Therefore, this study was conducted to determine which countries have contributed the most, the prominent authors, and the major research themes in the workforce agility field.

## LITERATURE REVIEW

Dynamic changes in the current economy caused by unforeseeable events like the COVID-19 pandemic may endanger an organization's ability to continue operations and challenge the conventional methods of operation. An alternative in these circumstances might be a blended working arrangement (Sameer, 2022). According to a global survey of employees who worked from home during the COVID-19 crisis, agile work qualities have a favorable impact on the work-from-home success (Heidt et al., 2023). Another study discovered that the enablers that can enhance workforce agility (role flexibility, proactivity, resilience, learning agility, etc.) are related to employees' capability to adapt to changing business environment (Park & Park, 2020; Patil & Suresh, 2019). Similarly, another paper indicated that the most important enabler is "management support," and other enablers with a strong driving force are employee empowerment, rewards, and recognition (Menon & Suresh, 2021; Munteanu et al., 2020). Workforce agility was defined in another research as a set of behavioral dimensions (Petermann & Zacher, 2021) and these dimensions are learning, accepting changes, collaboration, transparency, decision-making, etc. When implementing agility transformation in the business, collaboration and information sharing are the most important factors that need to be focused (Thayyib & Khan, 2021). Employees that are curious are also more able to adapt to unfamiliar circumstances and uncertain environment, which produces more innovative and creative solutions to workplace issues (Müceldili et al., 2020; Storme et al., 2020; Franco & Landini, 2022), helpful to demonstrate superior agility performance. Another study investigated how trust in the organization could affect proactive and adaptive agility and resulted that employee trust in the company boosting the adaptive aspect of agility (Jager et al., 2022; Storme et al., 2020). Employee agility is significantly and favorably impacted by work-based learning (Hanu et al., 2023). Work-based learning is

any type of learning that takes place in the workplace that allows people to gain information, abilities, and skills to improve their work efficiency and professional growth (Billett, 2021). Additionally, research has been done on organizational learning strategies and how they relate to increasing workforce agility and the findings indicated that organizational learning can improve workforce agility (Abdelhamid & Sposato, 2019; Storme et al., 2020). Paul et al. (2020) indicated in their study that workplace spirituality is significantly related to workforce agility. Another study revealed that workforce agility can be a predictor of emotional intelligence (Varshney & Varshney, 2020).

Another study proposed a theoretical framework to explain how and why an organization with agile employees is more likely to develop creative products and establish a temporary monopoly because they are proactive in creating new products, versatile in adapting to a changing environment, and steady under pressure and ultimately become a high growth firm (Abrishamkar, 2020). Additionally, the performance of the organization was strongly correlated with workforce agility (Das et al., 2023). In order to increase the adaptability of the workforce, Sameer (2022) emphasizes the need for digitization. Another study sought to determine the innovative strategies most new businesses adopt to improve their workforce's digital awareness and capabilities as well as to create a model for ultimately transforming the workforce in the digital era (Varshney, 2020). Another study examined the effect of individual IT competency in enhancing employee agility and found that workforce agility is directly and favorably influenced by the digital competence of the field personnel (Saputra et al., 2022; Lim et al., 2021). Cai et al. (2017) investigated how Enterprise social media (ESM) usage is related to employee agility performance and discovered that ESM usage has a favorable association with employee agility (Pitafi et al., 2020; Pitafi & Ren, 2021). ESM is necessary for employee agility.

Today's transformational technologies and unforeseen circumstances like the COVID-19 pandemic have created numerous challenges for the higher education sector. In order to overcome these issues, higher education institutions all over the world must establish a competitive advantage via organizational innovation to survive (Thani et al., 2022). Furthermore, self-



development was found to have a positive impact on human resource agility. Another study suggested a framework to assist the institution's management in comprehending the existing level of workforce agility and taking remedial measures to strengthen the identified weak characteristics (Menon & Suresh, 2022).

## RESEARCH METHODOLOGY

### Scope of the Research

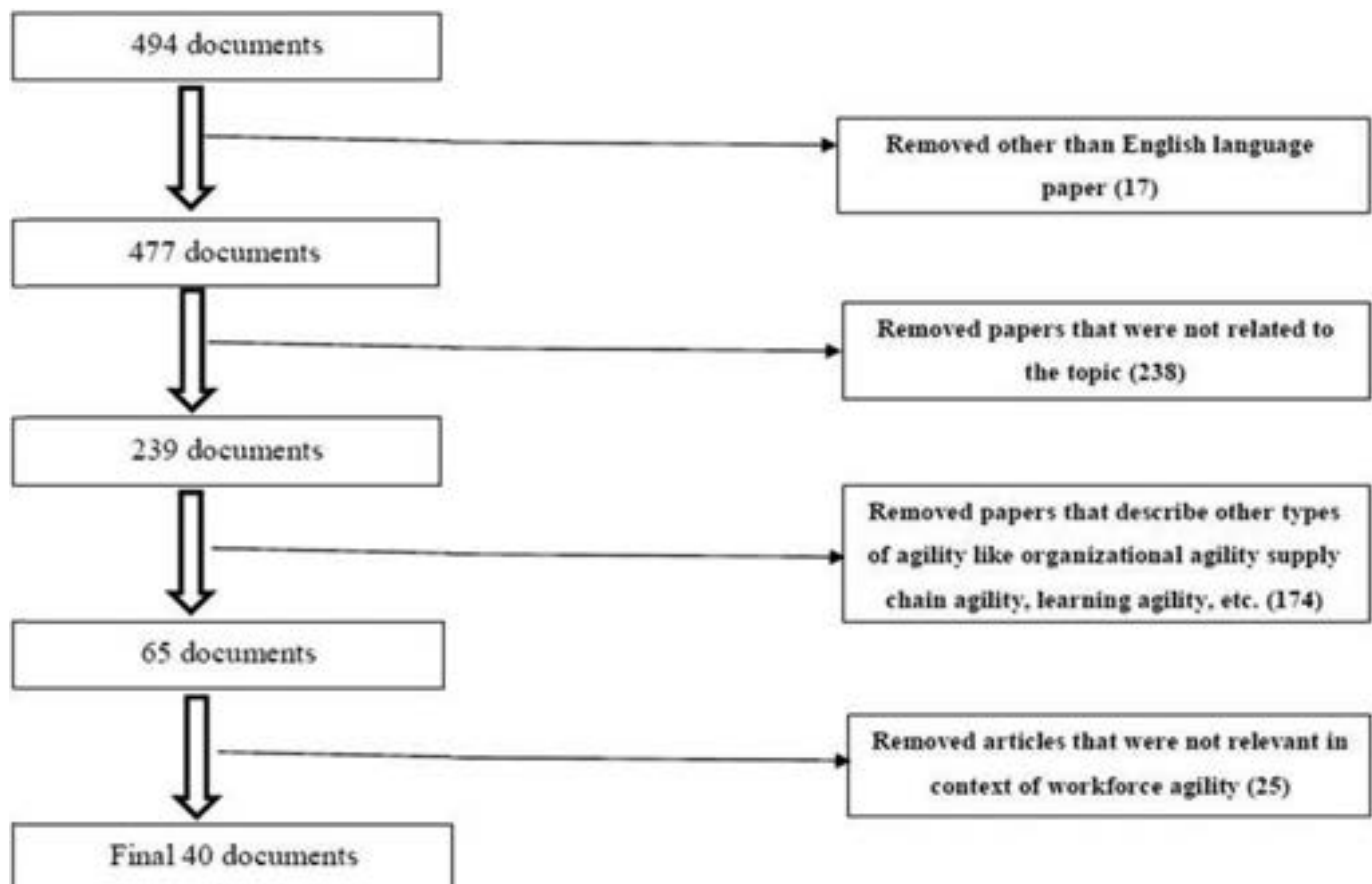
The bibliometric analysis solely focuses on workforce agility studies. We excluded related topics like supply chain agility, organizational agility, learning agility, etc., and only the studies that specifically addressed workforce agility. Additionally, research works that didn't directly address workforce agility were eliminated.

### Database Selection and Data Collection

The two main and most extensive databases for large-scale bibliometric analysis and methods of research

evaluation are WoS and Scopus (Pranckute, 2021). This study used Scopus to acquire its data since it offers the best coverage of the accessible databases (Norris & Oppenheim, 2007).

Keywords used for database search are: "Agility" OR "Agile" AND "Workforce" OR "employee". A total of 494 articles were found when the keywords mentioned above were used to search the articles, publications etc. in the titles and abstracts of Scopus publications which were published between 2018 and 2022 (inclusion criteria: articles, conference papers, book chapters, and reviews). This research was carried out on December 9th, 2022. The database is continually being updated and changed, it is essential to display the date that the documents were collected (Liu et al., 2013). This study examines the workforce agility during the last five years to investigate the challenges experienced by employees during pandemic. The search term was restricted to these study areas – *Business Management & Accounting, Social Sciences, Arts & Humanities, Econometrics & Finance and Economics*.



**Figure 1: PRISMA**

Source: Author's own computation

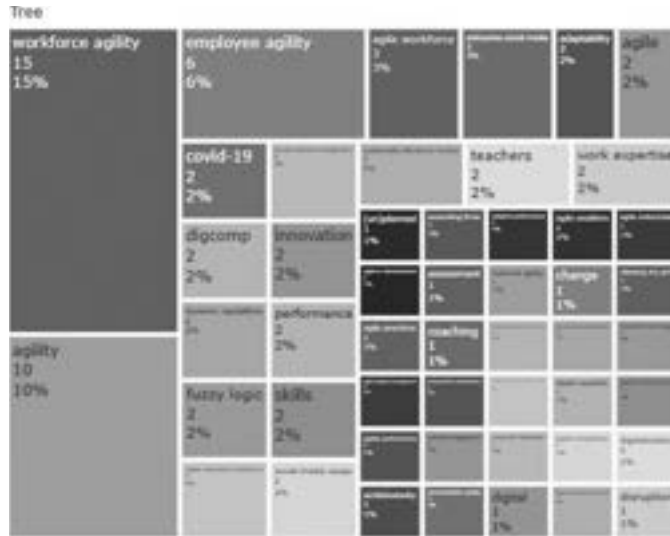
## RESULTS

*Source:* Author's own computation with help of software

*Source:* Author's own computation with help of software

Lim, Y. S., Halim, H. A., Ramayah, T, and A.H. Pitafi consistently use the keyword “workforce agility.”

The map displays the nations where at least one article about workforce agility has been published (Countries are painted in various shades of blue). The number of papers published is indicated by the blue



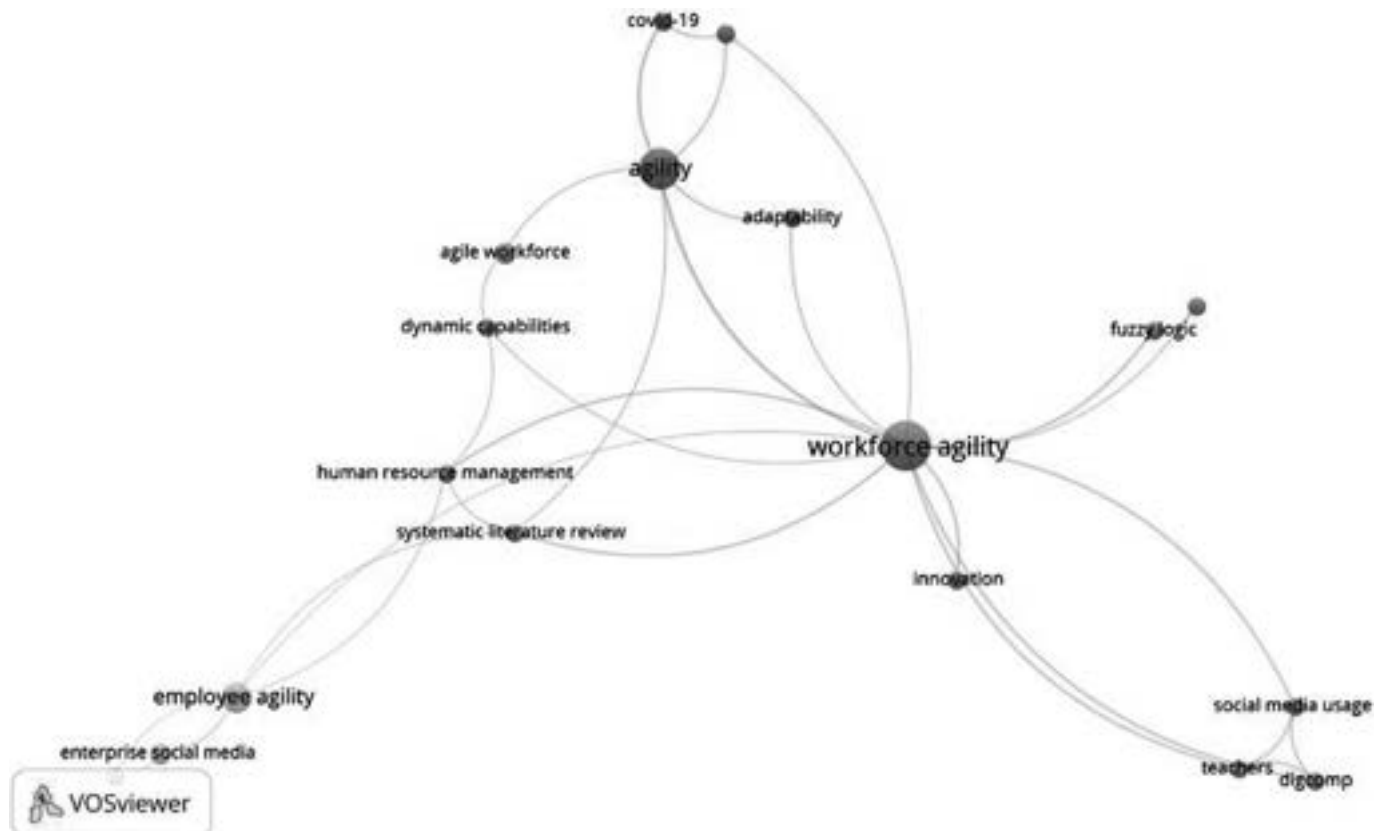
### Figure 4: Keywords Analysis

*Source:* Author's own computation with help of software

color, representing the nations that have published the most on this subject. The more collaborations there are between nations, the thicker the lines between them indicate (see Figure 3). China & Pakistan and Indonesia & Netherlands were two pairs of nations that collaborated the most.

Figure 4 depicts the keywords which are mostly used by authors in their study. This keyword analysis found that workforce agility, agility, and employee agility are the most common keywords used in many of the studies.

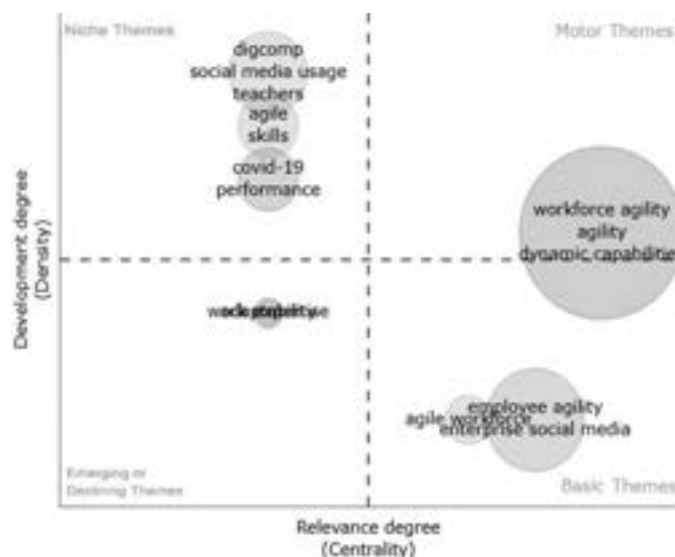
Figure 5 depicts the co-occurrence of keywords, which indicates the types of keyword combinations most commonly used by the researchers in their studies. This is made up of five clusters. Adaptability, agility, COVID-19, and performance are the four components of Cluster 1. Human resource management, dynamic capabilities, adaptable workforce, and a systematic research review are the four components of Cluster 2. Fuzzy logic, higher education institution, innovation, and workforce agility are the four components of Cluster 3. Work expertise, enterprise social media, and



**Figure 5: Co-occurrence of Keywords**

*Source:* Author's own computation with help of software

employee agility are the three components of Cluster 4. Teachers, social media usage, and digital competence are the three components of Cluster 5.



**Figure 6:** Strategic Diagram of Workforce Agility

Source: Author's own computation with help of software

Figure 6 shows the strategic diagram of workforce agility. The figure 6 highlights four important themes used to describe the keyword's present magnitude of development; the themes are motor, basic, emerging & declining and niche themes. The first theme includes the collaboration of words such as workforce agility, agility and dynamic capabilities referred to as motor theme depicting that the mentioned keywords are significant and well-developed. The second theme incorporates the words such as "employee agility", "agile workforce", and "enterprise social media" referred to as basic theme depicting that the variables mentioned are important but underdeveloped.

The lower-left quadrant shows the third theme namely emerging or declining theme which encompasses the words "work expertise" and "adaptability" the two words are merging and not clearly visible in the figure which means both are equally emerging variables. The quadrant highlights that both variables are marginally important and underdeveloped,

The fourth theme namely Niche, covers the words "digital competence", "social media usage", "teachers", "agile skills", "COVID-19", and "performance," the inclusion of these variables in this quadrant reveals that these variables are well-developed but unimportant. Thematic analysis discloses the future

research directions in the sense that the researcher can use the combination of variables which are significant but understudied for instance, combining these two variables "employee agility" with "enterprise social media."

## DISCUSSIONS

The workforce agility literature is still in developmental mode ever since it was explained by Breu et al., 2002. All industrial sectors are keenly interested in understanding the workforce agility as a concept for their respective enterprise be it business organizations or academic institutions. The present study takes forwards the works of Tessarini et al. (2021) and Salmen et al. (2021). The current bibliometric study uses bibliometrix and VOSviewer to analyse the literature on workforce agility that was published in the Scopus database from 2018 to 2022.

Paul et al. (2021) in his guidelines mentioned that as number of events can happen in a time span of 5 years therefore a literature review can be conducted thus the duration of 2018 -2022 was considered an appropriate duration for the present study. They also highlighted that the minimum number of research papers must be 40. The time period for the current study has confronted some most crucial events in the history of the world such as COVID-19 Pandemic, Ukraine-Russia war, Taliban's invasion of Afghanistan, US- China Trade war etc. which has direct or indirect impact on organizations working and its workforce.

The first section of this study shows a network map of the countries, keywords, and author's connections and collaborations. In addition, this study presents the most significant authors and countries in this field. The majority of the publications in this field of study were authored in Malaysia and India, but when we talk about country collaboration, China and Pakistan, as well as Indonesia and the Netherlands, are two of the most collaborative nations for the concept of workforce agility. According to the findings, Lim Y. S., Halim, H. A., Ramayah, T, and A.H. Pitafi were the most prominent authors, who published research papers in the area of workforce agility. "Agility" and "workforce agility" are the two keywords which are researched by Germany and India the most.

The second section of this study looked at the most common keywords which were found to be Workforce agility, agility, and employee agility. It also highlighted the keyword co-occurrence, which shows the types of keyword combinations that researchers most regularly used in their studies, five clusters were revealed.

Third section displayed the strategic diagram of workforce agility, which reveals that enterprise social media, employee agility, work expertise, and adaptability are the most emerging trends in workforce agility. Agility among employees can be improved with the use of enterprise social media (Cai et al., 2017; Pitafi et al., 2020; Pitafi & Ren, 2021). Enterprise social media is currently not widely used, thus offers future scope of research in context of employee agility.

## IMPLICATIONS

This research adds to the existing body of knowledge on workforce agility by compiling data on the most influential authors, countries, most relevant keywords, and emerging themes for workforce agility research. In addition, this analysis contributes to the workforce agility literature by defining the terms (work expertise, enterprise social media, adaptability, employee agility) that represent the main area of workforce agility research and provide future research directions. Additionally, the study discovered thematic clusters which will help researchers to have a thorough and in-depth understanding on emerging themes, secondly, it will help them in extending the literature and build a theoretical framework. Thirdly, clusters also provide a number of useful insights that will help practitioners to build workforce agility as a practical approach to the present environment thus making the results helpful for managers and practitioners by making them aware of the increasing importance of smart techniques, i.e., adopting innovations and technologies. It supports further research by providing detailed information about authors, publications, journals, and potential future study ideas.

## CONCLUSION AND FUTURE RESEARCH DIRECTIONS

As a result of our investigation, we discovered that scholars from southern and northern regions have made the largest contributions to the field of workforce agility. Since 2018 the research output has significantly

expanded for a number of crucial events that have taken place in the past five years. After examining the literature, this paper found that workforce agility has not yet grown to the extent that it should have been. However, it is still in the development stage. Overall, the number of studies that might be done in this area demonstrates the range of strategies that businesses can use to foster agility among employees while also enhancing the overall position of the business. The study's main limitation was that the data were collected from a single database Scopus. Since most bibliometric analyses used a single dataset to avoid article duplication. The exclusion of databases such as Web of Science, Pubmed, and others implies the exclusion of some important research publications that could be useful to this research area. As a result, using only the Scopus database limits the study's findings. As a result, additional research may be done using other databases in this area of study.

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# Analyzing Symmetry and Disparities in Higher Education Enrollment Patterns in India

## *An Exploratory Study*

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### ABSTRACT

*This exploratory study examines the enrolment patterns in higher education across India, focusing on the symmetry and disparities based on socio-economic, gender, regional, and caste dimensions. Using secondary data, the paper analyses trends, underlying factors, and policy implications to identify areas of inequity and suggest measures for improving access and inclusivity in higher education. The analysis with the help of the above tables takes into consideration regional distribution, national gross enrollment ratio based on gender and social categories, gender distribution amongst types of Universities. The macro data of Indian Higher Education presents a picture that higher education is not equally accessible to all. There are regional disparities along with disparities on the basis of gender and social categories in the country. Despite this, the South zone has a much higher GER% as compared to the zones because of the major concentration of State Public Universities in this zone.*

**Keywords:** Higher Education, Enrollment Pattern, Gross Enrollment Ratio, Universities.

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### INTRODUCTION

Over the past several decades, India's higher education system has experienced substantial expansion in terms of both the number of institutions and students. But even with this growth, there are still wide differences in enrolment according to caste, location, gender, and socioeconomic class. In order to provide policymakers with the knowledge they need to successfully address these difficulties, this study attempts to investigate these discrepancies and the variables that contribute to them. The growth of higher education in India has been remarkable, with the number of universities and colleges increasing significantly since independence (Vargesse and Malik, 2015; Arya and Dadwal, 2022). Various government initiatives, such as the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) and the establishment of new institutions, have aimed at improving access to higher education.

According to the AISHE (MOE) report 2022,<sup>1</sup> there are 1168 universities and 45473 colleges in India. Out of 1168 Universities, there are 53 Central Universities, 423 State Universities, 392 Private Universities, 124 Deemed Universities, 17 Open Universities, 153 Institutes of National Importance established under Act of Parliament and 6 Institutes established under the State Legislature Act (Table 1a). It shows that number of Universities is largely dominated by State Public Universities (36.21%) and State Private Universities (33.56%).

The total number of enrollment in higher education is 43.3 million with just 9.65 million enrolled in University or University-level institutions (Table 1a) and the majority of 31.45 million enrolled in constituent and affiliated colleges (Table 1b). From Figure 1,

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<sup>1</sup> Government of India (2022) All India Survey on Higher Education Report 2022. Ministry of Human Resource Development, p.38.

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**Table 1a:** Enrollment in Universities in 2022

Type of University	Number of Universities	Enrollment in numbers
Central University	53	701265
Central Open University	1	1260841
Institution of National Importance	153	325732
State Public University	423	2980508
Institution under State Legislature Act	6	7092
State Open University	16	1800003
State Private University	392	1616265
Deemed University, Government	33	30819
Deemed University, Government Aided	10	59936
Deemed University, Private	81	852651
Total	1168	9638345

Source: MOE report (All India Survey on Higher Education 2022) from www. MoE.gov.in

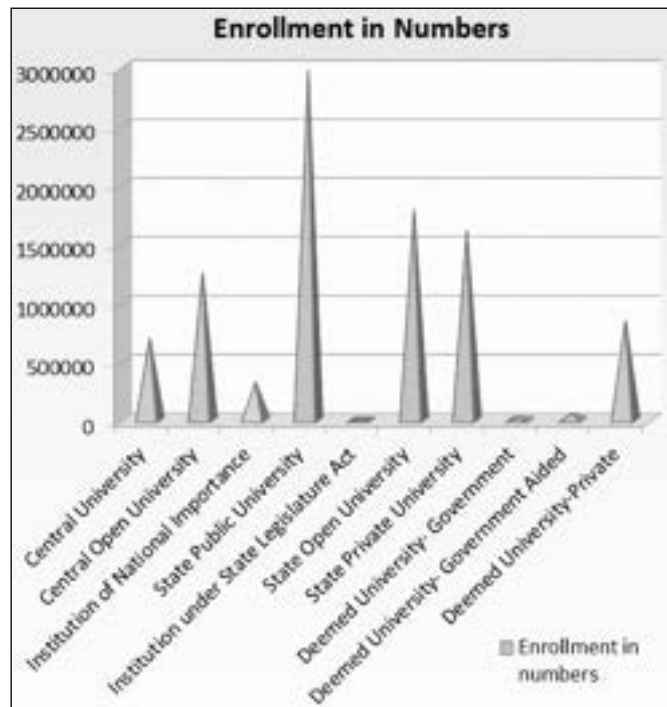
**Table 1b:** Enrollment in Affiliated and Constituent Colleges in 2022

Type of University	Enrollment in Affiliated and Constituent Colleges (in numbers)
Central University	906744
State Public University	30552348
Total	31459092

Source: MOE report (All India Survey on Higher Education 2022) from www.MoE.gov.in

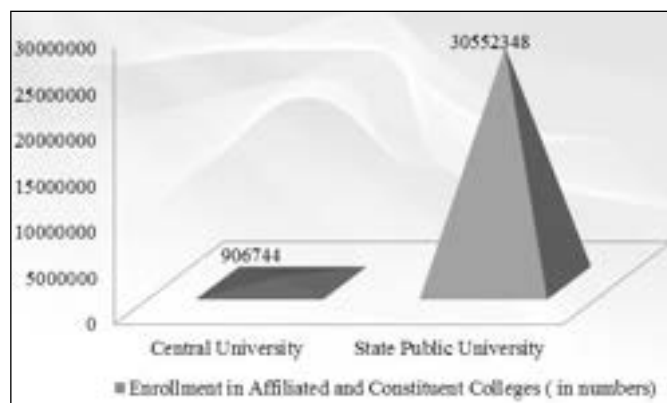
it is evident that State Public Universities has the highest number of enrollments (2.9 million) amongst all Universities followed by State Open Universities (1.8 million), State Private Universities (1.6 million) and Central Open University (1.2 million). Further, enrollment through distance mode constitutes 10.4% of the total enrollment in higher education facilitated through 17 open universities and 119 dual-mode universities.<sup>2</sup> This shows that distance education has a significant role in increasing enrollments in higher education in India.

<sup>2</sup> Government of India (2022), All India Survey on Higher Education Report 2022. Ministry of Human Resource Development, p. 8.

**Figure 1:** Enrollment Levels in Different Types of Universities in India in 2022

Source: Authors (using Table 1a)

Figure 2 shows that enrollment in colleges is largely (97.3%) contributed through affiliated and constituent colleges of State Public Universities. From Figure 1 and Figure 2, it is evident that State Public Universities and their associated colleges are the vehicles of higher education in the country.

**Figure 2:** Enrollment Levels in Affiliated and Constituent Colleges in India in 2022

Source: Researcher (using Table 1b)

Table 2 highlights the regional asymmetry in terms of types of Universities and regional characteristics based on State-wise and Type-wise number of Universities in India provided by the MOE report on “All India Survey on Higher Education 2022”.

## LITERATURE REVIEW

Studies show that one important factor influencing a person's ability to pursue higher education in India is their socioeconomic standing. There are several obstacles facing economically disadvantaged students, such as lack of resources for preparation and budgetary limitations (Agarwal, 2009, Arya et al. 2023). Gender disparities in higher education enrollment have been a longstanding issue, though recent years have seen some improvement. Das et al. (2014) show that societal norms, early marriage, and family responsibilities often hinder women's educational pursuits. There are clear regional differences, with metropolitan regions having more access to universities than rural ones (Agarwal, 2014). Higher enrollment rates are often found in states with stronger economies (Tilak, 2018).

Providing financial resources through government and/or aid-funded programs, improving physical infrastructure, providing learning materials help in delivering quality education (Kapoor and Arya, 2019; Anbalagan, 2011). Adequacy of the library, technology-aided learning mechanisms, and other infrastructure facilities available with the HEI is vital for the quality of academic programs offered (Throat and Newman, 2009; Harvey and Green, 1992; Arya et al. 2022). Studies elucidate that funds facilitated by the

government act as a backbone in facilitating additional infrastructure to increase enrollments, improve the present infrastructure of institutions, facilitating well-equipped learning resources (George, 2012; Yorke, 2001).

## RESEARCH METHODOLOGY

The study utilizes data from the All India Survey on Higher Education (AISHE), and other relevant government reports. A mixed-method approach is employed, combining quantitative analysis of enrolment data with qualitative insights from policy documents and academic literature.

## OBJECTIVE OF THE STUDY

To analyse Symmetry and Disparities in Higher Education Enrollment Patterns in India

## ANALYSIS AND DISCUSSION

Gross enrollment ratio (GER) in higher education means "total enrollment in higher education expressed as a percentage to the total population of 18–23 age group".<sup>3</sup> In 2022, 43.3 million students were enrolled for higher education and the gross enrollment ratio was 28.4% (MOE-AISHE, 2022). Table 3 presents

<sup>3</sup> Retrieved from <https://data.gov.in/keywords/gross-enrolment-ratio> as on 8th February, 2022.

**Table 2:** State-wise and Type-wise Number of Universities

S. No.	State/UTs	Central University	Central Open University	Institute of National Importance	State Public University	Institute under State Legislature Act	State Open University	State Private University	State Private Open University	Deemed University, Government	Deemed University, Government Aided	Deemed University, Private	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh	3		10	24	1		5				4	47
2	Arunachal Pradesh	1		1				6	1	1			10
3	Assam	2		5	15		1	6		1			30
4	Bihar	4		6	17	1	1	7		1			37
5	Chandigarh			1	1					1			3
6	Chhattisgarh	1		4	14		1	14					34
7	Delhi	6	1	6	9					6	1	1	30
8	Goa			2	1								3
9	Gujarat	1		9	26		1	51		1	1	1	91
10	Haryana	1		5	20			24		3		3	56
11	Himachal Pradesh	1		5	7			17					30
12	Jammu and Kashmir	2		4	9	1							16
13	Jharkhand	1		5	11			15				1	33
14	Karnataka	1		6	33		1	20		2		12	75

S. No.	State/UTs	Central University	Central Open University	Institute of National Importance	State Public University	Institute under State Legislature Act	State Open University	State Private University	State Private Open University	Deemed University, Government	Deemed University, Government Aided	Deemed University, Private	Total
15	Kerala	1		6	14		1			2		1	25
16	Laddakh				1					1			2
17	Madhya Pradesh	2		10	23		1	40		1			77
18	Maharashtra	1		7	23		1	21		7	2	12	74
19	Manipur	3		2	3			2					10
20	Meghalaya	1		2				8					11
21	Mizoram	1		1				1					3
22	Nagaland	1		1				4					6
23	Odisha	1		5	19		1	8				3	37
24	Puducherry	1		2								1	4
25	Punjab	1		6	12		1	18		1		1	40
26	Rajasthan	1		5	26	1	1	49				7	90
27	Sikkim	1		1	1			6					9
28	Tamil Nadu	2		7	21		1	3			2	26	62
29	Telangana	3		4	15	1	1	4		1		2	31
30	Tripura	1		2	1			1					5
31	Uttar Pradesh	6		11	32	1	1	31		2	3	4	91
32	Uttarakhand	1		4	10		1	19		1	1	1	38
33	West Bengal	1		8	35		1	11		1		1	58
<b>All India</b>		<b>53</b>	<b>1</b>	<b>153</b>	<b>423</b>	<b>6</b>	<b>16</b>	<b>391</b>	<b>1</b>	<b>33</b>	<b>10</b>	<b>81</b>	<b>1168</b>

Source: MOE report (All India Survey on Higher Education 2022) from [www.MoE.gov.in](http://www.MoE.gov.in)

**Table 3:** State-wise Gross Enrollment Ratio (GER %)

Name of States/Union Territories	Zone	Total Population of 18–23 Age Group	Enrollment in Higher Education	Total GER (%) 2019
Andaman & Nicobar	South India	49616	11427	23.03
Andhra Pradesh	South India	5434660	1929159	35.50
Arunachal Pradesh	East India	158815	64890	40.86
Assam	East India	3744187	678012	18.11
Bihar	Central India	11816235	2622946	22.20
Chandigarh	North India	195670	111003	56.73
Chhattisgarh	Central India	3155505	656341	20.80
Delhi	North India	2327335	1145390	49.21
Goa	West India	181661	65415	36.01
Gujarat	West India	7245353	1797662	24.81
Haryana	North India	3184565	1104532	34.68
Himachal Pradesh	North India	716818	319651	44.59
Jammu and Kashmir	North India	1275401	400423	31.40
Jharkhand	Central India	3871644	879965	22.73
Karnataka	South India	6904493	2436540	35.29
Kerala	South India	2961735	1304445	44.04
Lakshadweep	South India	7365	88	1.19
Madhya Pradesh	Central India	8973693	2800165	31.20
Maharashtra	West India	13219769	4577843	34.63

<i>Name of States/Union Territories</i>	<i>Zone</i>	<i>Total Population of 18–23 Age Group</i>	<i>Enrollment in Higher Education</i>	<i>Total GER (%) 2019</i>
Manipur	East India	327528	130388	39.81
Meghalaya	East India	336942	96453	28.63
Mizoram	East India	127774	46771	36.60
Nagaland	East India	243112	51223	21.07
Odisha	Central India	4611729	1073879	23.29
Puducherry	South India	166685	94643	56.78
Punjab	North India	3117207	858744	27.55
Rajasthan	West India	9062665	2689340	29.67
Sikkim	East India	77128	33761	43.77
Tamil Nadu	South India	6967747	3309327	47.49
Telangana	South India	3940500	1596680	40.52
Tripura	East India	430745	100551	23.34
Uttar Pradesh	North India	25075066	6973424	27.81
Uttarakhand	North India	1197583	567704	47.40
West Bengal	Central India	10867409	2722151	25.05

*Source:* Authors (compiled from data of MOE report on “All India Survey on Higher Education 2022” from [www.MoE.gov.in](http://www.MoE.gov.in))

enrollment in higher education (number and percentage) for the State and Union Territories of the country. To analyze regional disparity in the country, the researcher has attempted to compute GER (%) of five zones in India: Central, East, North, South, and West as shown in Table 4.

With the help of Table 2 and Table 3, an attempt has been made to analyze the number of HEIs and enrollment in higher education for the five most populous states of the country in the age group of 18–23. The “population in the age group of 18–23 years” is highest in Uttar Pradesh (25.07 million) followed by Maharashtra (13.22 million), Bihar (11.8 million), West Bengal (10.85 million) and Rajasthan (9.06 million) (Table 3). Uttar Pradesh attains the top position in terms of enrollment numbers in higher education (6.97 million) as well as (Table 2) in terms of number of Universities (91), but its GER is 27.8% below the national average 28.4 because its “population in the age group of 18-23 years” is very high 25.07 million which is approximately one-sixth of the national population (142 million) in the age group of 18-23. Despite being the second most populous state in the age group of 18-23(13.23 million), Maharashtra has much higher GER (34%) than the national average (28.4%) because it

has second-highest enrollment in higher education in numbers and also attains 6th position (Table 2) in terms of the number of Universities (74).

Although Rajasthan has the second highest number of Universities (90), its GER % is 29.67 % which is above the national GER% of 28.4% because of its large population (9.06 million) in the age group of 18-23 years. Bihar has the third position in terms of “population in the age group of 18-23 years” but its enrollment ratio of 22% is much below the national average of 28.4% because it has very few (37) Universities (Table 2). Similarly, West Bengal with a population of 10.85 million in the age group of 18-23 is at fourth position in terms of “population in the age group of 18-23 years” but the enrollment ratio is 25 % which is much below the national average of 28.4%.

In terms of types of Universities, there is an asymmetry in these top 5 states in terms of “population in the age group of 18-23 years” (Table 2). Uttar Pradesh has an almost equal concentration of State Public Universities (32) and State Private Universities (31) out of a total of 91 Universities in the State. While out of a total of 90 Universities in Rajasthan, there are 49 State Private Universities which is almost double the number of State Public Universities (26) in the State. In Maharashtra,

the number of State Public Universities (23) is twice as compared to the number of State Private Universities (21). Similar to Maharashtra, West Bengal and Uttar Pradesh have many more State Public Universities as compared to State Private Universities. In terms of the number of Deemed Universities wide disparities can be seen in these five states as Maharashtra has a high number of Deemed Universities (21) while Rajasthan and Uttar Pradesh has 7 and 9 respectively and Bihar and West Bengal has negligible Deemed Universities with a just one in Bihar and two in West Bengal.

Table 2 shows that the top five states in terms of the highest number of Universities are Rajasthan(90), Uttar Pradesh(91), Gujarat(91), Madhya Pradesh(77) and Karnataka(75). Goa despite having the least number of Universities(3) has GER (36%) above the national average(28.4)<sup>4</sup> because it is the smallest state in the country in terms of geographical area<sup>5</sup> and one of the least populated State in India. Goa has just one State Public University and two Institutes of National Importance and has no Central University, no Open University, no Deemed University.

For Union Territories, there is a significant difference in terms of the number of Universities in Delhi and Chandigarh. Delhi has the highest number of Universities (30) and Chandigarh has the lowest (3) and Delhi has a higher population (2.32 million) in the age group of 18-23 and higher enrollment numbers (1.14 million) as compared to Chandigarh which has a population of 0.2 million in 18-23 age group and has 0.1 million students enrolled in higher education (Table 2 and Table 3). As Delhi is more populated than Chandigarh, despite being Delhi having a significantly higher number of Universities than Chandigarh, Delhi has a GER of 49.2% which is lower than that of Chandigarh which is 56.7 (Table 3).

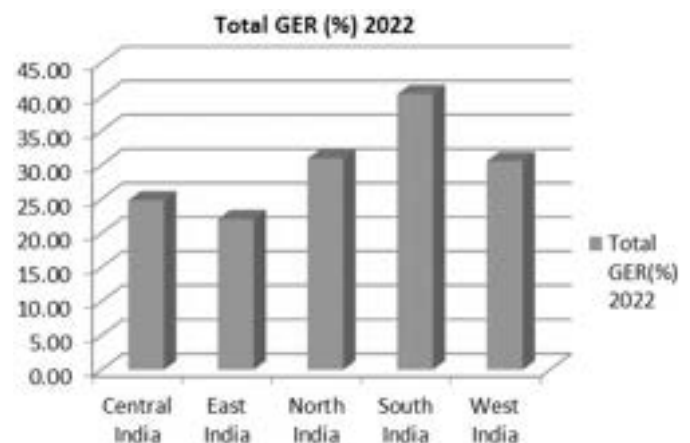
In terms of the number of State Private Universities, there is wide regional asymmetry. States in North, Central, and West zone has a major concentration of State Private Universities for instance, Rajasthan has 49 State Private Universities, Gujarat has 51 State Private Universities, Haryana has 24, Madhya Pradesh

has 40 and Uttar Pradesh has 31. While South zone has a minimum concentration of State Private Universities as many states in this zone such as Tamil Nadu(3), Kerala(0), Telangana (4), and Andhra Pradesh(3). Despite this, the South zone has a much higher GER% of 40.41% (Table 4) as compared to the national average of 28.4% because of the major concentration of State Public Universities in this zone. In terms, of number of State Public Universities in the South zone, Tamil Nadu has 21, Telangana has 15, Kerala has 14, Karnataka has 33 and Andhra Pradesh has 24 State Public Universities.

**Table 4:** Regional Disparities in Higher Education in India

Zone	Total Population of 18–23 Age Group	Enrollment in Higher Education	Total GER (%) 2019
Central India	43296215	10755447	24.84
East India	5446231	1202049	22.07
North India	37089645	11480871	30.95
South India	26432802	10682309	40.41
West India	29836934	9130260	30.60

Source: Authors (compiled from Table 3)



**Figure 3:** Graphical Representation of Zonal GER (%)

Source: Author (Refer Table 4)

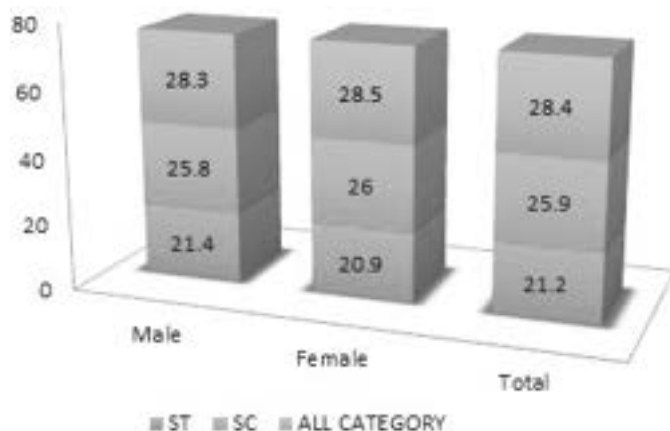
Following Goa, the majority of Eastern states have the lowest number of Universities such as Mizoram (3), Tripura (5), Nagaland (6), Sikkim (10) and Manipur (9) especially these states have no State Public Universities except one in Sikkim and one in Tripura (Table 2). Moreover, in terms of GER% (Table 3), Assam (18.7%), Tripura (23.34%), Nagaland (21.07%) have GER much below the national average (28.4%). Table 2 shows that Sikkim has the highest GER which is a sweeping 43.77% but Table 4 also depicts that the

<sup>4</sup> Government of India (2022) All India Survey on Higher Education Report 2022. Ministry of Human Resource Development, p.60, T-38.

<sup>5</sup> <https://www.india.gov.in/india-glance/profile>

GER of the East zone (22.07%) is much below the national GER (28.4%). Because Sikkim is the least populated state in the East zone with a population of 77,128 which is just 1.4% of the total population of the East zone and thus its high GER % has no impact on zonal GER. Although Central India has an enrollment of 10.7 million in higher education which is much above East zone's which is 1.2 million, Central India GER (24.84%) is just above East India GER (22.07%) because its "population in the age group of 18-23 years" is 7 times more than that of East India. East India and Central India have a lower level of higher education as compared to other regions.

Figure 3 depicts that the GER% of Higher Education in the West zone (30.60%) is just above national GER (28.4%). After the West zone, GER% of the North zone (30.95) is next close to the national GER. Moreover, the North zone achieves the first position in terms of the number of students enrolled in higher education with 11.5 million students enrolled in higher education out of the total 43.3 million students enrolled in India as a whole (Table 4). GER of Central India as well as East India is much below the national average (Figure 3). South India has the highest GER amongst all zones and its GER (40.41%) is much above the national GER (28.4%). This analysis further depicts the picture of regional asymmetry in Indian Higher Education.



**Figure 4:** GER Distributed According to Social Category and Gender

Source: Government of India (2022), All India Survey on Higher Education Report 2022. Ministry of Education, p. 46

In 2022, 43.3 million students (Table 3) were enrolled for higher education in the country and the gross enrollment ratio was 28.4%. As per the XII five-

year plan (2012-2017)<sup>6</sup>, the national GER for higher education was targeted to be reached to 30% by 2020-21. Moreover, National Education Policy 2020 has targeted the GER to be reached to 50% by 2035<sup>7</sup>. In 2022, the national level GER for females was 28.5% and for males, it was 28.3% which are at par with the national average of 28.4% (Figure 4) which infers that at the national level it is reflected that males and females have almost equal access to higher education and opportunity for pursuing higher education.

While at the national level, disadvantaged sections of society have very low GER as compared to the national average of 28.4%. At the national level, for SC and ST, it is 25.9% and 21.2% respectively (Figure 4) which infers that disadvantaged sections of the society have lower accessibility to higher education as well as the opportunity for pursuing higher education in the country. It is important to understand the level of GER at the national-level as well as state-level along with its distribution according to social category and gender. Thus, it becomes important to highlight that on the basis of data the policy makers can understand the weak areas in the respective regions. There are disparities on the basis of regional characteristics along with disparities on the basis of social categories with respect to higher education in the country.

**Table 5:** Level-wise Enrollment Amongst All HEIs

Level	Total Enrollment Amongst All HEIs (in million)	Enrollment %
Under Graduate	34.1	78.75
Post Graduate	5.21	4.04
Diploma	2.91	2.26
PG Diploma	0.3	0.23
Integrated	0.41	0.32
Ph.D.	0.21	0.16
Certificate	0.14	0.11
M.Phil.	0.05	0.04
Total	43.3	100

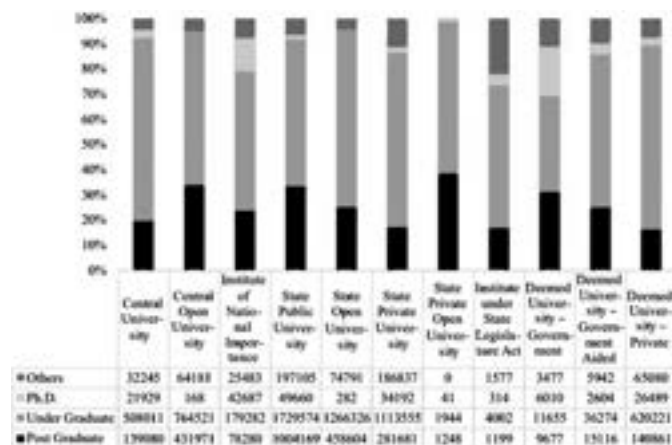
Source: MOE report<sup>8</sup>

<sup>6</sup> XII<sup>th</sup> Five Year Plan (2012-2017) Ministry of Human Resource Development, Government of India..

<sup>7</sup> Government of India (2020) National Education Policy 2020.

<sup>8</sup> Government of India (2019) All India Survey on Higher Education Report 2018-19. Ministry of Human Resource Development, p. 9, T-43. Retrieved on July 20, 2020 from [https://www.mhrd.gov.in/sites/upload\\_files/mhrd/files/statistics-new/AISHE%20Final%20Report%202018-19.pdf](https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE%20Final%20Report%202018-19.pdf).

As shown in Table 5, the highest number of students is enrolled at Under Graduate level in India. Out of the enrollment of 43.3 million students, a vast majority of 34.1 million (about 78.75%) students are enrolled in Under Graduate level programs. 5.21 million (4.04%) are enrolled at Post Graduate level, 2.91 million (2.26%) are enrolled in diploma level and 0.23 are enrolled in Ph.D. degree course. Further, at the Post Graduate level, maximum students are enrolled in Faculty of Arts and at the Under Graduate level; highest number of students are enrolled in Faculty of Arts followed by Faculty of Science and Faculty of Commerce.<sup>9</sup>

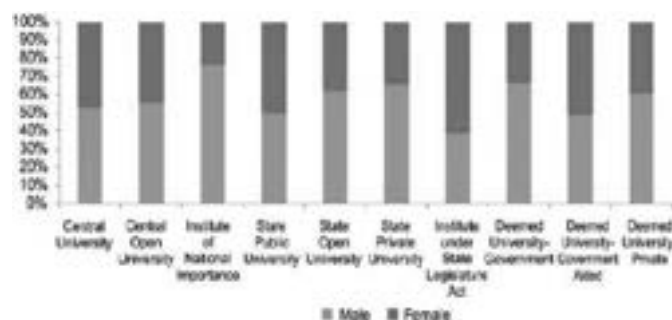


**Figure 5:** Level-wise Enrollment in Different Types of Universities in India

Source: "Government of India (2019) All India Survey on Higher Education Report 2022. Ministry of Education, p. 25.

Figure 5 shows the level-wise enrollment in different categories of Universities by the year 2022. Total 7.5 million students are enrolled in Universities at different levels. The share of the number of Ph.D. students is highest in State Public Universities. The highest share of Post Graduate level students is enrolled in State Public Universities. Under Graduate students are largely enrolled in State Public Universities, State Open University and State Public University. The majority of PG diploma students are enrolled in State Public Universities.

Figure 6 shows the gender disparities in enrollments in different types of Universities in India. Although just 5,115 students are enrolled in Institutes under the State Legislature Act, it has the highest female ratio (60%) amongst all Universities/University level



**Figure 6:** Gender Distribution in Enrollment in Different Type of Universities in India

Source: Government of India (2022) All India Survey on Higher Education Report 2022. Ministry of Education

institutions. On the other hand, the Institutes of National Importance have a male-dominated enrollment with a vast sweeping of 76% male. State Public Universities, Central Universities, and Deemed Government Aided Universities have approximately equal male to female ratio.

## CONCLUSION

This paper provides a comprehensive overview of enrollment disparities in higher education in India, drawing from multiple data sources and offering actionable insights for policymakers. The study highlights significant disparities in higher education enrollment in India based on socio-economic status, gender, region, and caste. While progress has been made, substantial challenges remain. Policymakers must adopt comprehensive strategies to ensure equitable access to higher education for all segments of society.

The analysis with the help of the above tables takes into consideration regional distribution, national gross enrollment ratio based on gender and social categories, gender distribution amongst types of Universities. The macro data of Indian Higher Education presents a picture that higher education is not equally accessible to all. There are regional disparities along with disparities on the basis of gender and social categories in the country. SCs, STs, and OBCs have lower enrollment rates compared to General category students. Affirmative action policies have improved access but have not fully bridged the gap.

Despite this, the South zone has a much higher GER% as compared to the zones because of the major

<sup>9</sup> Government of India (2019) All India Survey on Higher Education Report 2018-19. Ministry of Human Resource Development, p.9.



concentration of State Public Universities in this zone. As State Public Universities has maximum enrollments amongst all universities and has equal enrollments of males and females, it is evident that State Public Universities are the vehicles of women's higher education in the country.

## IMPLICATIONS AND FUTURE RESEARCH

Addressing disparities in higher education enrollment requires multi-faceted approaches, including financial aid, scholarships, and targeted outreach programs. Strengthening affirmative action policies and improving infrastructure in rural and underdeveloped regions are crucial. Further research is needed to explore the long-term impact of current policies and to develop new strategies for promoting inclusivity. Longitudinal studies tracking students' progress and outcomes can provide deeper insights. While progress has been made, substantial challenges remain. Policymakers must adopt comprehensive strategies to ensure equitable access to higher education for all segments of society.

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# Career Ambiguity and its Impact on Mental Wellness of MBA Graduates

Dr. Krishna Kumari\*

## ABSTRACT

*Career ambiguity after management degree becomes common concern for students in India. increasing numbers of management institutes, online courses for management diplomas has made big impact on the education of youth. Being MBA graduate students dreams of getting handsome amount of salary packages turn into tragic reality when un-employability hits. Career uncertainty highly impact moral and self esteem of students. Being unemployed the mental wellness negatively affected. Through factor analysis this study found that lack of employment skills, lack of employment opportunities in campus and low confidence to get out of campus employment leads to Career ambiguity and had significant moderate impact of mental wellness among MBA graduates.*

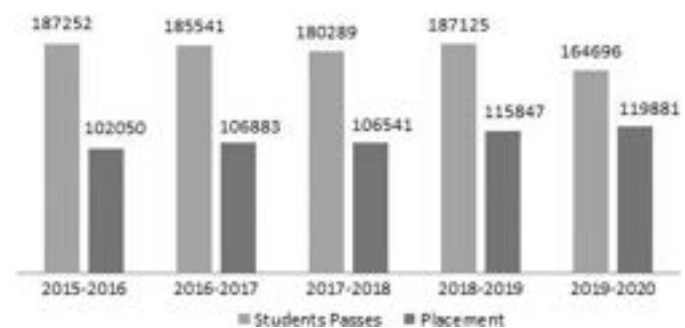
**Keywords:** Career Ambiguity, Mental Wellness, Employment, Management, Graduates, etc.

## INTRODUCTION

Choosing right career is an important decision of earlier life of students. Future life direction of a person majorly depends on his/her career choice. An individual's career not only a reflection of his personality but it is an important symbol of respect in society. This is also a reason that career decision is a major life decision in today's highly competitive world specially after professional degrees like MBA. There has been numbers of factors that affects such decision. Some of them are personal such as interest, skills, knowledge and strength. Other factors are non-personal or general factors that include demand and supply of labor market, economic condition of country, employment opportunities, government policies and sustainability of industry.

In this ever-changing world sustainability of industry becomes critical. Economic setback and cut through competition for talent becomes hot topics of career world. This not only affecting current employees but a high pressure is raised on prospect employees. Career aspirants are facing this big dilemma of career choice. In such situation lack of coordination between education sector and industry has created a loop that becomes difficult to manage. Education system is not

producing what industry is demanding. And various career advancement courses and skill development courses come into picture. Peoples are investing big amount on these degrees and diplomas courses and that further enhance the burden of career selection in the mind of individual. When people are investing their time, money and energy to get best career they expect that their career choice must provide them better return on investment and also prove future promising. When people are not able to utilize their education to get fruitful career they generally face stress, anxiety and depression. Such symptoms of mental health are more prominent among young people. Those who are in school and college are continually facing situation of



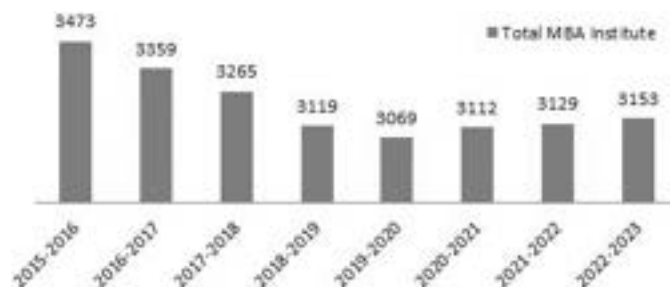
**Figure 1:** MBA Placement

Source: AICTE Dashboard

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career uncertainty. Chib and Verghese (2019) claims that even the country has sufficient numbers of MBA institute and their intake also high, but the interest of management courses declined due to lack of placement opportunities for students.

A career uncertainty is a situation where person is unable to see future of their career. In recent past Indian economy have witnessed many low and high points. Demonetization, political actions, stock market fluctuation, industry production and its contribution in GDP, poverty and cost of living are some of important issues that affecting life of common people. It has been found through study conducted on B-Schools by Associated Chambers of Commerce and Industry of India (ASSOCHAM) that from the total MBA pass out students only 7% are employable except the graduates from IIMs. Lack of proper regulation of management institutes was the leading reason for unemployed management students. A new challenge of COVID-19 has already shaken the entire country. Vaccinations issues, health issues lockdowns and loss of jobs have made people helpless to think about what to choose for future. Especially in case of education system, students and parents highly concerned for the selection of right career. After covid breakout, people are not only concerned for covid infection but they are also facing problem of mental wellness. Also the lockdown and panic situation leads high tension amongst young population around career decision. This study is an attempt to explore career Ambiguity and its effect on mental wellness amongst MBA graduates.



**Figure 2:** Total MBA Institute

Source: AICTE Dashboard

Over the Years MBA Institutes are declining their prestige due to low employment opportunities for students. Data shows that after 2019 and covid effect management institute were decreasing in numbers.

## LITERATURE REVIEW

Nair, and Ghosh (2006), Claims that Management graduate getting placement if they had good work experience which are also perceived to be better by the campus placement companies. That means that without work experience management graduate were lacking in employment skills and unable to score better job opportunities. Showry (2012) reveals that there MBAs after pass out from colleges with good score but unable to attend personality and soft skills. This conditions leads to un-employability amongst management graduates.

“MBA graduates are spending lakes of rupees on their management education, but after graduating, most of them are earning a measly 8000 to 10,000 rupees per month-that too, only when they are able to find placements” (*India Today*, 6th Feb. 2018)

Employment ambiguity and financial fluctuation followed by higher probability for the overall mental health of person and his/her families (Holland, 2016; Jonsson et al., 2020), and learning from past financial emergency situations shows that the effect of such situation were unequal to entire society, people having financial backup were more secure than other during un-employment (Godinc et al., 2019). The definitions of ambiguity described that when “details of the situation are ambiguous, complex, unpredictable, or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge or the state of knowledge in general” (Brashers, 2001, p. 478). Another definitions suggest that uncertainty refers to a lack of control mindset (Afifiet al., 2014), where people unable to see future results (Penrod, 2007), a kind of disorder (Hirsh et al., 2012), or the person’s inability to understand and describe the meaning of an event (Mishel, 1988).

Good employment opportunities with all kinds of financial and non- financial benefits, social identification and respect, financial backup are some of the important indicators that contribute human growth, satisfaction and sense of identity (Yousaf et al., 2019; Newman et al., 2018; Hobfol et al., 1990).

Emotional exhaustion and psychological strain are brought on by the unstable economic environment, which results in widespread layoffs, cutbacks, inflation,

and debt (Lim et al., 2018; Meltzer et al., 2010). People lose access to basic resources, and the impact is exacerbated for vulnerable groups, including those with mental illnesses, low-income and impoverished families, immigrants, and illegal workers (Heath et al., 2012; Hobfoll et al., 2011).

Numerous disciplinary studies have demonstrated that uncertainty is a factor linked to worsening mental health in a range of demographic groups (Phillimore & Cheung, 2021; Santacroce, 2003; Stewart & Mishel, 2000; Wu et al., 2020).

According to some research, career ambiguity is positively correlated with higher rates of mental health issues related to a range of psychiatric conditions, including anxiety disorders (Tarhani et al., 2020), post-traumatic stress disorder (PTSD), and depression (Sharkey et al., 2018).

Hence the research has two important objective to attend. What are the factors that leads to MBA graduates a situation of Career Ambiguity and does this situation of career ambiguity has any effect on mental wellness of management graduates.

## RESEARCH METHODOLOGY

Study attempt to explore the un-employability state of MBA graduates that cause career ambiguity and further how it affects the mental wellness of students. This is an explorative cum causal research. Exploratory factor analysis and regression has been used for the research purpose. A total of 560 students were approached through emails for data collection. For the empirical testing of research question various Management institute in Haryana were considered including the state universities, self finance institute, added colleges. Out of 560 questionnaires only 528 responses were found complete and used for data analysis.

## DATA ANALYSIS

First aim of this research was to explore the factors contributing the career ambiguity for MBA graduates. For this exploratory factor analysis were used. Data adequacy for applying factor analysis has been checked through KMO and Bartlett's Test. The result shows the value 0.932 and it implies data is adequate for factor analysis.

**Table 1:** KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.932
Bartlett's Test of Sphericity	Approx. Chi-Square	7914.317
	Df	153
	Sig.	.000

Source: Primary Data

Table 2 shows the rotated factors matrix. For the exploratory nature of this research study used principle components method to extract the highly contributing factor first and so on. There are four factor were identified namely Lack of employment skills, Lack of Placement Opportunity, Low self Confidence for out of campus placement

**Table 2:** Rotated Component Matrix<sup>a</sup>

	Component		
	1	2	3
LES2	.870		
LES 3	.774		
LES 1	.770		
LES 4	.732		
LES 5	.731		
LES 6	.607		
LPO11		.826	
LPO 10		.818	
LPO 9		.788	
LPO 8		.778	
LPO 12		.759	
LPO 7		.680	
LSC 14			.798
LSC 13			.775
LSC 15			.773
LSC 17			.762
LSC 18			.705
LSC 16			.657

Source: Primary Data

Table 3 shows the total percentage of variance explained by three factors for defining the career ambiguity.

The second objective of this study was to explore the impact of Career Ambiguity on mental wellness of students. For this regression analysis were used. For Mental wellness concept a single factor consist of seven statements were used. Table 4 shows the factor

loading results for each items in single factor for mental wellness.

In order to find the effect of independent variable on dependent variable multiple regression analysis was performed on SPSS. In this study the effect of Career

**Table 3:** Percentage of Variance Explained by Each Factors

S. No.	Factor Name	Percentage of Variance Explained	Cumulative percentage
1.	Lack of Employment Skills	24.201	24.201
2.	Lack of Placement Opportunities	24.199	48.400
3.	Low Self Confidante for out of campus Placement	23.170	71.571

**Table 4**

S. No.	Mental Wellness Sacle	Factor Loading
1	I have been feeling optimistic about my career	.821
2	I have been feeling relaxed	.808
3	I have been feeling Good About myself	.770
4	I have been able to make up my mind about things	.765
5	I have been thinking clearly	.735
6	I have been feeling useful	.725
7	I have been dealing with problems well	.719

Ambiguity has been checked on mental wellness of students. Table 5 shows the model summary of Regression analysis and the value of R Square is 0.59 that shows moderate level of effect of Career Ambiguity (Independent Variable) on mental wellness (Dependent Variables) of students.

ANOVA table show P value is less than 0.05 that implies a strong prediction of mental wellness of students through Career Ambiguity.

Table 7 shows the coefficient value for regression analysis. It is found through analysis that at 95% of confidence level all three factors namely Lack of Employment Skills, Lack of Placement Opportunities and Low Self confidence for out of Campus Placement were significant (0.000). Hence the result of regression analysis has clearly show the effect of Career Ambiguity on the Mental wellness of Management students.

## CONCLUSION

Research has attempted to empirically test the effect of Career Ambiguity amongst MBA students and how it impact on their mental wellness. It has been found that due to lack of employment skills amongst students, lack of career opportunities in campus and low self confidence for out of campus placement leads to Career Ambiguity. Students were unclear about their career even after completion of degree. Further it was

**Table 5:** Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.771 <sup>a</sup>	.595	.592	.63840732	.595	256.350	3	524	.000

**Table 6:** ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	313.437	3	104.479	256.350	.000 <sup>b</sup>
	Residual	213.563	524	.408		
	Total	527.000	527			

**Table 7:** Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Lack of Employment Skills	.616	.028	.616	22.145	.000
	Lack of Placement Opportunities	.256	.028	.256	9.195	.000
	Low Self Confidante for out of campus Placement	.387	.028	.387	13.932	.000

found through regression analysis that all three factors have significantly moderate level of impact on mental wellness of students. Even though those without jobs reported worse mental health outcomes in terms of overall and emotional loneliness, psychosocial well-being, quality of life, and psychological distress, it will be crucial to monitor these results over time to see if the financial assistance that the management institute implemented to address job loss will have a positive impact.

## SUGGESTIONS

- Comprehending the manner in which mental health and employment are intertwined can aid in the development of policies, protocols, and resources that are necessary for crisis situations that alter the work environments of individuals.
- Developing a better knowledge of the effects that social distancing behaviors have on mental health and wellbeing can aid in the creation of practical remedies.
- The most popular route to job reinvention is taking up an extracurricular activity and developing your knowledge, abilities, connections, and resources until you have strong enough legs to explore a new career. People take part-time classes, work pro gratis or as advisors, and work on start-up ideas on the weekends and evenings.
- Consider setbacks like a rejected proposal or a lost opportunity for advancement as opportunities for growth rather than as failures. This growing perspective gives us the fortitude to recover more intelligently. Recognize, adjust, and move on.

Prioritizing self-care is not just about feeling good momentarily. Mental health directly strengthens our decision-making skills, resilience, productivity, creativity, learning agility, communication and every other attribute that drives excellence

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# A Bibliometric Analysis of Workplace Deviant Behavior (2000–2023)

Aishwerya\* and Prof. (Dr.) Satyawan Baroda\*\*

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## ABSTRACT

**Purpose:** To perform a bibliometric evaluation of research articles on workplace deviant behavior published between 2000 and 2023. Scholars and industry professionals have recently shown interest in studying workplace deviant behavior.

**Research methodology:** In this paper, the researchers analyzed information collected from 1340 articles on this topic that were indexed in the Scopus database and the analysis has been performed using the VOS viewer 1.6.19 version. Thematic mapping has been done using Biblioshiny to track the evolution of the research field and identify the most relevant authors.

**Findings:** Author's citation and keyword co-occurrence network specify the psychological structure, publications, or journals as well as topics and keywords that have been studied in workplace deviant behavior, and what are the potential areas for future research. Countries have made significant contributions to research in workplace deviant behavior.

**Keywords:** Workplace Deviant Behavior, Counterproductive Behavior, Unethical Behavior.

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## INTRODUCTION

The workplace serves as a stage for a wide range of activities, each with a unique effect on the people involved. The majority of the time, these actions are consistent with the firm's norms. Organizational standards are a group of “*expectable behaviors, languages, concepts, and postulates that permit firms to perform at an appropriate pace*” (Coccia, 1998). A frequent issue in workplace organizations is employees' deviant workplace behavior (WDB). WDB is described as “voluntary actions that go against tangible organizational standards and endanger the existence of an organization, its members, or both” (Robinson & Bennett, 1995, p. 556). The terms “workplace deviance” (Bennett and Johnson, 2003), “unproductive behaviors” (Mangione and Quinn, 1975), and “anti-social behaviors” are just a few of the many names researchers have given to these actions (Giacolone and Greenberg, 1997). Deviant behaviors can be classified into two categories, Robinson and Bennett (1995) claim, namely interpersonal and organizational deviance and minor versus major deviance. Major

deviant behaviors cover stealing from the business, accepting kickbacks, and endangering co-workers. Minor deviant behaviors consider willfully working slowly, leaving the workplace early, and emphasizing favoritism (Robinson & Bennett, 2000). The goal is to expand the scope of organizational studies research by concentrating on both positive and negative deviant behaviors. This article also looks at some of the reasons why managers and employees participate in various deviant behaviors in the workplace, both good and negative. Additionally, some factors that explain why some organizations encourage positive deviant behavior while discouraging undesirable deviant behavior are examined. The final section will look at potential remedies for issues brought on by negative deviance in the workplace, as well as how organizations can support good deviant behaviors that will aid in achieving their objectives. The primary target of the deviation varied between two major kinds of workplace deviation, namely interpersonal and organizational deviation. (Di Stefano, Scrima, & Parry, 2019). Interpersonal deviance includes wrongdoing

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directed at specific people, such as pulling practical jokes on people, spreading rumors, robbing colleagues of their belongings, or acting rudely. The latter relates to improper conduct that organizations are subject to, including tardiness, property damage, disclosing trade secrets, fraud, and corruption. (Malik & Lenka, 2019).

“Bibliometric analysis” refers to the quantitative analysis of bibliographic information. It gives a broad overview of a research area that is categorized by articles, authors, and journals (Merigo & Yang 2017, p. 1). Large-volume documentation is analyzed in bibliometric research using mathematical and statistical methods (Diodato, 1994). According to Callon, Courtial, and Penen (1993), these investigations are typically conducted to retrace the development of different sciences and to challenge conventional beliefs. The findings enable researchers in the field being investigated to remedy any perception flaws.

## RESEARCH QUESTIONS

- **RQ 1:** What topics and keywords have been studied in workplace deviant behavior, and what are the potential areas for future research?
- **RQ 2:** Which countries have made significant contributions to research in workplace deviant behavior?
- **RQ 3:** What is the collaboration and co-authorship pattern among authors in workplace deviant behavior?

## REVIEW OF LITERATURE

Donthu et al. (2021) concluded that an outline of the bibliometric approach is given, with an emphasis on its many approaches, along with detailed instructions which can be trusted to carry out bibliometric analysis systematically and with confidence. Merrigo & Yang (2017) explored research on bibliometric analysis in operational research and management science. Finding the most significant research in this area as well as some of the most recent trends is the study's main goal. Nandiyanto et al. (2020), bibliometric analysis is effective in producing datasets that may be used to raise the caliber of research. Peterson (2002), the purpose of this study was to see whether it was possible to anticipate different forms of bad behavior using an instrument that was designed to

evaluate the ethical atmosphere of organizations. Rubab (2017) indicated that stress largely buffers the association between work-family conflict and burnout, while conflict between work and family had a strong positive impact on both burnout and workplace deviant behavior. Ghani et al. (2021) conducted a study to investigate the relationship between corporate social responsibility (CSR) and workplace deviant behavior, with job satisfaction acting as a mediator. The findings of the study concluded that both internal and external CSR are associated with a lower level of turnover intention and counterproductive work behavior. Parry et al. (2019) this study investigated the impact of organizational culture on workplace deviant behavior in the workplace. The results of this study showed that corporate culture, even in family cultures with lower levels of workplace deviant behavior, had a considerable impact on such behavior. Ashraf et al. (2023) revealed that when employees engage in workplace deviance, interpersonal conflict negatively impacts their task performance. Abbasi & Ismail (2022) showed that organizational trust had a significant positive impact on organizational citizenship behavior, while it had an opposite effect on deviant behavior within the organization. Mao et al. (2020) the researcher found that the presence of both a self-serving ethical climate and a rule-oriented ethical climate mitigated the relationship between centralized management and workplace deviant behavior. Jin et al. (2016) this research study hierarchical multiple regression analysis showed that perceived organizational support had a significant negative impact on workplace deviance. Shin et al. (2016) in their study, the researcher revealed that personality traits, specifically conscientiousness (related to impersonal factors) and agreeableness (related to interpersonal factors), had different effects on predicting workplace deviance. Duniewicz et al. (2016) this study explored the mechanism and conditional process connecting abusive supervision and workplace deviance. The findings showed that work-related negative feelings act as a mediator between abusive supervision and workplace deviance. Ferreira & Nascimento (2015) revealed that the factors of agreeableness, conscientiousness, and neuroticism were statistically significant and had associations with the three types of counterproductive work behavior.

## METHOD

In the current study, [TITLE-ABS-KEY (“workplace deviant behavior” OR “counterproductive behavior” OR “unethical behavior” OR “Aggressive behavior”)] was used as the search query to conduct a thorough search of the Elsevier Scopus database. The search was limited to the years 2000 through 2023, and 1340 documents were found consequently. It should be emphasized that the outcomes would differ if different search criteria were employed. Also, keep in mind that this method may have some gaps because the author or editorial may include keywords that have nothing to do with the articles’ subjects be emphasized that the outcomes would differ if different search criteria were employed. Also, keep in mind that this method may have some gaps because the author or editorial may include keywords that have nothing to do with the articles’ subjects.

To address the study’s three research questions— topics and keywords have been studied in workplace deviant behavior, and what are the potential areas for future research, countries with the highest contributions, and the social structure among authors—the VOS viewer science mapping framework was utilized. This framework provides a scientific mapping process, analysis of performance, and citation analysis utilizing methods like co-authorship citation and keyword co-occurrence analysis. By employing this approach, the study was able to thoroughly analyze a significant body of literature while minimizing biases and errors.

## DATA COLLECTION

This research is based on the Scopus database, which provides a comprehensive collection of peer-reviewed journals and reliable bibliographic data. Researchers conducted the data collection process in three steps. Initially, researchers focused on workplace deviant behavior as the accepted term to define the academic field. However, considering that scholars in some publications used alternative terms such as counterproductive behavior, unethical behavior, aggressive behavior, and irregular behavior interchangeably, we included them as supplementary search terms. In the second phase, a search using the combined terms “workplace deviant behavior” OR “counterproductive behavior” OR “unethical

behavior” OR “aggressive behavior” to locate relevant documents in Scopus across various fields, including title, abstract, and author keywords. This search yielded a total of 30,623 entries published between 1986 and 2023. Finally, researchers exported the search results from Scopus as files containing complete records and cited references.

## DATA CLEANING

The scholar reviewed the explored data. They verified each study’s title, abstract, key terms, and whole text. The study and discussion of workplace deviant behavior concerning management were covered in the literature. Researchers exclude articles between (1986–1999). Scholars include only English language with business management and accounting subjects. The researcher considered 1340 documents in his research.

## BIBLIOMETRIC PROCEDURES

For reviewing and analyzing vast amounts of scientific data, the bibliometric procedure is a well-liked and dependable technique. It offers insights into new areas of study within a field and enables us to explore the evolutionary tendencies within that field. The primary goal of using bibliometric tools in this study was to find the most effective way to answer the research questions. The study used bibliometric methodologies such as performance analysis and scientific mapping. The bibliometric study was carried out using VOS viewer version 1.6.13. The study evaluated the landscape of workplace deviant behavior using “authorship, citation, and keyword co-occurrence networks”. The following is an overview of the effects these networks have.

## RESULT

Main information about data	
Time span	2000:2023
Sources (Journal, Books, etc.)	530
Documents	1340
Annual growth rate %	7.25
Documents average age	7.61
Average citation per document	24.25
References	78195
Document contents	
Keywords Plus (ID)	830
Authors Key word (DE)	3270

Document type			
Article	1038	Editorial	5
Books	20	Erratum	6
Book chapter	136	Letter	1
Conference Paper	60	Note	3
conference Review	1	Review	70

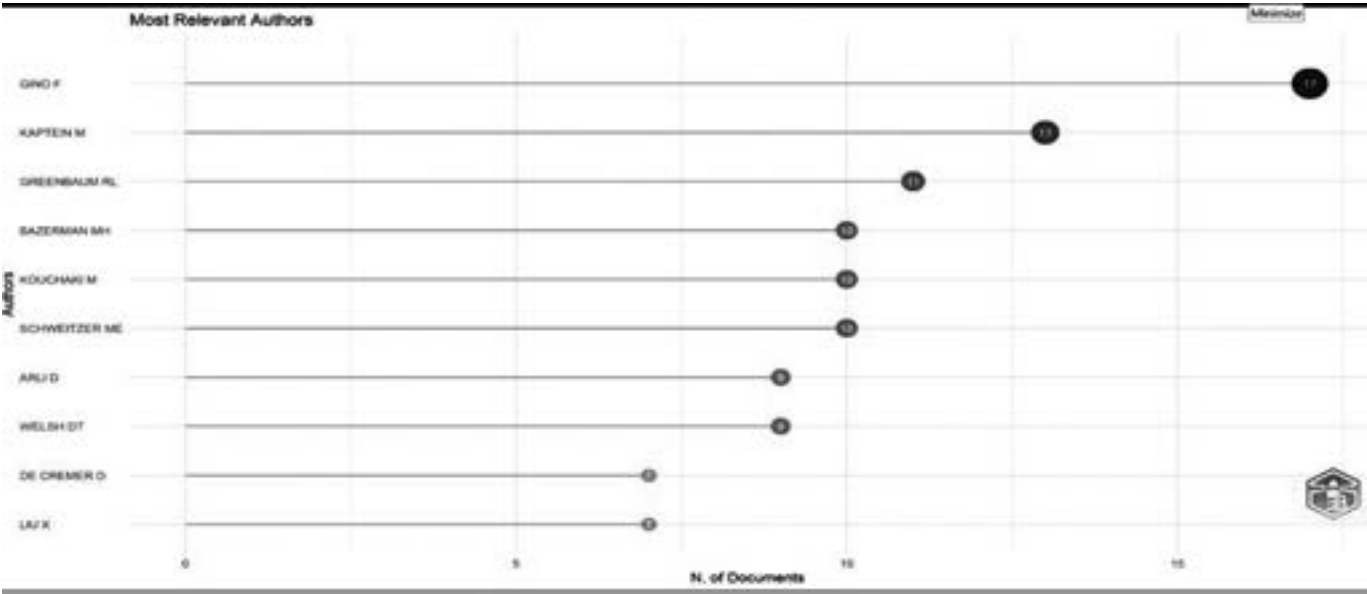


Figure 1  
Source: Biblioshiny RStudio

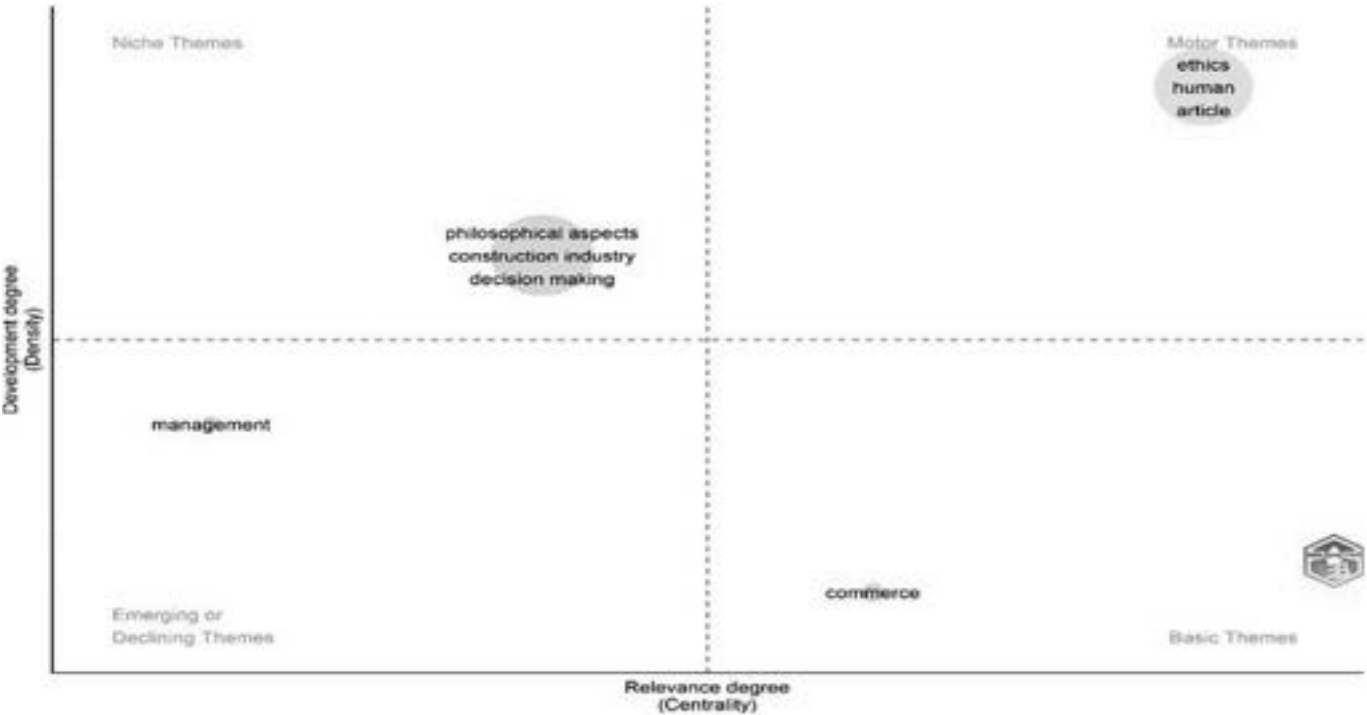


Figure 2  
Source: Biblioshiny RStudio

### Most Relevant Author

**Thematic map** is based on density and centrality, a thematic map was also created, separated into four topological zones. This outcome was reached using a semi-automatic technique that examined the titles of all the references analyzed in this research and added extra pertinent keywords (other than the author's keywords) to capture deeper variations. (Figure 1)

Or

[A thematic map was generated based on density and centrality, resulting in four distinct topological zones. This was accomplished using a semi-automatic technique that analyzed the titles of all the references included in this research. Additional relevant keywords were identified and added to capture further variations beyond the author's provided keywords.] (Figure 2)

**Keyword co-occurrence analysis** (Figure 3) by using co-word analysis on the keywords of the studies in the

area, the first research question—Topics and keywords have been studied in workplace deviant behavior, and what are the potential areas for future research? These investigations map the existing connections between content domains using scientific mapping. It is feasible to identify areas for additional research and research gaps. Author keywords served as the unit of analysis and were fully counted. The analytical algorithms remove noise from the data and analyses since they are unable to determine from the entirety of the text whether a word is essential for the particular content domain or just infrequently used in a text.

Co-word analysis was employed to examine the keywords used in previous studies in the field, answering the first research question regarding themes of past research and avenues for future exploration. By conducting scientific mapping, the interconnections between different content domains were identified, allowing for the identification of research gaps and potential areas for future investigation. The unit of

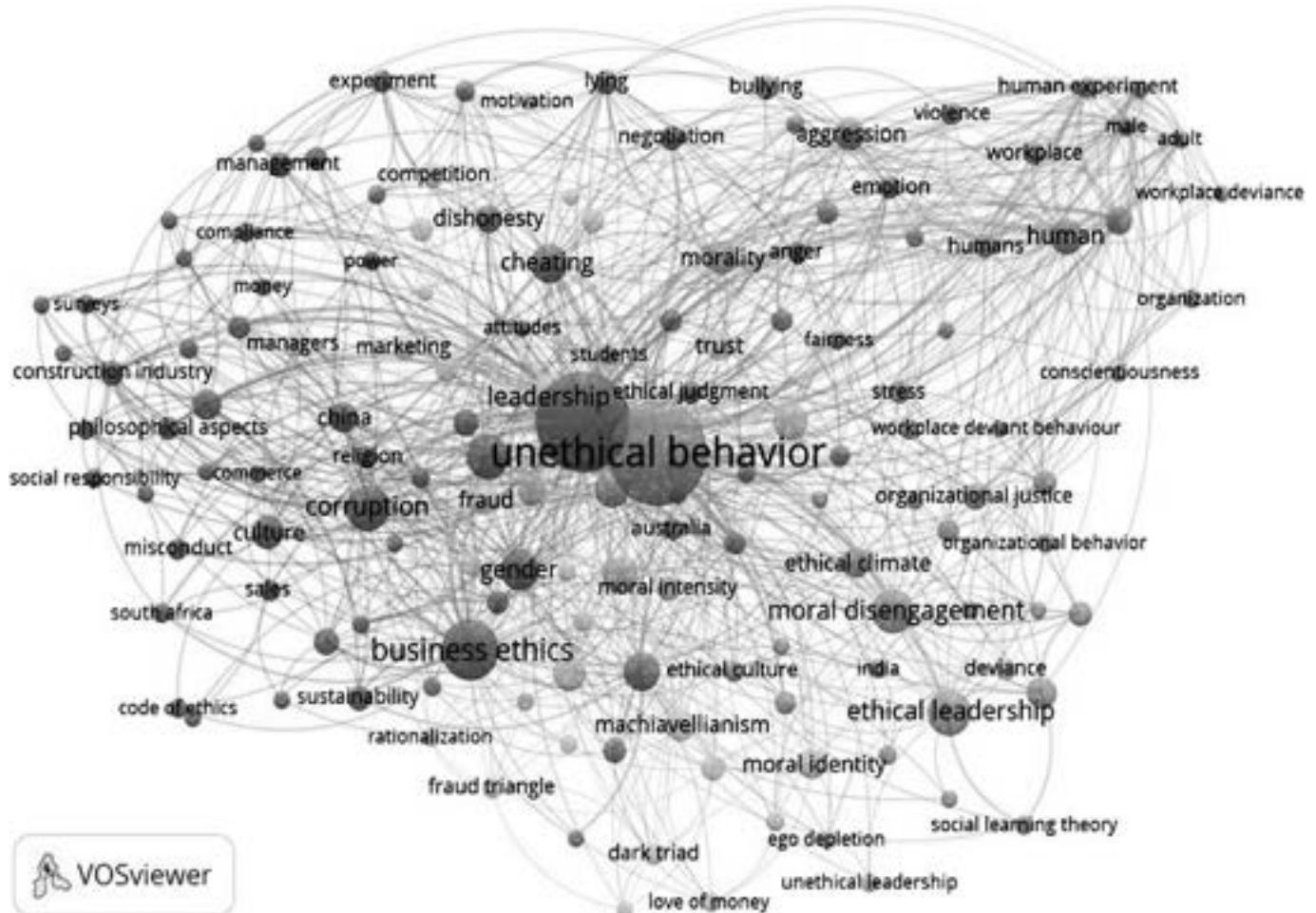


Figure 3

analysis was the author's keywords, which were thoroughly counted. Analytical algorithms were used to filter out noise from the data and facilitate the analysis, as they cannot discern whether a word is crucial to a specific content domain or simply rarely used in a text.

### Keywords

A key word must appear a minimum of five times. Total key word 3219 and 145 key words meet threshold limit. For each 145 keywords. The overall strength of the linkages between co-occurring keywords will be determined. The keywords to select. The chart displays a total of 7 clusters.

Or

A minimum threshold of 5 occurrences per keyword was set, resulting in a total of 3,219 keywords. Out of these, 145 keywords met the threshold limit. The total strength of co-occurrence linkages with other keywords will be determined for each of these 145 keywords. Based on this analysis, 7 distinct clusters were identified and visualized in the diagram

**Red cluster** consists 41 keywords, i.e. Accountability, Auditing, Behavioral search, Business ethics, China, Code of ethics, Codes of ethics, Commerce, Compliance, Construction industry, Corporate governance, Corporate social responsibility, Corruption, Crime, Culture, Ethical behavior, Ethics, Ethics management, Gender, governance, Hong Kong, Human resource management, Management, Misconduct, Money, Monitoring, Philosophical aspect, Power, Project management, Religion, sales, Social responsibility, South Africa, Status, survey, sustainability, Transparency, Unethical behavior, values, unethical behaviors, Values, whistleblowing.

**Green cluster** consists of 26 keywords, i.e. abusive supervision, conscientiousness, counterproductive behavior, emotional intelligence, ethical behavior, ethical climate, ethical cluster, ethical leadership, firm performance, job performance, job satisfaction, moral disengagement, organizational behavior, organizational commitment, organizational identification, organizational justice, performance, social learning theory, stress, transformational leadership, unethical behavior, unethical pro-organization, workplace bullying, workplace deviant behavior, workplace deviant behavior.

**Blue cluster** consist 24 keywords, i.e. anger, attitude, cheating, communication, consumer ethics, deception, dishonesty, emotion, emotions, empathy, ethical judgement, ethics education, experiment fairness, guilt, Indonesia, lying, marketing ethics, negotiation, norms, religiosity, social norms, theory of planned behavior.

**Yellow cluster** consist 23 keywords, i.e. competition, dark traid, earnings management, finance, fraud, fraud triangle, incentives, integrity, leadership, locus of control, machiavellianism, managers, marketing, motivation narcissism, organizational culture, personality, personality traits, psychopathy, trust, Vietnam, whistleblowing.

**Purple cluster** consist 17 keywords, i.e. adult, aggression, article, bullying, creativity, deviant behavior, female, human, human experiment, humans, male, organization, personnel, psychology, violence, workplace, workplace deviance.

**Sky blue cluster** consists of eight keywords, i.e. behavioral ethics, deviance, ego depletion, ethical decision-making, love of money, morale identity, self-regulation, and unethical leadership.

An **orange cluster** consists 6 keywords, i.e. consumer behavior, decision making, ethical decision making, moral intensity, students,

### Bibliography Coupling Country Citation

In order to respond second research question, we were concerned with the highest contribution in this research. The standards for a country's minimum of five documents and ten citations. The total strength of the bibliographic coupling link with other nations will be calculated for each of the 38 countries. The nations with the highest overall link strength will be chosen.. In table top 10 countries on the basis of citation is, consider.

Or

To address the second research question regarding the highest contribution in this research, we focused on specific criteria. The minimum requirement was set at 5 documents per country and a minimum of 10 citations per country. The strength of all bibliographic coupling ties between each of the 38 countries was calculated. We chose the nations with the strongest overall connection strength.

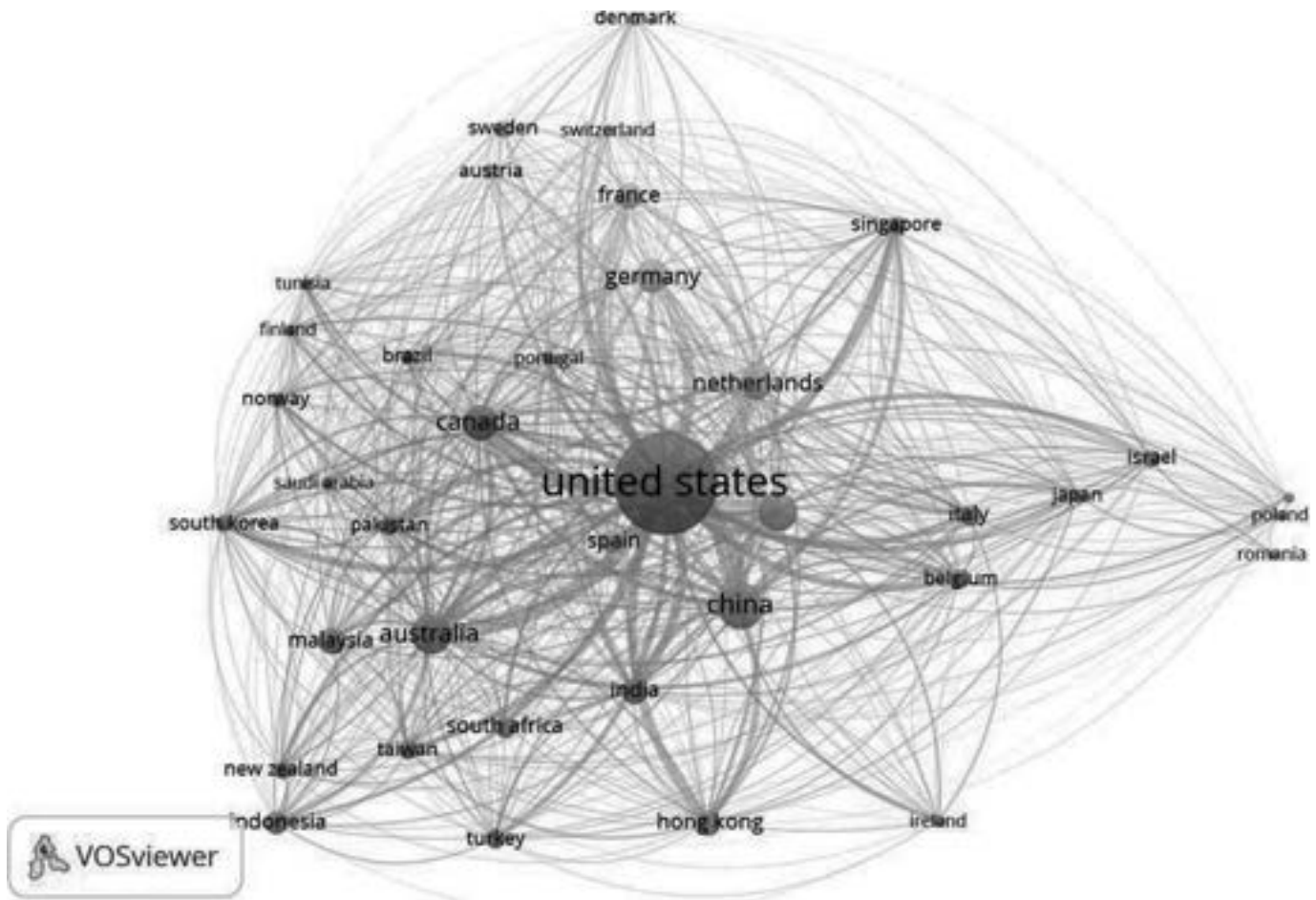


Figure 4

In Figure 4, there are total six clusters:

**Red cluster** shows 10 countries Brazil, Canada, Finland, Norway, Pakistan, Portugal, Saudi Arabia, South Korea, Tunisia, and United states.

**Green cluster** shows 9 countries Belgium, Czech Republic, Ireland, Italy, Japan, Poland, Romania, United Kingdom.

**Blue cluster** shows 8 countries, Australia, India, Indonesia, Malaysia, New Zealand, South Africa, Taiwan, Turkey.

**Light green cluster** shows 6 countries Austria, Denmark, France, Sweden, Switzerland.

**Sky blue cluster** shows 2 countries Netherland and Spain.

Top 10 Countries Based on Citations

Country	Documents	Citations
United states	460	17978
United Kingdom	68	2439

Country	Documents	Citations
Australia	76	2305
Canada	54	2191
Germany	50	1142
Hong Kong	29	1070
France	33	939
Israel	15	852
Italy	22	492
Belgium	19	450

### Authorship Network

The third study issue about the social networks among authors in the subject was investigated by examining the bibliographic data. These studies enabled the mapping of the social structure by examining the relationships and interactions among authors in the field (Donthu et al., 2021; Zupic and Cater, 2015).

In order to respond third research question, we were concerned with the highest contribution in this research.

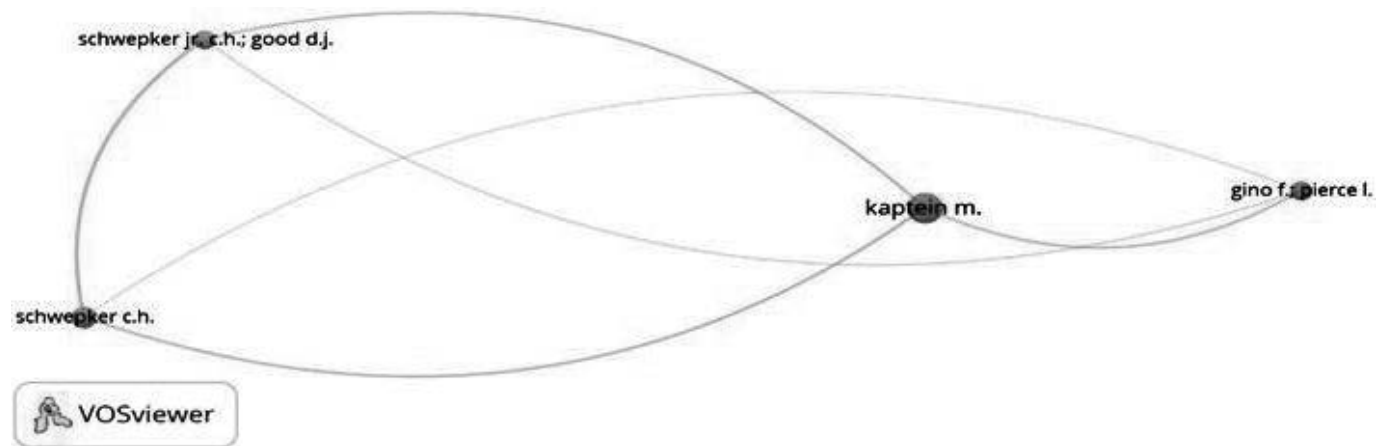


Figure 5

Three documents and a minimum of ten citations per author are the requirements for minimal author output. The overall strength of the bibliographic coupling link between each group of four writers will be determined. The author with the most overall links will be chosen.

**Red cluster** shows 2 author's relationship ginof; pierce l. and kaptein m. (Figure 5)

Green cluster shows two author relationship "schwepker c.h." and "schwepker jr.c.h.; good d.j"

Citation network "schwepker c.h." and "schwepker jr.c.h.; good d.j" most connected based on a number of links and total link strength.

### Conclusion

This research was conducted to analyze bibliometric articles about workplace deviant behavior. The research process uses the keywords "workplace deviant behavior" OR "counterproductive behavior" OR "unethical behavior" OR "Aggressive behavior". This bibliometric analysis revealed the social networks, the most significant publications and journals, the areas of prior research, and potential directions for future study in the area of workplace deviant behavior. A strong theory that clarifies the reasons and the way people take on responsibility at work is presented here. To take workplace behavior research from the individual level to the group and organizational level and make substantial additions to the body of literature, the discipline still requires new talent that can collaborate closely with others around the world. This is because workplace behavior research has been conducted for 23 years.

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# The Role of Women-led Development in a Changing Society

Sarita\* and Dr. Pyla Narayan Rao\*\*

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## ABSTRACT

*India's presidency of the G 20 has marked a pivotal moment in the country's approach to gender equality and women empowerment. By designating "women-led development" as one of its six central focal points, India has demonstrated a commitment to integrating women as active leaders and participants in the development process. This approach signifies a shift from viewing women as mere beneficiaries of development programs to recognizing them as key drivers of economic, social, and political progress. The emphasis on women-led development is a significant stride toward achieving gender equality and empowering women across various sectors. The transition from "Women's Development" to "Women-led Development" marks a significant advancement in the promotion of gender equality and the empowerment of women in India. The paper examines current women led start up in India and challenge faced by women entrepreneurs and divergent initiatives taken by Indian government to encourage women led start up.*

**Keywords:** Women Entrepreneurship, Economic Developments, Govt. Initiatives.

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## INTRODUCTION

India's vision is epitomized by the statement made by our Hon'ble Prime Minister, Mr. Narendra Modi, during the G20 Summit at Bali that "global development cannot be achieved without the participation of women". There is ample evidence to support this assertion. As internet and mobile penetration has grown, the number of female-owned enterprises in India has increased significantly. A McKinsey report has estimated that India can increase its GDP by up to 18% (approximately \$770 billion) if it succeeds in bridging the gender gap by increasing female labour force participation. According to report, In India around 13.5 million to 15.7 million Micro, Small and Medium Enterprises (MSME) and agri-businesses have more female-occupied enterprises than in many other countries. In addition to private and government sector job creation, entrepreneurship is a potent yet largely unexploited source of opportunity for women of working age in India. By generating employment opportunities, stimulating innovation, and leveraging investments in health care and education, entrepreneurship amongst women can significantly

contribute to India's progress towards social and economic prosperity. Women are a huge part of our society, and if they don't grow, the whole thing will grind to a halt. Companies that allow women to grow naturally tend to do better themselves. Women's empowerment is essential for nation to ensure their own development as well. The Government of India has acknowledged the importance of women's leadership in India's development and has implemented a range of social programs to empower them and enable them to be at the forefront of India's development. This has been done through the implementation of various welfare schemes over the past nine years.

## REVIEW OF LITERATURE

Yasmeen Sultana (2023) observed that the microfinance service and women empowerment have positives relations. The economic and social development of women closely linked to the empowerment of women through the implementation of microfinance programmes in developing countries. The study conclude that the it is essential that the government of India, policy makers, and Microfinance Institutions

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(MFI) come up with specific solutions to address the issues faced by Indian women in terms of access to microfinance, as well as enhance microfinance awareness campaigns, particularly among rural women. Sucheta Agarwal (2018) the study found that the women entrepreneurship empower womens. The Government of India has initiated a variety of policies and development initiatives to foster the entrepreneurial spirit among women's groups, by implementing these policies and programs, the Government of India not only supports the economic empowerment of women but also subsidize the overall economic growth of the country. Debasree Das Gupta (2019) the study found that the Implemented policies that specifically target gender disparities, ensuring equal access to resources, training, and support for female entrepreneurs to create a more inclusive economic environment where female entrepreneurs can thrive and contribute significantly to economic development. Ms. Yogita Sharma (2013) the study found that various factors that affect women empowerment .There are many challenges faced by female entrepreneurs, such as lack of educational background, social and legal obstacles, high production costs, male-dominated culture, limited management skills, low self-esteem, etc. The study concludes that the women possess the capacity and determination to establish, maintain and oversee their own business in a systematic manner. In addition, female entrepreneurs can become a part of the national economy and contribute to India's economic with the right support and encouragement from the community, family and government. Pratiksha Virendrakumar Jain (2023) the study found that India is currently in a more advantageous position in terms of its start up ecosystem, as the rate of female entrepreneurship has increased significantly. This positive trend reflects the growing participation and success of women in the entrepreneurial landscape. However, research has also revealed that the majority of women-oriented businesses that have received funding are concentrated in metropolitan areas. This geographic concentration highlights a significant disparity, as there is a notable lack of female-oriented businesses in smaller towns and cities.

## OBJECTIVE OF STUDY

1. To study current status of women led start-up in India.

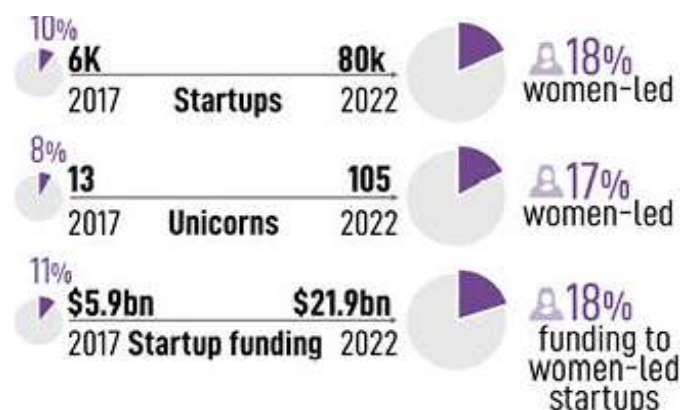
2. To study the obstacles that women entrepreneurs faces as part of the government women led start-up.
3. To examine the specific initiatives taken by government to encourage women -led Start-up.

## RESEARCH METHODOLOGY

This paper is a comprehensive descriptive study. This study based on secondary data. Secondary data and information has been analysed for preparing the paper. Secondary information has been taken from various academic sources, books, journal articles, conference papers, working papers, and websites.

## STATUS OF WOMEN-LED START-UP IN INDIA

The report released by Nasscom and Zinnov, which indicates that female founders or co-founders headed 18 percent of Indian start-ups. According to the report, 17% of the investment deals in India between 2019 and 2022 were initiate by start-ups with female entrepreneur .The report found that the start-ups established by women across all stages of growth is consistent with their presence in the ecosystem and indicate that they have an equal chance of success as their male counterparts. This shows that women have the intention and ability to contribute to India's economic growth. The report indicates that the proportion of start-ups located in emerging locations has increased from 34% to 39% between 2021 and 2022. Today, India start-up ecosystem ranks 3rd in the world, with 25,000 to 27,000 active technology start-ups. Women-owned businesses are a major contributor



**Figure 1:** Women-led Startups and Unicorns

Source: Women in India's Startup Ecosystem Report 2023

to the economy. There are 13.5 to 15.7 women-owned businesses in India directly employ 22 to 27 million people. The Boston Consulting Group report revealed that female-founded or co-founded start-ups generate 10% higher cumulative revenue over the course of five years. Additionally, these start-ups tend to have a more equitable work environment and employ three times more female employees than male employees. Furthermore, the number of women-led businesses is projected to grow by 90% over the next five years. In India, women manage 45% of the start-ups, with the government acknowledging more than 50,000 of them.

As per the report, in this ecosystem, the share of women-led start-ups has grown from 10 to 18 percent. The venture capital funding for Indian startup rise to \$21.9 billion in 2022 from \$5.9 billion in 2017. The share of funding to women-led startups has increased from 11 to 18 percent in the same time.

### Major Start-Ups Run by Women in India

S. No.	Name of the Entrepreneurs	Field
1	Chitra Gurnani Daga – Thrillophilia	It is an adventure travel company in India. It specializes in curating local experiences for authentic and unique travel experiences. Currently, Thrillophilia has 3.5 million monthly active participants and it is one of the biggest online travel platforms in India. Current valuation of the company is \$ 4.48 million.
2	Falugni Nayer – NYKAA	The Nykaa Beauty and Wellness e-commerce platform is one of the leading e-commerce platforms for women. Nykaa is known for its original products and trusted brand names. Nykaa boasts its retail partnerships with leading personal care companies such as Unilever, P&G, L’Oreal, Biersdorf, and Johnson & Johnson. Current valuation of the company is 1300 crore.
3	Divya Gokulnath – BYJU’s Learning App	BYJU’s is India’s fastest-growing ed-tech start up and the most valuable in the world. It provides learning via an app and a website for competitive exams such JEE, CAT, NEET, IAS, and for students in Classes 1–12. In 2015 the company launched its

S. No.	Name of the Entrepreneurs	Field
		flagship product – The Learning App – for Class 4–12 students. BYJU’s has more than 42 million registered users and 3 million yearly paid subscriptions. A student spends an average of 71 minutes on the app per day. Current valuation of the company is \$ 18 billion.
4	Upasana Taku – Mobikwik	Mobikwik was established in April 2009. It is An innovative fintech company provides a mobile-based payment solution and a digital wallet. It seeks to bridge the digital gap between consumers and businesses. The company’s app enables users to pay for bills, DTH services, data cards, and more. Current valuation of the company is \$ 750 million.
5	Isha Choudhry – Zolo	Zolo Stay makes it easy for students to find places to stay with meals. Now, Zolo stays has made a name for itself in India’s co-living scene, with over 600 staff members in five cities. Current valuation of the company is \$ 100 million.
6	Radhika Ghai Aggarwal – Shopclue	Shopclues was launched in July 2011 .It is India biggest and most popular online marketplace, with over 7 million people visiting it every month. It’s available in over 9,000 cities, towns, and villages across the country. It’s known for its kitchenware, home decor, fashion, and electronics.
7	Khushboo Jain – Impact Guru	Impact Guru was established in 2014. A technology-driven crowd-funding platform empowers individuals, non-governmental organizations (NGOs) and socially serial enterprises.

### Challenges Faced by women Entrepreneurs in India

- **Social responsibility:** In a Men dominated society, women are not always given the same opportunities as men. Married women in India are expected to manage the entirety of child-rearing responsibilities. Consequently, they lack the necessary energy to fulfil their commercial duties.
- **Education:** In our country, women did not receive enough financial assistance to complete their

higher education, particularly in the rural areas. In India, a girl usually lives in a safe environment, so she has less exposure to the real world. This has a negative impact on her ability to take risks in her professional life.

- **Financial Issues:** In our country, Family members do not support women entrepreneurs. They are hesitant to invest in a business venture initiated by a woman entrepreneur. In addition, financial institutions do not consider middle class women entrepreneurs as suitable candidates for establishing their projects. They are reluctant to provide financial support to unmarried women or young girls as they are uncertain as to who will pay back the loan, either their parents or their in-laws after marriage. This demeans unmarried women and they tend to abandon the idea of establishing their ventures.
- **Limited Industry Knowledge:** One of the most fundamental issues faced by female entrepreneurs in India is a lack of access to professional networks. According to a survey conducted by Google-Bain, female business owners tend to be less connected to both formal and non-formal networks. Furthermore, the survey revealed that more than half of urban small business proprietors suffer from a lack of network development opportunities.
- **Lack of an Enterprenuails Environment:** A supportive business environment is essential for anyone to grow and succeed as a business owner. Unfortunately, many women don't have such a supportive business environment to work in.
- **Lack of Self-confidence:** Societal and structural barriers often impact women's confidence and opportunities in entrepreneurship. For example, limited access to funding, networking opportunities, and mentorship are significant challenges that women entrepreneurs face.
- **Stiff Competition:** Women entrepreneurs have limited financial resources for marketing, R&D, and hiring compared to larger, established businesses. It's a vicious cycle that eventually leads to the demise of women's businesses.

### Initiatives Taken by Government to Boost Women-led Development

1	Mudra Loan for women	The government provide financial assistance to enthusiastic women entrepreneurs who are interested in setting up a beauty salon, tuition centre or stitching shop initiated this scheme. They are required to come up with a business plan. The loan does not require any form of collateral to be granted. Through the scheme loans ranging from 50000 to 10 lakhs are provided to women for setting up a new business.
2	Dena Shakti Scheme	This Scheme provides credit up to Rs 20 lakh to women entrepreneurs in agriculture, manufacturing, microcredit, retail stores, and other businesses. Furthermore, this government initiative for women provides a 0.25 percent interest rate reduction. Female entrepreneurs can seek a loan up to Rs 50,000 within the microcredit zone.
3	Mahila udyam Nidhi Yojna	This scheme provides credit up to Rs 10 lakh to women entrepreneurs that must be repaid within ten years. Punjab National Bank offers it and SIDBI. Bank charge interest rate based on market rate.
4	Cent Kalyani Scheme	Cent Kalyani is a government loan scheme for women. It is open to new and existing entrepreneurs as well as self-employed women. The scheme is open to micro/small enterprises in various sectors such as agriculture, cottage industry, retail trade, etc. The loan does not require any collateral as collateral and does not require any guarantors. Bank charge interest rate based on market rate and loan must be repaid within 7 years.
5	Pradan Mantari Rojgar yojna	This scheme initiated by Indian government in 1997 is to give self-employment opportunities to the educated youth of the country. PMRY helps the unemployed Indian youth by providing them with a loan amount to start their own personal business project and create jobs for others. This scheme provides credit up to Rs 1 lakh to women entrepreneurs to start-up their business and repayment period of the loan is 3 to 7 years.



6	Synd Mahila Shakti Scheme	This scheme initiated by Indian government to facilitate economic empowerment of women through the provision of business loans to cover their working capital requirements or business expansion. Entrepreneurs can start or modernise their existing business by taking out a concessional loan of up to Rs. 5 crore, with a minimum interest rate of 10.25%. No collateral is required, no processing fees charged and concessional rates of 0.25% are offered for loans up to Rs. 10 crore.
7	Orient Mahila Vikas Yojna	Oriental Bank of Commerce facilitate financial assistant to women entrepreneur under this scheme .Under the scheme, women holding 51 percent share capital, either individually or jointly, in a proprietary company can get a loan. This scheme provides credit up to Rs 25000 to women entrepreneurs with collateral security and loan must be repaid within 7 years. The scheme also offers concessional interest rates up to 2 percent.
8	Women Entrepreneurship Platform	Niti Aayog in collaboration with SIDBI has launched a Women Entrepreneurship Programme to facilitate the growth and development of both existing and potential female entrepreneurs. It based on three pillars: Gyaan Shakti for financial support, Iccha Shakti for apprenticeships and Karma Shakti for companies. The aim of the WEP is to create supportive environment for women entrepreneurs to access financing, mentorship and corporate partnerships. The scheme also offers incubation and accelerator services to all female-led businesses at all stages of their journey, from ideation to expansion. Most importantly, the WEP helps women entrepreneurs to form a network of peers who can provide mutual support and guidance.
9	Bharatiya Mahila bank business loan	Bharatiya Mahila Bank incorporated this scheme in 2017 to provide financial assistance to women. It was later merged with SBI but continues to offer business loans. Here women entrepreneurs who are looking to set up a manufacturing unit or real

		estate business can get loans up to Rs. 20 crore. Bharat Mahila Bank also offers Collateral-free loans when the amount of the loan is less than Rs. 1 lakh. These business loans can be divided into BMB shringaar for beauty business, BMB SME easy, BMB Annapurna for food catering and BMB parvarish for day-care centre.
10	Stree Shakti Scheme	Stree Shakti is an initiative of SBI and is specifically designed for women entrepreneurs who have already started or are planning to start a business. Women entrepreneurs in manufacturing, retail or service sectors, Self-employed women, doctors, architects, etc. can also get loans under the scheme. Interest rates are reduced by 0.5 % for loans granted to women entrepreneurs of more than Rs. 2 lakh. No pledged security is required for loans under Rs. 5 lakh. To be eligible for this scheme, women entrepreneurs need to be part of the EDPs run by their respective state governments.

## CONCLUSION

In the current era of digitization, globalisation, and the growth of start-ups, India has the potential to experience a surge in women's entrepreneurship. In recent year, India has transitioned from the idea of "Women's Development" to "Women-Led Development. Recognizing the important role that women can play in driving sustainable and equitable development, the notion of women-led development emphasizes the achievement of women with equal opportunities, decision-making power, and control over resources. Women entrepreneurs are an integral part of the global economy, and they possess a range of distinctive qualities that enable them to become successful business owners. These include creativity and a willingness to take risks. However, they often face a variety of obstacles in their pursuit of success, such as limited access to finance, gender bias, lack of family support, lack of professional knowledge. Despite these difficulties, female entrepreneurs are able to persevere and exceed expectations through their hard work and commitment. Their contributions to the development of our society are invaluable, and



all members of the community should be thankful. With the ongoing support from government and private entities, it is likely that more women will become entrepreneurs in the near future. Consequently, it is essential to recognize the role of Women Entrepreneurs in the growth and development of our society.

## RECOMMENDATION

Women-led developments is the progression of women and ,accepting and including them in the decision-making process. It also means providing them with equal Oppourinities for growth and development in society and disapproving gender bias. To boost Women-led development govt. should provide easily access to affordable credit for women entrepreneurs and self help groups, provide skill training and job Oppourinities for women, creating safe environment, and promoting women leadership and decision making roles .Furthermore establishment of incubation centre geared towards women led enterprises have developed as a facilitators for developing entrepreneurship talent and cultivating and innovative culture. Through increased access to basic facilities, targeted investment in employment and skill building, and progressive legislation, women have comes to be empowered to become leaders and key contributors to New India growth story.

## FUTURE SCOPE

1. Gender gap in entrepreneurial leadership and challenges facing women in small and medium scale enterprise in India.
2. What drives women towards domestic vs international business venturing?

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# An Empirical Investigation of Millennials' Perception Towards Rewards in IT Sector

Deepanshi Sharma\* and Dr. Sulochna Syal\*\*

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## ABSTRACT

*This study focuses on how millennials in the IT industry see rewards, with a particular emphasis on how demographic factors (gender, age, employment level, highest qualification, and monthly salary) affect reward preferences. T-test analysis using a sample of 407 millennial employees shows that there are notable variations in how different groups perceive monetary and non-monetary benefits. The findings show that monetary incentives are significantly different on the basis of gender and age while non-monetary incentives shows significant difference on the basis of gender, age, income and job level. According to the research, IT organizations should modify their reward programs to better meet the demands of particular demographic groups. This will increase employee engagement, lower attrition, and create a more driven and effective staff.*

**Keywords:** Millennials, Monetary Rewards, Non-Monetary Rewards, IT Sector.

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## INTRODUCTION

Those born between 1981 and 1996 are known as millennials, and they make up a sizable share of the workforce worldwide. With their great affinity for technology, work-life balance, and digital nativity, millennials are different from past generations in terms of expectations and preferences. Given their continued dominance in the labor market, it is imperative for businesses seeking to attract and retain top personnel to comprehend the demands and motivations of this group.

Millennials value both material and intangible rewards, giving them a unique perspective. While monetary incentives such as bonuses and competitive pay are crucial, non-monetary benefits are also highly valued. These consist of accommodating work schedules, chances for career advancement, mentorship initiatives, and a positive work atmosphere. Work-life balance and remote work options are two essential non-cash benefits that increase millennials' job satisfaction and loyalty. In today's competitive labor market, companies that place a high priority on striking a balance between monetary remuneration and a supportive, inclusive

corporate culture are better able to draw in and keep millennial talent. This all-encompassing approach to rewards is in line with the aspirations of millennials, who want autonomy and fulfilling professional growth.

Companies in the IT industry, where millennials make up a sizable portion of the workforce, have realized that in order to satisfy these varied expectations, they must provide complete reward packages. An increasing number of IT companies are combining non-cash benefits like training programs, remote work choices, and wellness efforts with cash benefits like incentives and stock options. IT firms strive to improve employee satisfaction, increase productivity, and lower turnover rates by customizing their reward programs to suit the distinct tastes of millennial workers.

## REVIEW OF LITERATURE

### Monetary and Non-monetary Rewards

Asulin et al. (2023) suggest that providing financial incentives to complete a work might have a negative impact on task execution, even with sound economic rationale. This anomaly is explained by the hypothesis

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of swarming out effects, when monetary rewards “swarm out” non-monetary sources of substantial value that people obtain from completing a work (such as the project’s inherent value or social recognition). Still, working late casts doubt on the validity of spreading out impacts. The effectiveness of these influences using a more notable case and modifying the test design to more clearly illustrate the role of non-financial motivators in prosaic behaviour. Specifically, 245 sets of secondary school understudies were given different incentives by the study to collect gifts for a charitable cause: low financial incentives (1% of total gifts collected), high financial incentives (10% of total gifts collected), non-financial incentives (better sense of the project’s importance and public recognition), or no external incentives at all. The findings and our results demonstrate that, in contrast to the lack of external drive, low money-related motives lead to inferior execution. Crucially, non-financial incentives elicit superior performance compared to those involving money or the deficiency of external incentives.

The purpose of this exploratory study, according to Shaikh E. et al. (2022), is to determine how inspiring factors unrelated to money and those linked to money affect employees at HESCO in Hyderabad, Pakistan, when they display their work. The scientist assumes that financial inspiration factors are influenced by compensation and advancement, but that worker execution is negatively impacted by rewards; in terms of non-financial inspiration factors, professional stability, recognition, and appreciation are positively impacted, but working conditions negatively impact representative execution.

According to Azizi, T. A. et al. (2022), when clients see administrative disappointment as severe, the effectiveness of financial and non-financial assistance recovery processes on support objectives is examined in a twofold deviation. The study’s aftereffects suggest that the benefactor’s expectations are significantly influenced by the combination of financial and mental rewards. Payroll goals are substantially increased and negative customer sentiment is lessened by timely installments and obligations. Furthermore, the probabilities that a customer would make repeat purchases from a shop are unaffected by the postponed payment and conciliatory attitude used alone.

Jha, A. (2022) aims to investigate how employee motivation is affected by monetary and non-monetary benefits. A poll that was prepared in the Google framework flowed to meet the need. There were two sections to the survey. The primary section deals with determining the respondents’ segment components, and the subsequent section deals with identifying and evaluating the respondents’ reward inclinations. The assessment made the assumption that if representatives received financial rewards, they would likely perform even better. That being said, the benefits obtained from non-monetary rewards are also quite important.

According to Tee E. et al. (2022), understudies’ inclinations towards job determination are influenced by compensation, benefits, and management reputation. Surprisingly, job inclination was not much changed by development in the workplace or in a career. The review’s findings will likely provide corporate enrollment professionals with more astute knowledge, enabling them to better understand employees’ worries while selecting an inn company job.

A. K. Mittal (2022) investigates the role of motives pertaining to money and those unrelated to money in representative worker execution. To be more precise, this technique differs from a presentation strategy that typically views and rewards representatives’ roles by communicating to employees the financial and non-financial incentives inherent in their positions. In order to dissect various mechanisms of financial and non-financial incentives, a study is conducted. Conversations with employees in both public and private sectors, including banking, development, administration, and assembly, have provided an informal account of the inquiry. Understanding the direct and indirect impact of financial and non-financial motivators on employee performance is the main goal of this investigation.

Okereke, L. O., and Asha, B. (2022) investigate how non-monetary rewards affect representatives’ presentations at the Mount Meru Reference Clinic in Arusha, Tanzania. To finish the review, the successive equal plan was used. With 180 non-administrative employees and 8 administrative professionals, the example size was 188, but the target population was 355. To gather information, a survey and interview guide were used. Inferential and pictorial insights were used to analyse the quantitative data, and particular

deconstructions were made of the personal data. Non-monetary benefits such as representative recognition, planning, advancement, autonomy, and flexible work schedules have a significant impact on employee performance, according to the analysis. For successful position execution to be understood, flexible working schedules in the medical clinic must be implemented. The management of the medical clinic should train staff members to retrain themselves so they can perform better when providing patient care.

In their research on the financial and non-financial associated impetuses in LIC of India and their effect, Chaudhary, A. K., & Ghosh, S. (2021) aim to ensure the impact of financial and non-financial linked motivating factors on experts in LIC of India, Ranchi. The results demonstrated the significant influence of both financial and non-financial incentives for improved work performance, and incentive pay is clearly linked to inspiration, performance, and satisfaction.

According to Alharbi, K. K., and Javed, U. (2021), managers and employers need to find a means to enhance workers' well-being and give them a sense of belonging through the rewards they provide if they want to force them to perform effectively. Employee motivation comes from non-monetary as well as monetary benefits. When workers are appreciated for their work, they are motivated to do better. Therefore, the purpose of this study was to examine how organizational employee motivation and incentive schemes relate to one another. The findings of this study have demonstrated that the close association in Jeddah has been practicing benefits and compensation schemes related to representative compensation. Additionally, the organization uses monetary and non-monetary rewards to influence representative performance. This way, findings have validated the relationship between pay structures and motivating, authoritative employees. The moment someone feels motivated to accomplish their goal is when they are inspired. It might be via making people aware of their responsibilities, providing incentives or prizes, or in any other manner that they see it as beneficial to them.

Akila, B., & Gabriel, J. S. (2017) shed light on the connection between employee motivation and perks in the context of Chennai-based IT businesses. Upon

conducting a comprehensive factual analysis, the specialist concluded that employees in IT companies depend on the nine predominant characteristics. The scientist can identify these components by placing them in terms of both monetary and non-monetary worker advantages. They saw advantages unrelated to money as having equal importance. This leads to the recognition of the hypothesis that worker advantages and inspiration are not mutually exclusive factors. It demonstrates that employees in IT companies place equal value on monetary and non-monetary perks. The relationship between worker benefits and representational inspiration was further revealed by the Relapse investigation. This refutes the conjecture, leading to the rejection of the theory that worker benefits and motivation have no relationship. Through enticing employee incentives that win in the association, representatives are consistently encouraged to demonstrate association and optimistic dedication to the effectiveness of organizations. Organizations should thus concentrate on the two major advantages—financial and non-financial. Typically, representatives are not just motivated by traditional cash benefits. They also accord non-financial rewards the same significance.

### **Research Gap**

Though a lot of research has been done on the topic of generational disparities in the workplace, little is known about how the state of the world today has affected the goals and aspirations of millennials. Studies that focus more broadly on generational qualities tend to ignore the particular contextual elements that shape the job preferences and behaviors of millennials today. Furthermore, research on millennials' perceptions of rewards in the Delhi NCR IT sector is conspicuously lacking. This disparity is especially serious considering the size of the millennial workforce and the significance of the IT sector. The impact of demographic factors on millennials' incentive preferences in this situation has not been well studied. In order to close these gaps, this study attempts to shed light on the particular characteristics influencing millennials' perceptions of rewards in the Delhi NCR IT sector and provide useful advice for businesses looking to tailor their reward programmes to this group.

## OBJECTIVES OF THE STUDY

1. To measure the impact of selected demographic variables (gender, age, monthly income, job level, highest qualification) on monetary rewards.
2. To measure the impact of selected demographic variables (gender, age, monthly income, job level, highest qualification) on non-monetary rewards.

## RESEARCH METHODOLOGY

- **Research Design:** This mixed-methods study design examines millennials' attitudes toward monetary and non-monetary rewards in the IT sector using quantitative (questionnaire) techniques. For a thorough study, secondary data from pertinent literature is added to the source data.

- **Sample Size:** With 407 millennial employee respondents from the IT sector, the survey has a statistically significant sample size that allows results to be extrapolated to the entire population.

- **Data Collection:** Structured questionnaires were used for quantitative analysis. For contextual understanding, secondary data from industry reports, journals, and news stories was also examined.

- **Data Analysis:** Quantitative data was analyzed using the t-test to find significant variations in millennials perceptions.

## ANALYSIS AND INTERPRETATION

### Monetary Rewards

**Table 1:** Independent Sample t-Test Results for Monetary Rewards by Gender

Gender	n	Mean	Std. Deviation	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Female	111	4.3213	.28133	4.223	405	.000	.21040	.04982	.11246	.30834
Male	296	4.1109	.49554							

Source: Primary Data

**Table 2:** Independent Sample t-Test Results for Monetary Rewards by Age

Age	n	Mean	Std. Deviation	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Below 30	320	4.1203	.44560	-4.145	405	.000	-.22452	.05416	-.33099	-.11804
Above 30	87	4.3448	.45664							

Source: Primary Data

**Table 3:** Independent Sample t-Test Results for Monetary Rewards by Monthly Income

Monthly Income	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Below 50000	209	4.1619	.42047	-.291	405	.771	-.01320	.04535	-.10236	.07596
Above 50000	198	4.1751	.49326							

Source: Primary Data

**Table 4:** Independent Sample t-Test Results for Monetary Rewards by Job Level

Job Level	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Fresher	21	4.1984	.31010	.310	405	.757	.03175	.10247	-.16970	.23319
Experienced	386	4.1667	.46369							

Source: Primary Data

Table 5. Independent Sample t-Test Results for Monetary Rewards by Highest Qualification

Highest Qualification	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Graduate	149	4.1174	.36273	-1.711	405	.088	-.08022	.04689	-.17241	.01196
Post-Graduate	258	4.1977	.50152							

Source: Primary Data

**Non-Monetary Rewards**

Table 6: Independent Sample t-Test Results for Non-Monetary Rewards by Gender

Gender	n	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Female	111	4.3974	.26530	2.009	405	.045	.10010	.04982	.00216	.19804
Male	296	4.2973	.49887							

Source: Primary Data

Table 7: Independent Sample t-Test Results for Non-Monetary Rewards by Age

Age	n	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Below 30	320	4.2920	.43639	-2.830	405	.005	-.15243	.05387	-.25832	-.04654
Above 30	87	4.4444	.47776							

Source: Primary Data

Table 8: Independent Sample t-Test Results for Non-Monetary Rewards by Monthly Income

Monthly Income	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Below 50000	209	4.2467	.42728	-3.648	405	.000	-.16017	.04390	-.24647	-.07387
Above 50000	198	4.4068	.45835							

Source: Primary Data

Table 9: Independent Sample t-Test Results for Non-Monetary Rewards by Job Level

Job Level	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Fresher	21	3.9153	.44708	-4.381	405	.000	-.43152	.09850	-.62515	-.23788
Experienced	386	4.3469	.43919							

Source: Primary Data

Table 10: Independent Sample t-Test Results for Non-Monetary Rewards by Highest Qualification

Highest Qualification	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Graduate	149	4.3430	.45243	.628	405	.530	.02907	.04627	-.06188	.12003
Post-Graduate	258	4.3140	.44806							

Source: Primary Data

### **Interpretations**

- Table 1 – Based on the mean value, results highlighted that females were more inclined towards monetary rewards (4.3213) as compared to males (4.1109).

T-statistic = 4.223; Sig. = 0.000 had a statistically significant difference in how males and females perceive monetary benefits.

- Table 2 – Based on the mean value, results highlighted that employees aged above 30 were more inclined towards monetary rewards (4.3448) as compared to those below 30 (4.1203).

T-statistic = -4.145; Sig. = 0.000 had a statistically significant difference in how employees aged below 30 years and above 30 years perceive monetary benefits.

- Table 3 – Based on the mean value, results highlighted that employees with monthly income above 50000 were more inclined towards monetary rewards (4.1751) as compared to those with below 50000 (4.1619).

T-statistic = -0.291; Sig. = .771 had no significant difference in how employees with monthly income below 50000 and above 50000 perceive monetary benefits.

- Table 4 – Based on the mean value, results highlighted that freshers were more inclined towards monetary rewards (4.1984) as compared to those experienced (4.1667).

T-statistic = 0.310; Sig. = .757 had no significant difference in how employees with job levels as freshers and experienced perceive monetary benefits.

- Table 5 – Based on the mean value, results highlighted that employees with the highest qualification as post-graduates were more inclined towards monetary rewards (4.1977) as compared to graduates (4.1174).

T-statistic = -1.711; Sig. = 0.088 had no significant difference in how employees with the highest qualifications as graduates and post-graduates perceive monetary benefits.

- Table 6 – Based on the mean value, results highlighted that females were more inclined towards non-monetary rewards (4.3974) as compared to males (4.2973).

T-statistic = 2.009; Sig. = 0.045 had a statistically significant difference in how males and females perceive non-monetary benefits.

- Table 7 – Based on the mean value, results highlighted that employees aged above 30 were more inclined towards non-monetary rewards (4.4444) as compared to those below 30 (4.2920).

T-statistic = -2.830; Sig. = 0.005 had a statistically significant difference in how employees aged below 30 years and above 30 years perceive non-monetary benefits.

- Table 8 – Based on the mean value, results highlighted that employees with monthly income above 50000 were more inclined towards non-monetary rewards (4.4068) as compared to those with below 50000 (4.2467).

T-statistic = -3.648; Sig. = 0.000 had a significant difference in how employees with monthly income below 50000 and above 50000 perceive non-monetary benefits

- Table 9 – Based on the mean value, results highlighted that experienced were more inclined towards non-monetary rewards (4.3469) as compared to those freshers (3.9153).

T-statistic = -4.381; Sig. = 0.000 had a significant difference in how employees with job levels as freshers and experienced perceive non-monetary benefits.

- Table 10 – Based on the mean value, results highlighted that employees with the highest qualification as graduates were more inclined towards non-monetary rewards (4.3430) as compared to those with post-graduates (4.3140).

T-statistic = 0.628; Sig. = 0.530 had no significant difference in how employees with the highest qualifications as graduates and post-graduates perceive monetary benefits.

### **CONCLUSION**

The study's findings show that different demographic groups have somewhat different perspectives on monetary and non-monetary rewards. There were notable differences in how men and women, as well as people under and over 30, perceived financial benefits, with older people placing a higher value on financial gains. It's interesting to note that views of

financial rewards did not significantly differ according to monthly income, employment status, or educational background.

It was found that females viewed non-monetary benefits more highly than males did. Once more, age was a factor; older people gave non-monetary incentives a higher ranking than younger people. Perceptions were also influenced by monthly income, with higher earners having a more favorable assessment of non-monetary incentives. Additionally, although educational background had no discernible influence on these beliefs, seasoned workers valued non-monetary rewards more than rookies.

These observations highlight how important it is for businesses to take demographics into account when creating incentive programs that will properly increase worker motivation and satisfaction. Reward plans that are adapted to these variations can result in workplaces that are more fair and inspiring for all workers.

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# An Empirical Study of Work Life Balance Among Women Employees in IT Sector

Dr. Asha\*

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## ABSTRACT

*This study is primarily directed to identify the significant factors that are considered necessary during work life balance practices and their perceived significance level among women employees in IT sector. This is an empirical investigation, and a sample of 500 employees from the National Capital Region (Gurugram, Delhi, Noida, Ghaziabad) was taken. The study used Demographic profile of respondents named Age, education level, marital status and years' experience in the industry. Along with this, exploratory factor analysis also used to identify factors. The study identified eight factors named Satisfaction and rewards, flexible work schedule, advantages and life balance, work life integration and policies, empowerment and motivation in the workplace, human resources policies and job mobility, integrated lifestyle, the management and control of work stress significant among women employees during work life balance practices. Satisfaction and rewards factor was found to be the most contributing factor that influences the WLB of women employees in IT sector. Next most influencing factor is Work-Life Integration and Policies and the least influencing factor is the management and control of work stress.*

**Keywords:** Work Life Balance, IT Sector, Women Employees.

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## INTRODUCTION

The notion of work-life balance originated in industrialised societies due to several circumstances, such as shifting demography, growing ethical norms, and advancements in technology. This argument is substantiated by facts such as changing family relationships, more female participation in the workforce, and the increasing intricacy of contemporary work environments. Work-life balance is achieved when an individual's personal and professional responsibilities do not hinder one other. When one side is imbalanced for a prolonged duration, adverse symptoms such as weariness, anxiety, depression, and so on, may appear.

### Women in the Workforce and the Idea of Work-Life Balance

Work-life balance refers to achieving a harmonious and healthy equilibrium between an individual's life at home and at work. People are said to have "work-life balance" when their many responsibilities in life "fit" together well (Hudson, 2005). The increasing demands

of the contemporary workplace provide challenges in properly managing several obligations. Individuals will need to make difficult decisions in order to achieve this equilibrium. Workplace attendance has seen a rise. Professionals often struggle to balance their home obligations with the constant demands of consumers and the office, which directly affects their personal lives. Regardless matter whether you are taking care of a small child or elderly parents, your personal life may be as demanding. The contemporary female employee is a formidable and enduring proponent of adaptability in the workplace. Although both genders contribute to their own financial support, women endure a greater burden of raising children, managing the home, and caring for elderly parents. Consequently, women have more challenges in modern society when attempting to balance their work and personal lives. Work-life imbalance may lead to absenteeism, causing stress and hindering workers' ability to concentrate on their tasks. From a feminine perspective, the necessity of a satisfactory work-life balance for women is at stake nowadays. WLB's prior employment experience is influenced by the following factors.

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- Work-Family conflict and family relationships conflicts in the workplace
- The diverse responsibilities that women participate and got stress at the workplace
- The responsibility of caring for children.

A work-life equilibrium that is beneficial does not spontaneously manifest. It necessitates the collaborative efforts of numerous individuals and organisations, including the worker, their employer, their family, and the community in which they reside.

### Reason for Imbalance

India's labour markets will certainly alter, with more women in professional jobs across sectors. In the opinion of Awasthy and Gupta (2001), Indian men are assumed to be the major earners. Many people like and spend more time at work due to amenities, sociability, flexible schedule, and nice work environments. Grzywacz Butter (2005) observed that well-resourced jobs make work-life balance easier. Unlike domain satisfaction (e.g., career, family, and marriage), life satisfaction has a broad influence (Beutell, 2006). Workplace and domestic demands for women conflict. According to Misra (1998), women should be compassionate, accommodating, subservient, soft, sensitive, and domesticated at work. Work and personal life may be balanced so individuals can concentrate and give their best. Business owners and employees should prioritise work-life balance (Baral & Bhargava, 2009).

Rising workloads and the need to care for other people are two key contributors to work-life imbalances (Cooke & Jing, 2009). Being young and unmarried is associated with less work-life problems than caring for children or the elderly (Chen, 2006).

Ensuring a harmonious equilibrium between work and personal life is a significant preoccupation for individuals. Various variables might lead to an imbalance between work and home life, including professional expectations, conflicts in roles, family obligations, childcare responsibilities, interactions between superiors and family members, and competition etc.

- Enhanced job responsibilities
- Extended working hours
- Heightened domestic responsibilities

- Individual mindset
- Social media use

### Symptoms of an Imbalance between Work and Personal Life

- **Exhaustion:** Working long hours may lead to exhaustion, both emotionally and physically. As a result, you may notice that perplexity and tiredness are having a detrimental influence on many aspects of your life. Sticking to a comprehensive approach for an extended period of time may result in inefficiency, higher mistake rates, and confused thinking. An uneven work-life schedule may cause poor hand-eye coordination, slow reflexes, difficulty focusing, and even accidents, injuries, legal concerns, or career progress, among other problems.
- **Non-existence:** Failing to maintain a healthy work-life balance increases the likelihood that you will be tardy to work and unable to celebrate important family occasions like birthdays, anniversaries, or just spend quality time with loved ones.
- **Spending less time with friends:** Spending valuable time with close friends is important for building bonds. If you spend a lot of time at work, you might separate from people.
- **Elevate stress level:** Work-life imbalance can increase the risk of cardiovascular disease, immune system disorders, backaches, acne, irritability, nervousness, depression, weight gain, exhaustion, low self-esteem, and other health issues and lifestyle diseases.

### REVIEW OF LITERATURE

Mental and physical exhaustion, lower job satisfaction, and emotional and physical strains were identified as major repercussions of work and home life imbalance by Bhuvaneswari (2023). It brought to light the need for steps to preserve work-life balance in the industrial sector, driven by advances in technology, rising job demands, and shifting demographic profiles. According to Deepa's (2022) research on the service sector, women have a harder time striking a balance between their personal and professional lives because of the tough trade-offs they often have to make. It brought attention to the fact that digital technologies have both positive and negative impacts; for example, they make

it easier to work remotely, but they also make it more difficult to focus on tasks at hand, highlighting the need for organisational assistance to lessen the negative consequences. Lastly, it was pointed out that women bear a disproportionate share of the extra workload and suffer from a worse work-life balance as a result of cybersecurity issues brought up by the trend towards remote work.

Through in-depth interviews with London-based professionals, Sreeleka (2020) uncovered the negative consequences of excessive work hours and proposed solutions to strike a better work-life balance. They looked at the IT sector and India specifically to find out how women software engineers manage their work and personal lives, and they found that elements like flexible scheduling, positive management, and pleasant working circumstances were major contributors. With the rise of remote work in the banking sector, there has been an initial tendency towards flexibility, which might improve work-life balance. However, women have been affected in different ways by this trend. Women in banking faced extra obstacles to work-life balance because to increasing caregiving obligations during the epidemic and established gender norms and societal expectations.

In order to help Indian women strike a better work-life balance, Kotwa (2019) said that society and management should collaborate. Research confirms this, showing that successful Indian women, particularly during major life transitions, put family obligations ahead of career aspirations.

In their conceptual research, Julka and Mathur (2017) stressed the significance of clear goals, rigorous preparation, and control in work-life harmony for women. They urged HR departments to implement strategies to assist workers balance work and life. The authors Kaur, Navpreet, and Mahajan, Supriya (2017) looked at what makes a work-life balance and what companies can do to make it better. They said that in order to help their workers maintain a good work-life balance, companies should provide a positive work environment and institute welfare programmes. The results highlighted the need of planning ahead to increase production by making one's personal and professional lives more efficient and productive. Ashwini and Kumaraswamy (2015) noted that work-

life balance improves organisational effectiveness. They found that organisations with a work-life balance had higher productivity and better customer service. The research examined current work-life balance issues such geographically separated parents, increasing home obligations, nuclear families, dual-career parents, and solo parenting.

## **RESEARCH METHODOLOGY**

### **Research Design**

A mixed-method research design is utilized, combining Descriptive Research Design and Causal Research Design: Descriptive Research Design is used to describe the current state of work-life balance among the target population. Causal Research Design helped in understanding the impact of sector-specific policies and practices on work-life balance.

### **Sample Area**

The study will focus on women employees working in IT sector within the National Capital region (NCR) region. This includes cities like Gurgaon, Noida, Faridabad, and Ghaziabad.

### **Sampling Method**

Women working in the NCR area's information technology industry are selected using a simple random sample procedure.

### **Sample Size**

A well-designed survey or questionnaire is used for conducting a comprehensive study on work-life balance among female workers in the IT industry of NCR. The research used a sample size of 500 employees.

### **Objective of Study**

1. Identify the factors considered necessary for work life balance among women employees in IT sector
2. To study the perceived importance level of identified factors of work life balance.

### **Methodology of Data Collection**

Data was collected via the use of structured questionnaires. Surveys are sent to a wide range of individuals in order to get quantitative data about work-life balance. In order to ensure the anonymity

of the participants, the questionnaires were designed to be anonymous and included questions about work schedules, employment flexibility, satisfaction levels, and external obligations.

### Constructing a Questionnaire

- **Demographics:** Ask about their age, marital status, level of schooling, job title, and number of years in the industry.
- **Work-Life Balance Indicators:** Create questions to evaluate weekly hours worked, scheduling flexibility, job demands, employer support for work-life balance, and how work affects personal life and vice versa.
- **Well-being Measures:** Include questions on job satisfaction, stress levels, physical and mental health, and overall life satisfaction.
- **Open-ended Questions:** Allow space for respondents to share personal experiences or suggestions regarding work-life balance.

## DATA ANALYSIS AND INTERPRETATION

**Phase 1:** Phase 1 includes Collecting and analysing data on different characteristics of women workers from the IT industry would constitute the demographic research component. This would be useful for learning about the background of work-life balance problems and for gaining insight into the ways in which various demographic variables may impact them. Some of the most important demographic variables to consider are as follows:

### Demographic Study

**Table 1:** Demographic Study based on Age

Age	Count	Percentage
20-30 yrs	104	20.8
30-40 yrs	145	29.0
40-50 yrs	159	31.8
Above 50 yrs	92	18.4
Total	500	100.0

Sources: Primary data

The 500-person sample shows a varied age range. The 20–30 age group has 104 respondents, or 20.8% of the sample. The following age group, 30–40, has 145 people, 29.0% of the assessed population. The 40–50 age group comprises 159 people, 31.8% of the sample. The study included 92 women over 50, 18.4% of the population.

**Table 2:** Demographic Study Based on Education Level

Education	Count	Percentage
Graduate	135	27.0
Post graduate	158	31.6
Professional	139	27.8
Others	68	13.6
Total	500	100.0

Sources: Primary data

According to the table, 135 respondents (27.0%) have graduate degrees. 31.6% of respondents, 158, have postgraduate degrees. Additionally, 27.8% of the sample—139 respondents—are professionals.

**Table 3:** Demographic Study Based on Marital Status

Marital Status	Count	Percentage
Married	240	48.0
Unmarried	260	52.0
Total	500	100.0

Sources: Primary data

From Table 3, it is clear that 52% respondents are unmarried and rest are married.

**Table 4:** Demographic Study Based on Total Work Experience

Experience	Count	Percentage
Less than 1 year	107	21.4
1-2 Years	116	23.2
2-3 Years	132	26.4
More than 3 years	145	29.0
Total	500	100.0

Sources: Primary data

From above table 21% hold less than 1 year experience and only 145 respondents have more than 3 years of experience.

**Phase 2:** The methods of exploratory factor analysis have been used in order to uncover the elements that influence the work-life balance of women working in the information technology industry.

**Table 5:** Descriptive Statistics Based on Factor Affecting Work Life Balance Descriptive Statistics

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.870
Bartlett's Test of Sphericity	Approx. Chi-Square	1147.529
	df	190
	Sig.	0.000

Communalities		
	<i>Initial</i>	<i>Extraction</i>
Q1	1.000	0.780
Q2	1.000	0.680
Q3	1.000	0.605
Q4	1.000	0.615
Q5	1.000	0.647
Q6	1.000	0.749
Q7	1.000	0.510
Q8	1.000	0.619
Q9	1.000	0.549
Q10	1.000	0.340
Q11	1.000	0.691
Q12	1.000	0.514
Q13	1.000	0.350

Q14	1.000	0.670
Q15	1.000	0.344
Q16	1.000	0.521
Q17	1.000	0.443
Q18	1.000	0.801
Q19	1.000	0.789
Q20	1.000	0.634

Sources: Primary data

The Kaiser-Meyer-Olkin (KMO) sample adequacy metric evaluates data for factor analysis. The KMO measure is 0.570 in this investigation. Bartlett's Test of Sphericity determines whether factor analysis is acceptable by examining the dataset's connected variables. A significant p-value of 0.000 was obtained using an estimated chi-square value of 1147.529 with 190 degrees of freedom. This supports component

**Table 6:** Eigen Values Based on Factor Affecting Work Life Balance

Total Variance Explained									
Component	<i>Initial Eigen Values</i>			<i>Extraction Sums of Squared Loadings</i>			<i>Rotation Sums of Squared Loadings</i>		
	<i>Total</i>	<i>% of Variance</i>	<i>Total %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Total %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Total %</i>
1	2.220	11.102	11.102	2.220	11.102	11.102	1.780	8.900	8.900
2	1.813	9.065	20.167	1.813	9.065	20.167	1.719	8.593	17.493
3	1.689	8.444	28.611	1.689	8.444	28.611	1.677	8.385	25.878
4	1.407	7.036	35.647	1.407	7.036	35.647	1.488	7.442	33.320
5	1.354	6.771	42.419	1.354	6.771	42.419	1.358	6.792	40.111
6	1.219	6.093	48.512	1.219	6.093	48.512	1.342	6.708	46.819
7	1.129	5.647	54.159	1.129	5.647	54.159	1.264	6.318	53.137
8	1.018	5.092	59.251	1.018	5.092	59.251	1.223	6.114	59.251
9	0.988	4.939	64.190						
10	0.928	4.638	68.828						
11	0.855	4.274	73.102						
12	0.823	4.115	77.217						
13	0.727	3.633	80.850						
14	0.695	3.477	84.327						
15	0.685	3.426	87.753						
16	0.619	3.094	90.847						
17	0.594	2.969	93.816						
18	0.548	2.738	96.553						
19	0.351	1.753	98.306						
20	0.339	1.694	100.000						

Sources: Primary data

analysis of the dataset since there is enough evidence to reject the null hypothesis of no association among variables. Communities are the percentage of variation in each variable explained for by factor analysis factors. The table shows original and extracted communalities. Higher communalities after extraction imply that the variables are well-represented by the factors extracted during factor analysis, whereas lower communalities indicate that the variables may be more impacted by error or unexplained variation.

Each factor in table denotes the underlying dimensions that encapsulate the shared variance among the observed variables. The initial eight factors demonstrate substantial loadings, which account for a substantial portion of the total variance in the data.

**Table 7:** Rotated Component Matrix Based on Factor Affecting Work Life Balance Components

	1	2	3	4	5	6	7	8
Q1		0.854						
Q2								0.804
Q3				0.556				
Q4						0.769		
Q5						0.781		
Q6			0.835					
Q7	0.662							
Q8	0.647							
Q9	0.425							
Q10				0.552				
Q11							0.781	
Q12				0.507				
Q13				0.458				
Q14					0.804			
Q15								0.521
Q16					0.665			
Q17							0.608	
Q18			0.892					
Q19		0.879						
Q20	0.671							

Sources: Primary data

The descriptive data provide insights into how working women in the IT industry perceive various components impacting their work-life balance. The mean scores for the 20 variables analysed and ranged from 1.064 to 1.901, demonstrating differing levels of agreement

**Table 8:** Factor Loading Matrix Based on Factor Affecting Work Life Balance

Variables	Factor Loading		Mean
Q7	0.662	F1	1.901
Q8	0.647		
Q9	0.425		
Q20	0.671		
Q1	0.854	F2	1.293
Q19	0.879		
Q6	0.835	F3	1.281
Q18	0.892		
Q3	0.556	F4	1.699
Q10	0.522		
Q12	0.507		
Q13	0.458		
Q14	0.804	F5	1.131
Q16	0.655		
Q4	0.769	F6	1.159
Q5	0.781		
Q11	0.781	F7	1.085
Q17	0.608		
Q2	0.804	F8	1.064
Q15	0.521		

Sources: Primary data

or perception across various characteristics. Factors with higher mean ratings indicate more agreement or awareness of their influence on work-life balance. For example, factor 1 with variables Q7, Q8, Q9, and Q20 seems to have a greater impact on respondents' perceptions of work-life balance. Factor 8 with lower mean scores, such as Q2 and Q15, may have a reduced perceived influence on work-life balance.

- **Factor 1: Satisfaction and rewards** – Successful inter role (Q7), Satisfied in work and family (Q8), Minimum role conflict (Q9), and Performance based reward (Q20) have factor loadings of 0.662, 0.647, 0.425, and 0.671, respectively, indicating positive associations with Factor satisfaction & Reward (F1). This indicates they measure a common concept.
- **Factor 2: Flexible work schedule** – The factor named Flexible work schedule (F2) is positively associated with variables such as Long working hours (Q1) and flexibility in work schedule (Q19).

- **Factor 3: Advantages and life balance** – The factor named life balance and advantages (F3) is positively associated with variables such as fluid life role (Q6) etc.
- **Factor 4: Work-life integration and policies** – Positively associated with variables like feel stressed to work at home after long office hours (Q3), adjustment with work and family (Q10), Work place and life (Q12) and Multiple role without difficulty (Q13). This indicates they measure a common concept.
- **Factor 5: Empowerment and motivation in the workplace** – Some variables, like job direction (Q14) and Motivational excitement (Q16), are positively linked to the Empowerment and motivation in the workplace (F5) factor, as shown by their factor loadings of 0.804 and 0.655, respectively. This means that they probably measure the same basic thing.
- **Factor 6: Human resources policies and job mobility** – A factor loading of 0.769 for work mobility and 0.781 for HR policies imply that variables like “feel shifting my job” (Q4) and “HR develops different policies” (Q5) are positively associated with factor F6.
- **Factor 7: Integrated lifestyle** – Factor loadings of 0.781 show that variables like integrated ordering of living activities (Q11) and Compensation / Increment Policies (Q17) are positively correlated with factor F7. This indicates they measure a common concept.
- **Factor 8: The management and control of work stress** – Variables such as (Q15) and stressed at work (Q2) demonstrate positive correlations with the factor “work stressed management & control” (F8).

## DISCUSSION AND INTERPRETATION

Demographic profile of respondents represents the Age, education level, marital status and total work experience in the IT sector. Among the identified factors, Factor 1, Successful inter role, Satisfied in work and family, Minimum role conflict, and Performance based reward contributes maximum towards work life balance among women employees. Another factor is like feel stressed to work at home after long office hours, adjustment with work and family, Work place

and life and Multiple roles without difficulty is the next. Another factor named Flexible work schedule with variables such as Long working hours and flexibility in work schedule also helps in balancing work and life.

## Some Strategies to Enhance Work-Life Balance

These guidelines for work-life balance will help to restore a healthy equilibrium between work and personal life by shifting the balance in the correct way.

1. During the course of the day, set aside time for breaks.
2. Keep to the designated work schedule
3. Keep a plan for the long term.
4. Go for what you love to do
5. In life, you need to get your priorities straight.
6. Don't work on assignments during breaks.
7. Be a socially active individual
8. Learn to say NO
9. Make your wellbeing is your top priorities

## CONCLUSION

It is important that every worker be regarded as an individual who has their own set of life goals and perspectives on what constitutes a good work-life balance. In order to meet the diverse requirements and expectations, Employer should make an effort to provide flexible working choices, provided that this is feasible. Also, it was found that Satisfaction and rewards, Advantages and life balances, work life balances and HR policies and empowerment and motivation at workplace are the factors play the most important role during work life balance among women employees.

The study too had some limitations, like, Time, financial resources and geographical area, because of this, it is challenging to generalise the findings.

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## Diving into the Data Stream

### *A Bibliometric Analysis of Digital Finance Literature and Involvement of Corporate Governance Using Systematic Literature Review*

Kapil Soni\*, Geetanjali\*, Dr Akanchha Singh\*\*, Dr. Lata Suresh\*\*\* and Dr. Sunil Kumar Roy\*\*\*\*

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#### ABSTRACT

*In this paper, the authors begin a comprehensive exploration of the growing scope of digital finance, paying particular attention to the complex interplay between digital finance advances and corporate governance principles. The objective is to unveil trends, patterns, and focal areas within the broader body of literature about digital finance, while also seeking to incorporate corporate governance considerations into this discussion. Authors carefully used research techniques that are augmented by the computational power of 'R' software for data processing and visualisation, and employing a systematic literature review methodology, authors analysed a vast range of articles. Authors highlight through this analysis the quantitative growth trajectory of digital finance research, which highlights qualitative shifts in emphasis, emerging topics, and influential contributors within this dynamic field. Authors leverage network analysis and citation mapping methods to elucidate the complex web of relationships between different research aspects and seminal works. This provides insight into how effective governance practices can underline the paramount importance of corporate governance frameworks, reduce risks and enhance the resilience and stability of financial systems in the digital age.*

**Keywords:** Digital Finance, Innovation, Corporate Governance, Investments, Financial Instruments, Technology, Investors.

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#### INTRODUCTION OF DIGITAL FINANCE

Digital finance is a multi-significant change in the paradigms of the financial sector to harness the advantages of financial services and optimize how financial services cover control time. Digital finance encompasses a wide range of innovations that extend to online banking services, mobile payments, cryptocurrency, clothing, crowdfunding platforms, and regulatory technology solutions. Thanks to the online banking service, people can always make bank transactions, transfer money beyond traditional bankers and pay invoices daily. By mobile payments, users can participate in transactions without friction using a smartphone, but cryptocurrencies offer con

to manage investments democratically on algorithms and portfolio positioning—management services for investors of all sizes. Crowdfunding platforms, on the other hand, provide access to capital. This will make it a startup that allows you to collect funds in the World Basin for entrepreneurs, backers and supporters. Pros create solutions in the area of technical regulations that optimize the compliance process of financial institutions and guarantee regulatory requirements in an accelerated and complex regulation support scenario. Generally, digital finance marks a change towards a more effective and more vital financial ecosystem but must be addressed alongside consumer protection, data secrets and systemic sustainability.

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## RESEARCH OBJECTIVES

The purpose of this article is to analyze the literature on participation in digital finance and corporate governance through a bibliographic analysis and systematic review. Its purpose is to identify scholarly output, collaborations, and trends, gaps, and provide information for future research and practical applications. The study also aims to develop a comprehensive framework that integrates digital finance and corporate governance principles, thereby improving understanding of both fields.

## REVIEW OF LITERATURE

Corporate governance encompasses the structures, processes, and institutions that allocate power and resource control (Davis, 2005). Researchers categorise corporate governance mechanisms as internal (e.g., board of directors) and external (e.g., shareholders) (Gillan, 2006). Institutional investors' ownership positively correlates with company performance, particularly for pressure-resistant investors (Cornett, Marcus et al., 2007). Institutional investors play a vital role in better monitoring and governance practices (Manya Srivardhan, 2009). Despite mixed evidence, good corporate governance is perceived to impact company performance positively (Murad H Harasheh, 2010). Institutional investment is associated with positive risk/performance relationships, dependent on ownership size and management influence (Hutchinson, Marion Seamer et al., 2015). In Pakistan, institutional ownership shows no association with firm performance (Afza and Nazir, 2015). Activist hedge fund managers significantly impact company governance (Bebchuk, Cohen et al., 2017). U.K. institutional holdings enhance financialization and competition (Alexiou, Mohamed et al., 2019). In China, institutional investors influence governance and executive pay negatively correlated with excessive management compensation (Zhu, Huang et al., 2021). Institutional investors exert long-term positive influence on corporate governance by pressuring management for shareholder interests (Kokotec, Orsag et al., 2021). Companies with distracted shareholders experience higher debt costs, influenced by CEO power, information asymmetry, and market competitiveness (Ghoul, Guedhami et al., 2022). Corporate governance practices vary in mitigating agency costs, with factors

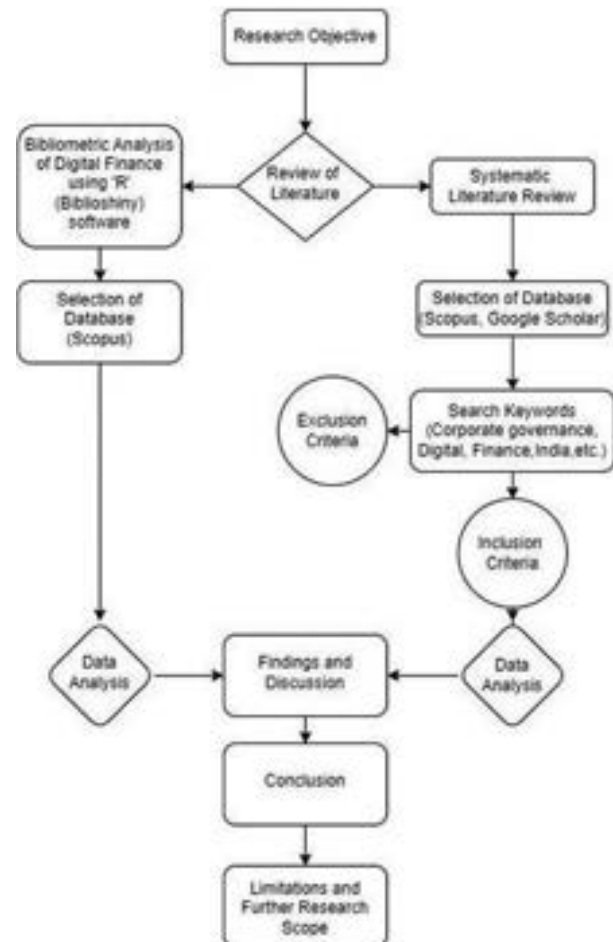
such as debt structure, executive ownership, and growth opportunities playing significant roles (Florackis, 2008). Changes in board structures have minimal impact on agency costs, while board ownership and debt reduction can alleviate agency conflicts (McKnight and Weir, 2009). The agency-based model of asset pricing suggests negligible detectable effects on institutional investment managers' actions (Brennan, Cheng et al., 2011). Agency costs negatively impact corporate governance risk across nations, with variations in implementation across sectors (ElKelish, 2017). The adoption of governance codes in Ghana reduces agency costs, with board size and ownership structure influencing them (Owusu and Weir, 2018). CEO duality affects firm value through internal capital allocation policies, aligning with agency theory (Aktas, Andreou et al., 2018). Managerial ownership and dividend policy play vital roles in mitigating operational expenses and reducing agency conflicts (Moez, 2018). Managerial ownership and debt financing serve as effective governance mechanisms in reducing agency costs in Chinese non-financial listed firms (Vijayakumaran, 2019). Institutional ownership positively impacts agency costs in Indonesian manufacturing firms, while long-term investment horizons contribute to improved corporate governance and firm performance mechanisms in Pakistani firms (Serly and Zulvia, 2019; Waheed and Malik, 2019). Efficient corporate governance procedures help mitigate management opportunistic behaviour and agency conflicts, with foreign investors playing a crucial role (Nguyen, Doan et al., 2020). Audit committees and lower financial leverage reduce agency costs, while board diversity and institutional ownership mitigate agency issues in Indian and Sri Lankan firms (Almaqtari, Al-Hattami et al., 2020; Salehi, Adibian et al., 2021; Rooly, 2021). However, internal governance mechanisms post-Indian Companies Act 2013 are found to be ineffective in addressing agency issues in the Indian corporate sector (T., 2021; Chaudhary, 2021). Institutional investors enhance firm-level financial competitiveness through improved corporate governance practices, ultimately boosting company performance and competitiveness (Wani, Haldar et al., 2023). Eng & Fikru (2022) illuminated the nuanced relationship between sustainability disclosures and performance among investor-owned electric utilities, highlighting variability across measures and advocating

for harmonized mandatory reporting to ensure accurate assessments. Rajgopal & Venkatachalam (n.d.) challenged perceptions of institutional investors as myopic by revealing their role in impeding earnings manipulation and reducing information asymmetries about future firm performance, particularly with increasing institutional ownership. Branco et al. (2023) uncovered disparities in tax-related sustainability reporting among electric utilities, shaped by coercive, normative, and mimetic isomorphism, with Spanish firms leading in sophistication due to specific legislation and initiatives. Venturelli et al. (2023) emphasized the need for further research on water utilities' biodiversity reporting practices to address gaps in knowledge and practice, particularly regarding motivations and approaches. García-Sánchez et al. (2022) contributed to a deeper understanding of corporate behaviour in sustainability by examining the influence of corporate governance mechanisms on CSR report assurance decisions, highlighting the role of board diversity and CSR committees. Nicolo et al. (2023) underscored the importance of corporate governance mechanisms like board independence in utilities' ESG disclosure levels, emphasizing meticulous board member selection to meet stakeholder information needs and demonstrate commitment to sustainable development. Areneke et al. (2022) showed how foreign institutional investors enhance corporate governance in weak institutional environments, while Krishnan et al. (2016a) revealed that top-performing hedge funds succeed through reputation and expertise, driving operational improvements amidst competition. (Riaz et al., 2022) found IFRS adoption in Australia enhances transparency, driven by digitalization and MNCs' proactive measures. (Brockman et al., 2023) revealed disparities in risk disclosures between Chinese and Hong Kong markets due to regulatory changes, affecting investor perceptions differently. (Gao et al., 2023) identified biases favouring SOEs in China's credit allocation, with regional variations, informing fairer credit market mechanisms. (Xue et al., 2023) showed mutual fund herding destabilizes China's stock market, moderated by factors like sentiment and ownership, contributing to discussions on market stability.

## RESEARCH METHODOLOGY

Research methods included Bibliometric analysis and systematic reviews of the literature to identify relevant articles related to digital finance and corporate governance. systematic literature review was conducted with dataset spans from 2006 to 2024, to know how corporate governance plays a vital role in digital finance. And data set spans from 2010 to 2024 is taken to conduct bibliometric analysis in which authors used 2043 documents, 492 sources and information about 5715 authors. Various research papers were used for analysis, systematic literature review with a comprehensive search strategy, implementation of criteria, quality assessment, data synthesis and finally, reporting the findings. On the other side to conduct a bibliometric analysis of 'Digital finance in India' data was collected from the Scopus database and for analysis 'R' (Biblioshiny) software was used.

### Research Framework



**Figure 1** (Source: Authors own work)

## FINDINGS AND DISCUSSION

Findings have come up by adopting various research techniques and analyzing the data mentioned in Research Methodology, its discussion is given below.

### Transformation of the Financial Industry in India through Technological Advancements

Advances in technology have significantly transformed the Indian financial industry, leading to significant changes in the access, delivery and management of financial services. Here:

1. **Digital Payment Revolution:** Digital Payment decisions driven by such initiatives as Unified Payments Interface (UPI) and India's Aadhar-SAC system were quickly adopted. UPI has revolutionized payments in India and enables seamless money transfers between real bank accounts through mobile applications.
2. **Mobile Banking and Wallet:** Mobile banking and digital wallets are becoming increasingly popular, allowing users to use their smartphones to conduct various financial transactions such as bill payments, top-ups and online purchases. Services like Paytm, PhonePe and Google Pay are widely accepted and provide convenient and secure payment solutions to millions of Indians.
3. **Expansion of the Fintech Ecosystem:** The rise of financial technology (FinTech) startups is driving innovation and competition in the financial sector. These startups use technology to offer a variety of financial products and services, including loans, wealth management, insurance and investment platforms. Fintech companies have played an important role in meeting the needs of India's poor and promoting financial inclusion.
4. **Digital Loan Platforms:** Digital loan platforms are an alternative to traditional bank channels and provide quick and hassle-free access to loans for individuals and small and medium-sized enterprises. These platforms use advanced algorithms for data analysis and automated learning to evaluate loan eligibility and personalized credit product proposals tailored to the needs of borrowers that reduce the time and documentation associated with loan approval.

5. **Blockchain and Cryptocurrency:** Despite the general uncertainty, blockchain and cryptocurrency technology reveals a lot of interest in India. Blockchain has the potential to enable payments through various financial processes, such as payments, commercial financing, and personality verification. Cryptocurrencies like Bitcoin and Ethereum have gained popularity among Indian investors and traders, but their regulation is unknown.
6. **Regulation Initiatives and Reforms:** Regulatory organizations, such as the Bank of India (RBI) and the Securities and Exchange Board of India (SEBI), have introduced some initiatives and reforms for digital finance and package regulations. This includes measures to maintain systemic stability and integrity while strengthening cyber security, enhancing consumer protection and promoting financial sector innovation.

Advances in technology have not only modernized the Indian financial industry but also democratized financial services, contributing to innovation and economic growth. However, it is important to resolve issues related to cybersecurity, privacy, compliance and digital literacy to ensure the continued success and sustainability of India's digital funding ecosystem.

### Corporate Governance and Its Importance

Corporate Governance is the basis of responsible business management, which includes systems, processes and compassion that direct and control business activities and ensure responsibilities, transparency, justice and honesty in decisions and exploitation. In short, effective business governance provides a framework for companies to balance the interests of various stakeholders, including shareholders, employees, customers, suppliers, and complex communities. After establishing a clear right line, emphasizing roles and responsibilities, and surveying and balancing the balance, the mechanism of business governance will help to reduce the conflict of institutions and adjust the profits of shareholders: shareholder value sharing and the value of long-term sustainability. Furthermore, strong business governance practices contribute to building the trust and credibility of investors, creditors, regulatory authorities and other stakeholders, enhancing a company's reputation

and reducing capital costs. Furthermore, in a global business environment in an accelerated and negotiated complex, it guarantees that companies are ethical and responsible for risk management, complex regulatory requirements and ethical dilemmas, therefore, reliable corporate management is essential. It works for social interests. After all, effective management practices are not only ideal requirements but also a strategic mandate, which emphasizes the flexibility, competitiveness and validity of today's dynamic scenarios.

### Corporate Governance Mechanisms in Digital Finance

The corporate governance mechanism plays an important role in ensuring the stability, transparency and responsibility of companies operating in dynamic sectors, and fostering the rapid development of digital finance. Technological innovation in this complex landscape requires a solid management structure, rapid market changes, increased regulation research, reducing risk, protecting investors, and promoting long-term construction. The main management mechanisms include the board of directors meeting, risk management structure, internal controls, compliance program and co-cola interaction strategy. The Board of Directors, including experienced experts, guarantees strategic management, solutions and monitoring performances, especially in areas such as cyber security, privacy, data and digital most critical regulation requirements. finance. The risk management framework helps to identify, evaluate

and mitigate risks related to digital financial services, such as business, technology and regulation risks, and internal controls over financial statements, processes, procedures and procedures. Complete programs are critical to guaranteeing application methods, industry rules and standards, navigating the complex regulatory environment, and avoiding potential legal and known pitfalls. Furthermore, effective shareholder strategies contribute to transparency, trust, dialogue with investors, customers, regulatory authorities and other stakeholders, and coordination of interests and responsible commercial practices. By introducing a solid governance management mechanism tailored to the unique problems and capabilities of digital finance, companies increase flexibility, reliability and sustainability in a fast-paced and conservative environment, and maximize the benefits they can provide to all stakeholders.

### Annual Scientific Production

Table 1

Year	Articles	Year	Articles
2010	4	2018	44
2011	2	2019	107
2012	7	2020	201
2013	6	2021	387
2014	6	2022	468
2015	13	2023	691
2016	17	2024	57
2017	33		

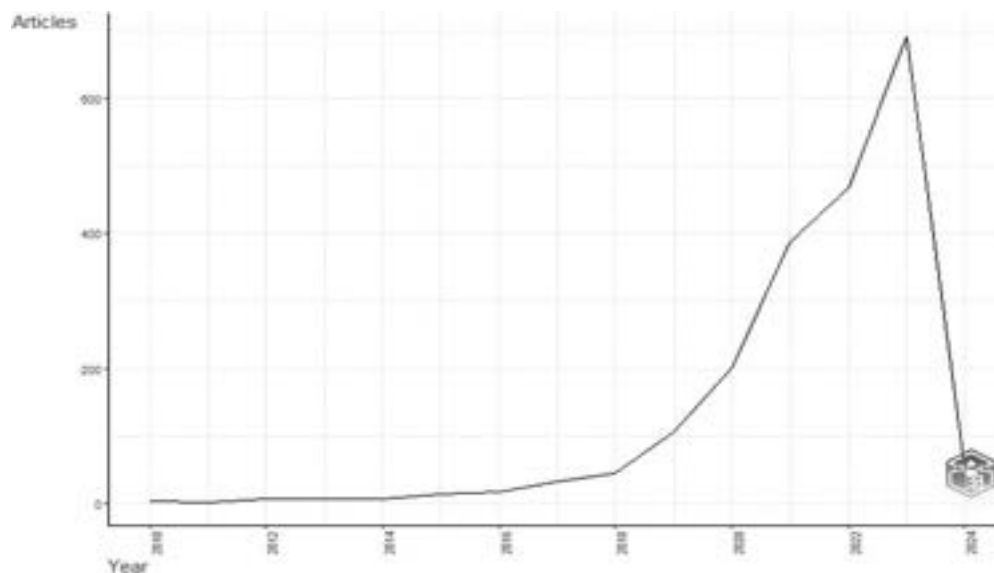


Figure 2: Annual Scientific Production

It shows that the number of annual outputs has increased significantly in recent years. The number gradually increased with fluctuations. It has shown a significant increase in research activities during this period, from 107 articles to 691 articles. However, the results are going down significantly in 2024. This probably points to other external factors influencing other external factors that influence research or publication indicators. Detailed research on the main causes of these fluctuations could provide valuable information on dynamics in scientific performance in this region.

Average Citation Per Year

Table 2

Year	Mean TC Per Art	N	Mean TC Per Year	Citable Years
2010	42.75	4	2.85	15
2011	18.5	2	1.32	14
2012	39	7	3	13
2013	72.5	6	6.04	12
2014	34.67	6	3.15	11
2015	30.62	13	3.06	10
2016	36.76	17	4.08	9
2017	101.09	33	12.64	8

Year	Mean TC Per Art	N	Mean TC Per Year	Citable Years
2018	38.39	44	5.48	7
2019	34.23	107	5.7	6
2020	28.82	201	5.76	5
2021	21.42	387	5.36	4
2022	12.98	468	4.33	3
2023	3.59	691	1.79	2
2024	1.33	57	1.33	1

The average citation per year varies over many years, reflecting fluctuations in the research area. For example, the average for the past year is relatively low, such as the 2010 article averaging 42.75 citations. The annual peaks appear in 2013 and 2017 at tops of 72.5 and 101.09 respectively, meaning a period of particularly impressive research results. However, especially in 2023 and 2024, the average value dropped from 3.59 to 1.33, the next year, the next year, and the next year. This lack may indicate a problem with changing the direction of research and possibly maintaining a high level of risk. These fluctuations, the factors that contribute to performance, and the implications of research in this area require more analysis to understand the results.

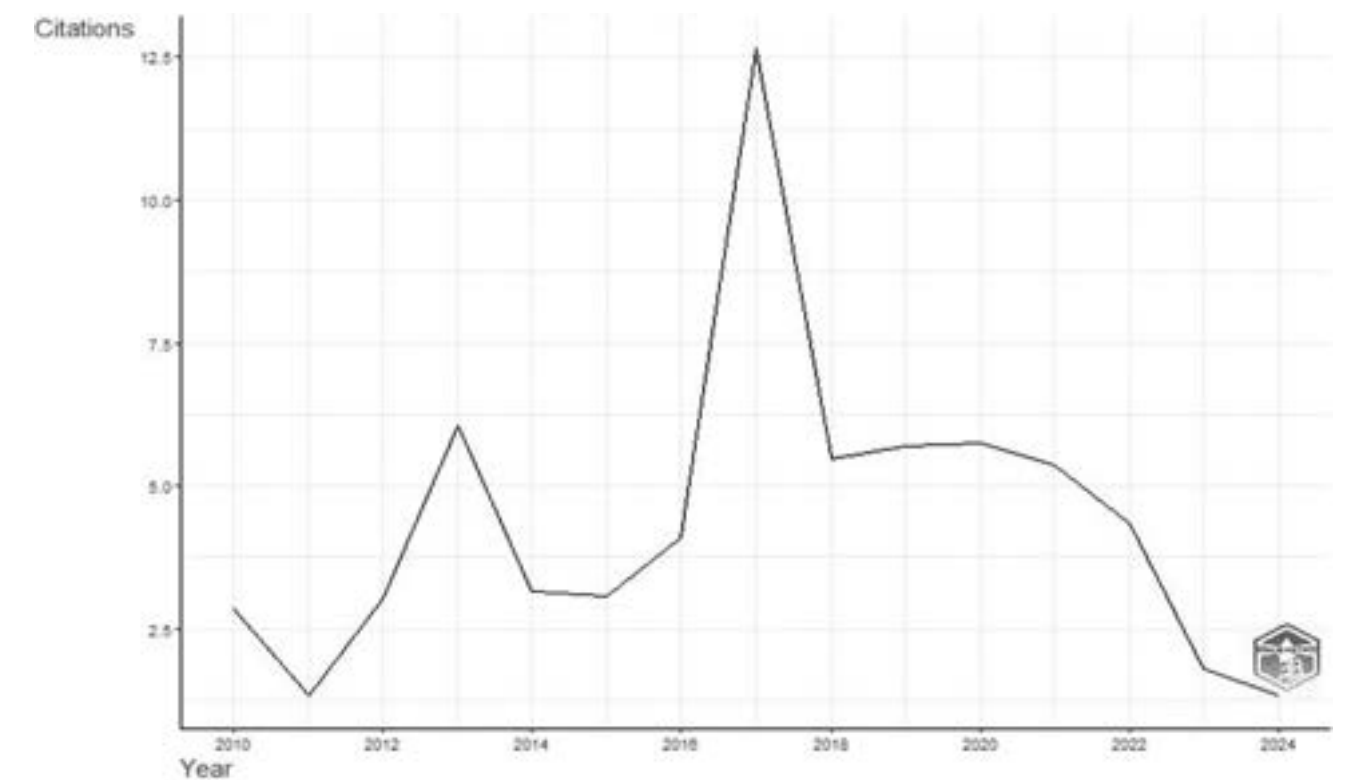


Figure 3: Average Citation Per Year

## Most Relevant Sources

**Table 3**

Sources	Articles
Journal of risk and financial management	297
Cogent business and management	92
Technological forecasting and social change	67
Journal of Business Research	48
Risks	34
Journal of innovation and knowledge	31
Financial innovation	30
Innovative marketing	28
Journal of theoretical and applied electronic commerce research	27
Banks and bank systems	24

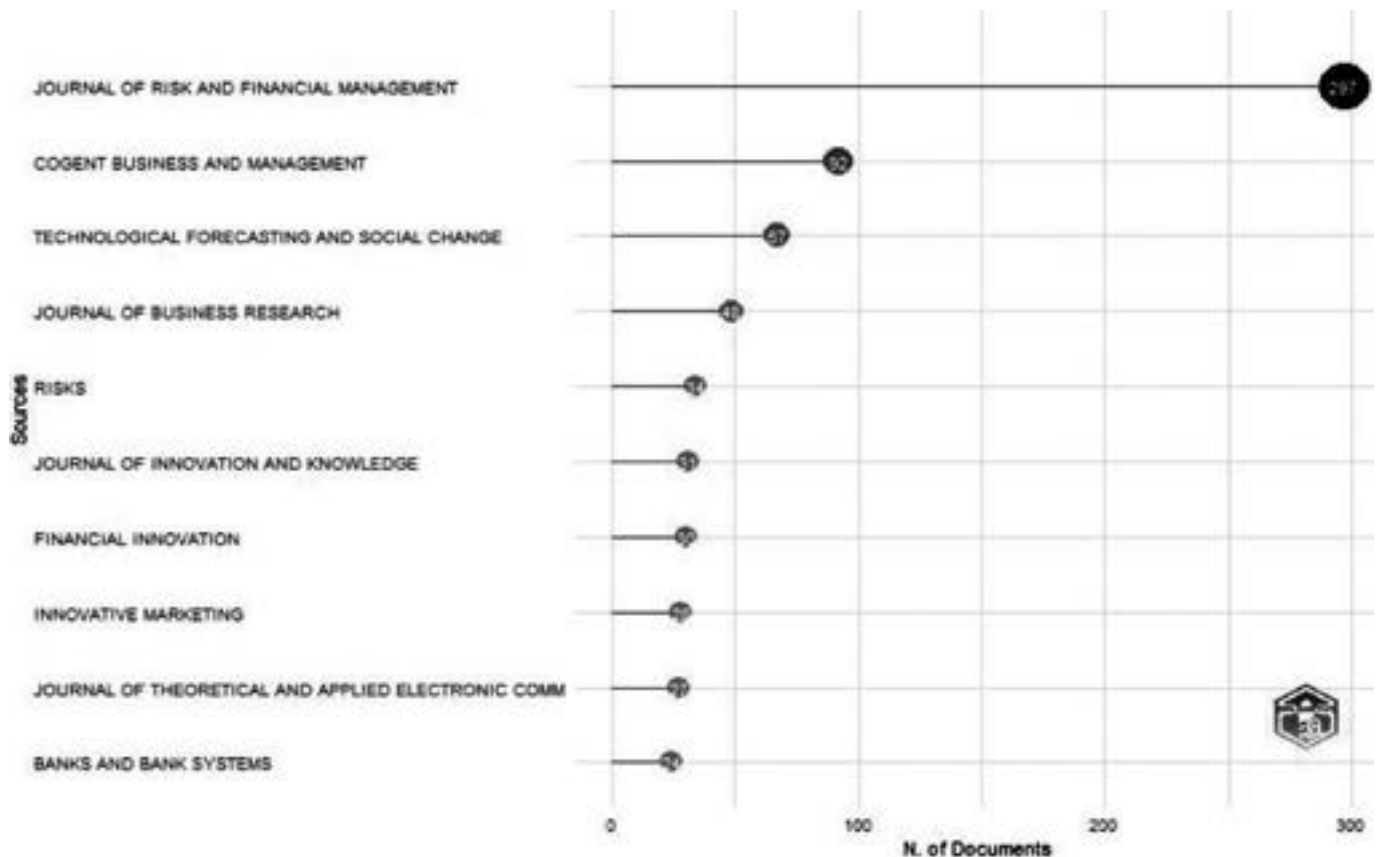
The most appropriate information sources based on the number of published articles are emphasized by the “Journal of Risk and Financial Management” as a major source with 297 articles, which has a significant influence and contribution to the field. The following includes an article “Technological Forecasting and Social Change”, a record of “Precise Company and Management” and 67, which implies the importance

of risk and financial management. Other well-known information sources include 48 “Business Journal” articles, 34 “Risk” articles, and 31 “Journal of Innovation and Knowledge” articles. In addition, “Financial Innovation, \”” Innovative Marketing, and “Journal of Theoretical and Applied Research of Electronic Merchants” contribute to the promotion of 30, 28, and 27, respectively.

## Core Sources by Bradford’s Law

**Table 4**

Source	Rank	Freq	Cumfreq	Zone
Journal of risk and financial management	1	297	297	Zone 1
Cogent business and management	2	92	389	Zone 1
Technological forecasting and social change	3	67	456	Zone 1
Journal of Business Research	4	48	504	Zone 1
Risks	5	34	538	Zone 1
Journal of innovation and knowledge	6	31	569	Zone 1



**Figure 4: Most Relevant Sources**

Source	Rank	Freq	Cumfreq	Zone
Financial innovation	7	30	599	Zone 1
Innovative marketing	8	28	627	Zone 1
Journal of theoretical and applied electronic commerce research	9	27	654	Zone 1
Banks and bank systems	10	24	678	Zone 1

Bradford's law is expected to classify information sources according to frequency of occurrence, and major information sources are expected to make up the majority of the document. In this analysis, 297 articles are displayed in "Journal of Risk and Financial Management" as the main source, and then "Constantan Business and Management" continues with 92 articles and "Journal of Risk and Financial Management" 67 articles. These sources fall within Bradford Zone 1, which represents a significant contribution to the literature on risk and financial management. Other well-known main sources include "business magazines, risk," and "innovation and knowledge magazines", which explain their importance among scientists.

### Sources' Local Impact by H Index

Table 5

Element	H_index	G_index	M_index	TC	NP	PY_start
Journal of risk and financial management	24	33	4	2343	297	2019
Journal of Business Research	23	48	2.875	2716	48	2017
Technological forecasting and social change	23	48	2.55555556	2382	67	2016
International journal of information management	14	17	1.16666667	3203	17	2013
Journal of theoretical and applied electronic commerce research	12	23	1.71428571	545	27	2018

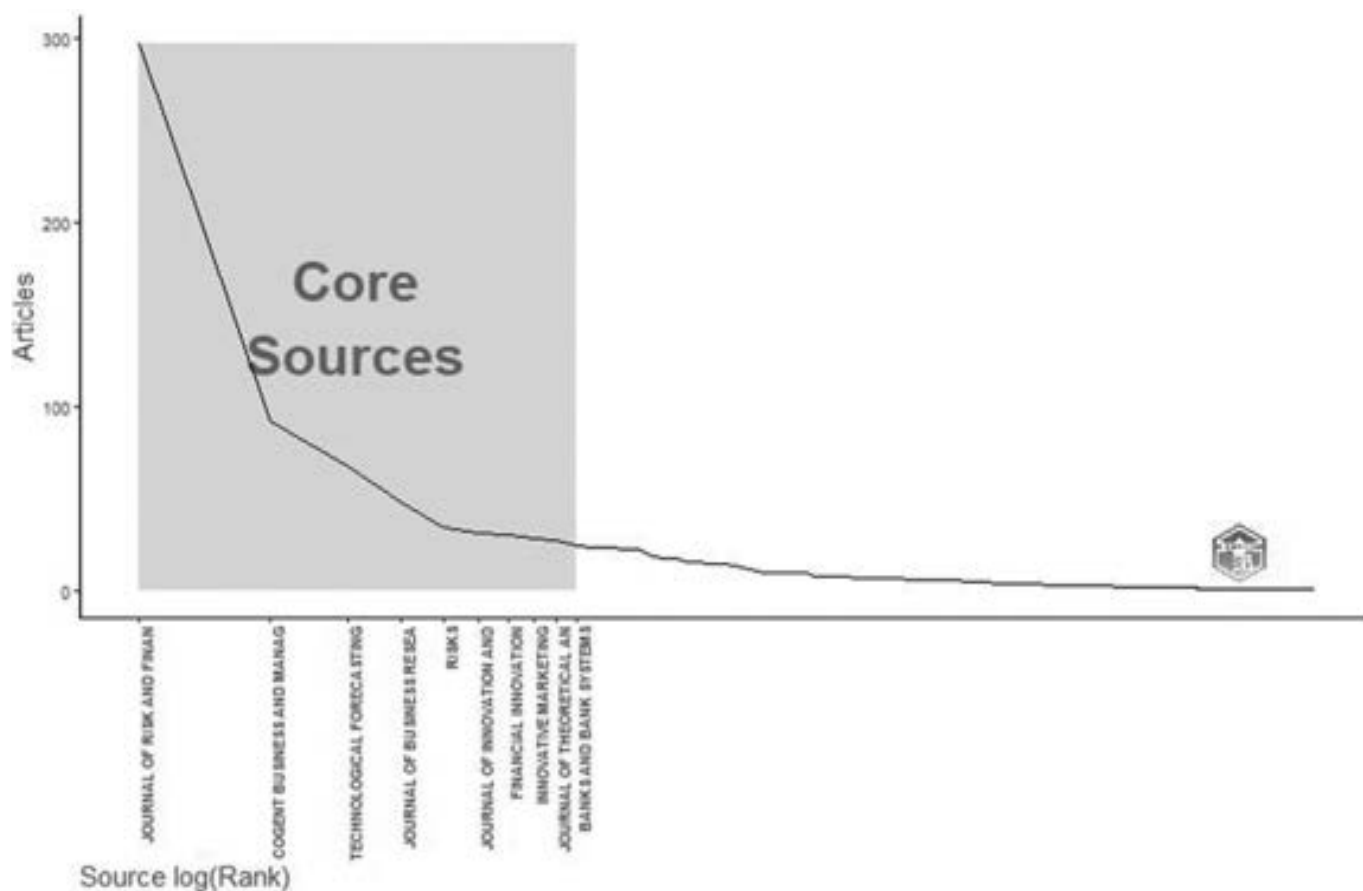


Figure 5: Core Sources by Bradford's Law



Element	H_index	G_index	M_index	TC	NP	PY_start
Financial innovation	11	21	1.83333333	457	30	2019
Journal of innovation and knowledge	11	23	2.75	568	31	2021
Cogent business and management	10	18	1.42857143	435	92	2018
Technology in society	10	17	1.66666667	805	17	2019
Journal of Cleaner Production	9	21	1.28571429	453	23	2018

The Local impacts of a source are evaluated based on the H index, which reflects both published performance and citations to specific sources. At the top of the list, there is a 24-hour index, risk and financial management magazine, which has a strong influence in this field, followed by “business newspapers” and “technology forecasting, and social change”. In H. “Index 23. Confirmed citations have a fair impact on the high value of the index H compared to the number of articles published in these sources.” These results indicate the importance of this source in the context of the source.

## Sources Production Over Time

Table 6

Year	Journal of Risk and Financial Management	Cogent Business and Management	Technological Forecasting and Social Change	Journal of Business Research	Risks
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	1	0	0
2017	0	0	2	1	0
2018	0	2	6	2	0
2019	29	3	10	2	0
2020	75	8	15	3	0
2021	181	18	27	14	4
2022	211	37	37	28	11
2023	297	91	62	46	34
2024	297	92	67	48	34

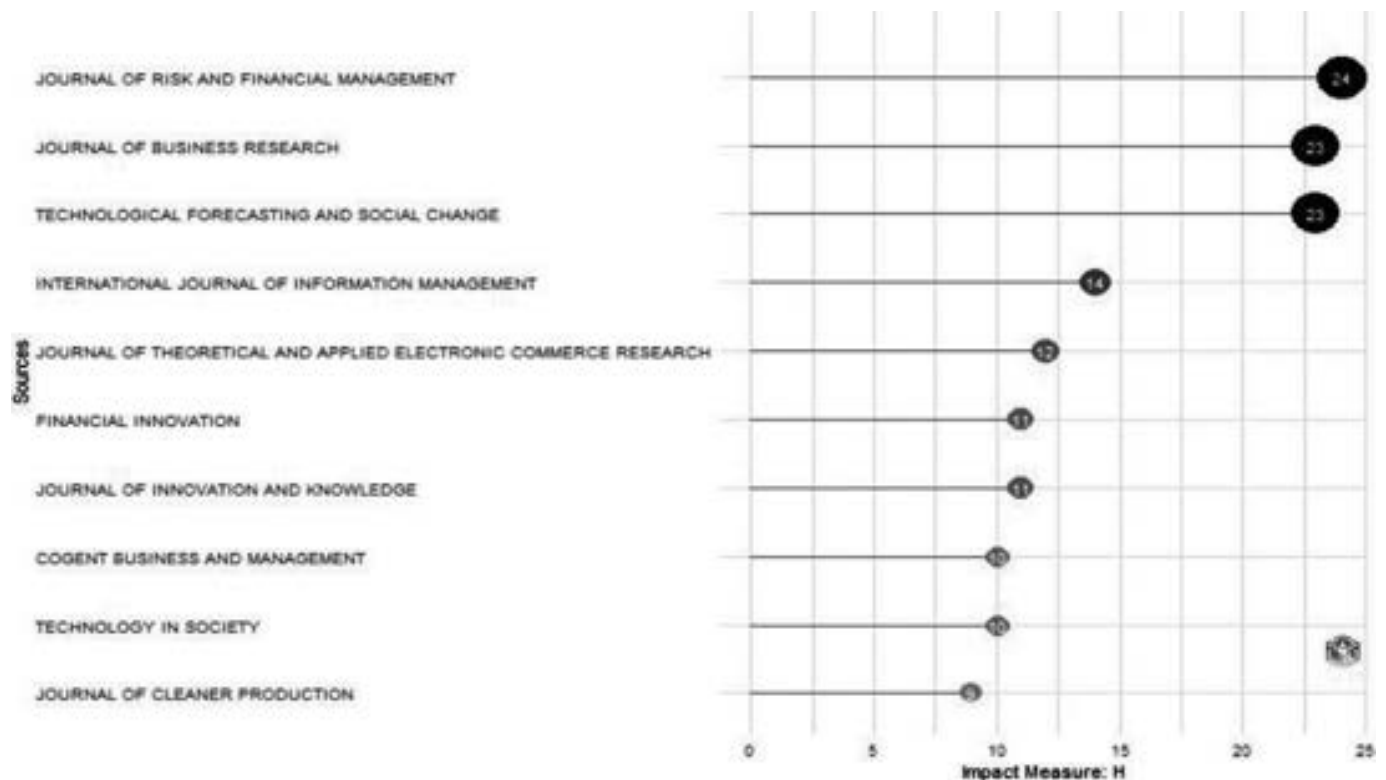


Figure 6: Sources' Local Impact by H Index

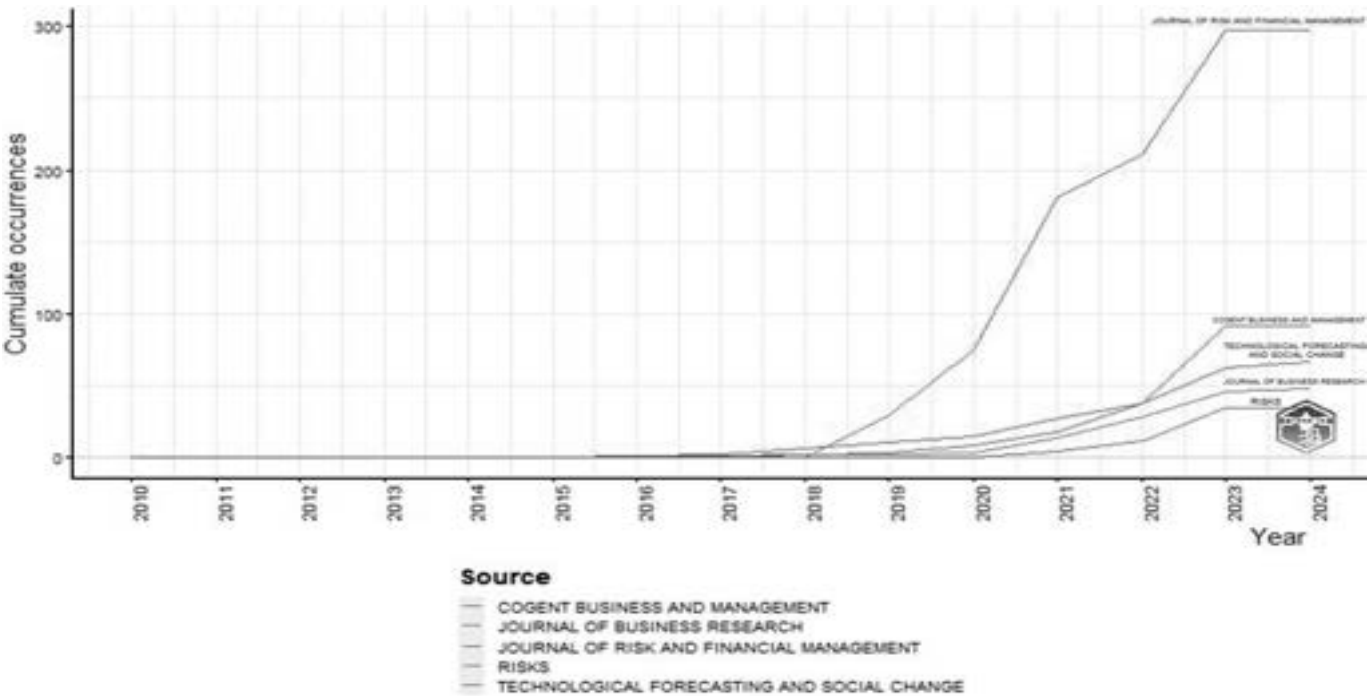


Figure 7: Sources Production Over Time

The production of articles over time for the selected sources shows different models of growth and stability. “Journal of Risk and Financial Management” and “Cogent Business and Management” show continuous growth, “Journal of Risk and Financial Management” continues to have a high result, achieving 297 articles and maintaining this level in 2024 “Technical and Social Forecasts and Changes” show a significant increase in output since 2019, while the “Journal of Business Research” maintains a more gradual but steady increase in output, with no significant growth observed.

Most Relevant Author

Table 7

Authors	Articles	Articles Fractionalized
Kumar S	29	7.36666667
Dwivedi YK	28	5.81607958
Kumar A	25	5.34285714
Rastogi S	18	5.15952381
Dhir A	16	3.43333333
Rupeika-Apoga R	12	3.38333333
Sharma P	12	3.95
Rana NP	11	2.05893673
Grima S	10	2.16666667
Lim WM	9	1.83333333

Based on the number of articles written, the most relevant author is Kumar S, who has 29 articles. Taking into account broken authority, which is optimized for situations in which multiple authors contribute to the same article, Dwivedi emerged as the most relevant author with 28 articles. Kumar A with 25 articles and Rastogi S with 18 articles.

Author’s Production Over Time

Table 8

Author	Year	Title	Source	DOI	TC	Tcpy
Kumar S	2023	Input, outcome, and Impact: a program-informed Model to improve the effectiveness of corporate social marketing	Social marketing quarterly	10.1177/15245004231209101	0	0
Kumar S	2023	Marketing Analytics: the bridge between customer psychology and marketing decision-making	Psychology and marketing	10.1002/mar.21908	1	0.5
Kumar S	2023	An Intelligent Method for supply chain finance selection using supplier segmentation: a payment risk portfolio approach	Cleaner logistics and supply chain	10.1016/j.clscn.2023.100115	1	0.5
Kumar S	2023	The six decades of the capital asset pricing model: A research agenda	Journal of risk and financial management	10.3390/jrfm16080356	0	0

Author	Year	Title	Source	DOI	TC	T <sub>cpy</sub>
Kumar S	2023	Covid-19 and management education: From pandemic to endemic	International journal of management education	10.1016/j.ijme.2023.100801	9	4.5
Kumar S	2023	Mapping the venture capital and private equity research: A bibliometric review and future research agenda	Small business economics	10.1007/s11187-022-00684-9	18	9
Kumar S	2023	Still our most important asset: A systematic review on human resource management in the midst of the fourth industrial revolution	Journal of innovation and knowledge	10.1016/j.jik.2023.100403	2	1
Kumar S	2023	Enablers for growth of cryptocurrencies: A fuzzy—ism benchmarking	Journal of risk and financial management	10.3390/jrfm16030149	1	0.5
Kumar S	2023	A systematic literature review of the risk landscape in fintech	Risks	10.3390/risks11020036	5	2.5
Kumar S	2023	Border disputes, conflicts, war, and financial markets research: a systematic review	Research in international business and finance	10.1016/j.ribaf.2023.101972	15	7.5

In 2023, Kumar S showed remarkable productivity and diversity in research performance across multiple fields. Its contributions span a variety of topics, including social marketing companies, marketing analytics, supply chain financing, and personnel management in the fourth industrial revolution. Specifically, Kumar S engaged with contemporary topics such as the pandemic impact of Koch 19 and the evolving landscape of cryptocurrency. His work was published in prestigious journals such as “Social Marketing Quarterly”, “Psychology and Marketing” and “Journal of Risk and Financial Management”, which has shown absolute expertise and significant scientific impact in a year.

### Author’s Productivity through Lotka’s Law

Table 9

<i>N.Articles</i>	<i>N.Authors</i>	<i>Freq</i>
1	5058	0.88503937
2	428	0.07489064
3	132	0.02309711

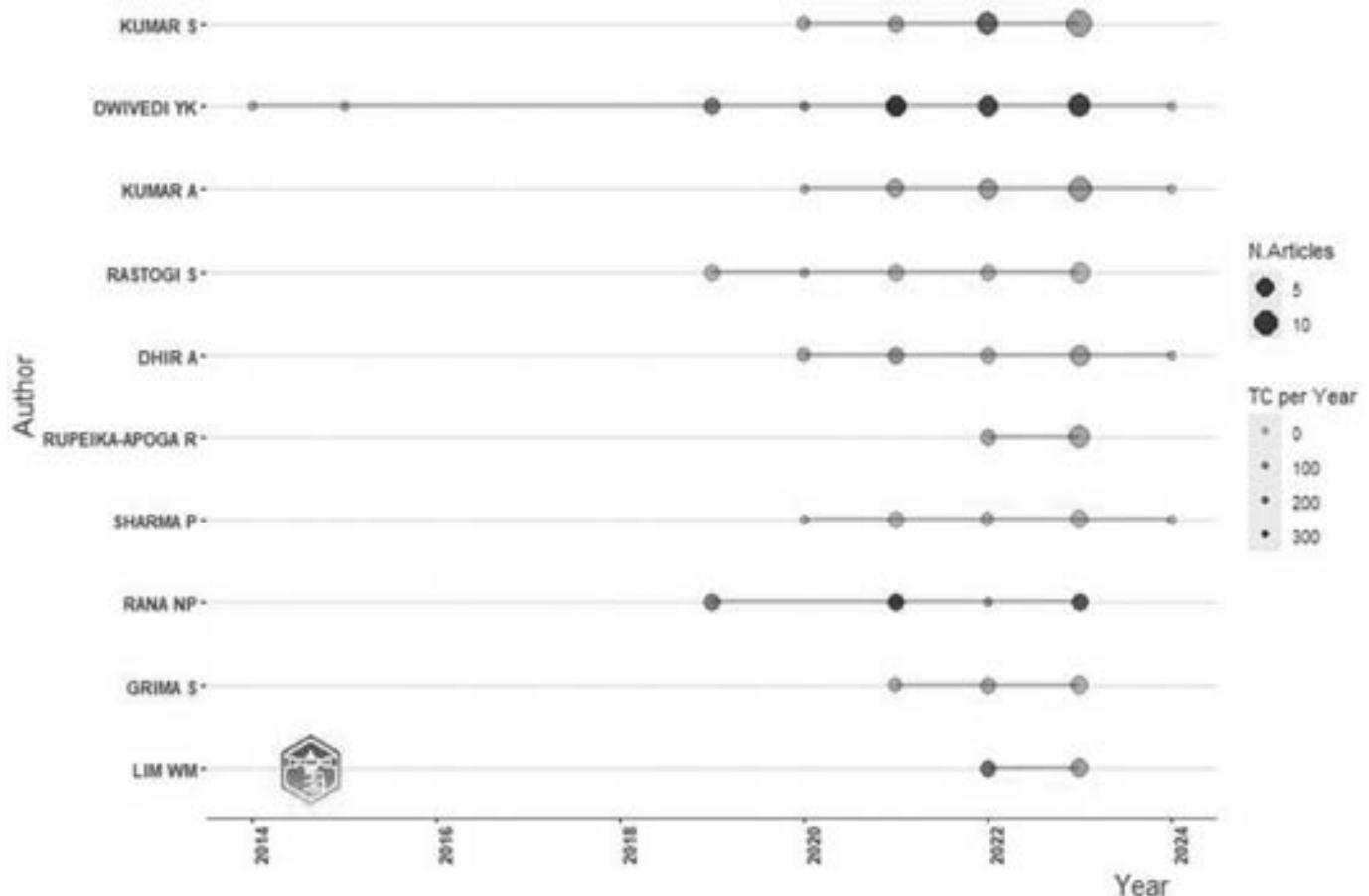


Figure 8: Author’s Production Over Time

<i>N.Articles</i>	<i>N.Authors</i>	<i>Freq</i>
4	37	0.00647419
5	21	0.00367454
6	14	0.00244969
7	10	0.00174978
8	5	0.00087489
9	1	0.00017498
10	1	0.00017498
11	1	0.00017498
12	2	0.00034996
16	1	0.00017498
18	1	0.00017498
25	1	0.00017498
28	1	0.00017498
29	1	0.00017498

Lotka's law describes the distribution of authors' productivity in a given field and shows a model in which a small number of authors produce the majority of articles, while the majority of authors contribute. The law holds in this analysis, a large majority of authors (88.5%) write only one article. With an increasing number of policies per writer, the frequency decreases rapidly, reflecting the decline in the number of high-productivity writers. For example, only 0.17% of authors indicate 9 or more items. This distribution highlights the uneven distribution of productivity among authors and highlights the importance of

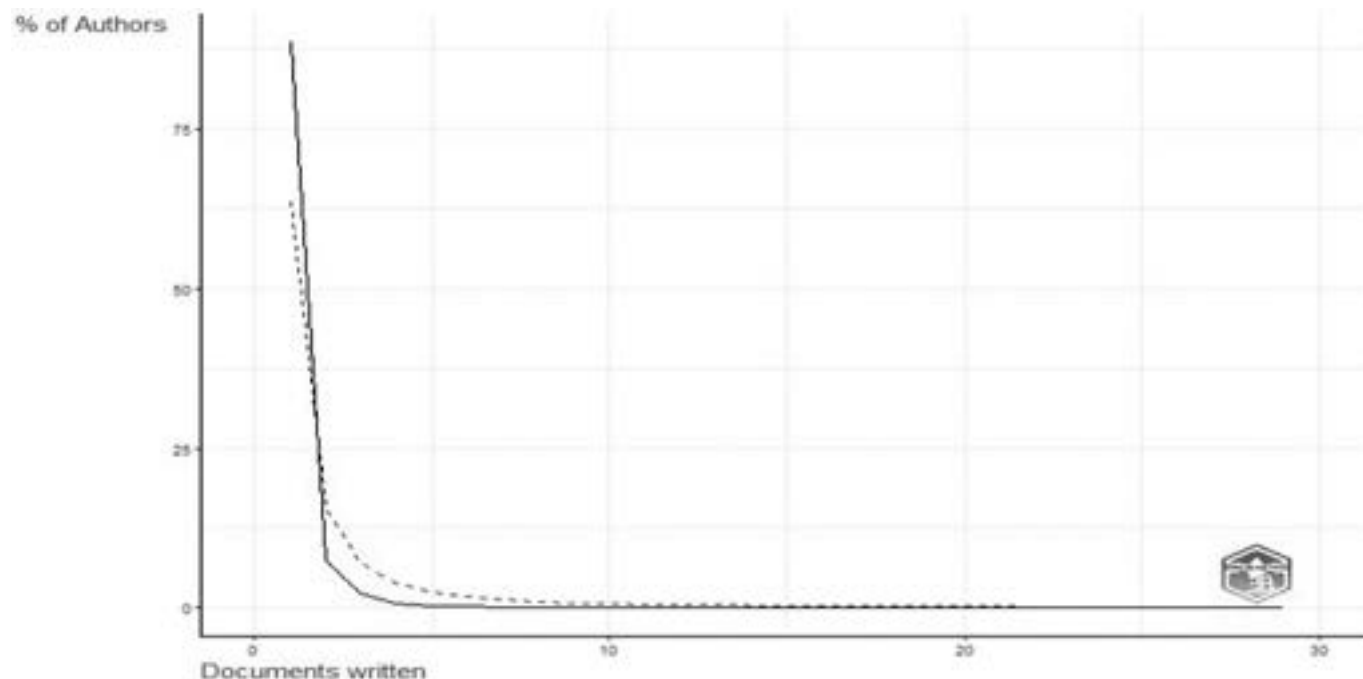
underrepresented authors in scientific production in the field.

### Most Relevant Affiliations

**Table 10**

<i>Affiliation</i>	<i>Articles</i>
Swansea University	52
Symbiosis International (Deemed University)	45
Griffith University	23
Coventry University	22
Indian Institute of Technology	22
Tomas Bata University In Zlin	21
University of Johannesburg	21
Jiangsu University	20
King Abdulaziz University	20
Bucharest University of Economic Studies	19

The most relevant affiliations based on the number of associated articles are Swansea University with 52 articles, Symbiosis International (Assunt University) with 45 articles and Griffith University with 23 articles. These bonds show a significant research output and a scientific contribution to their respective fields. Coventry University and the Indian Institute of Technology are also notable, with 22 articles each, indicating their substantial involvement in academic research and publishing. Other standout tiers are Tomas Bata University, the University of



**Figure 9:** Author's Productivity through Lotka's Law

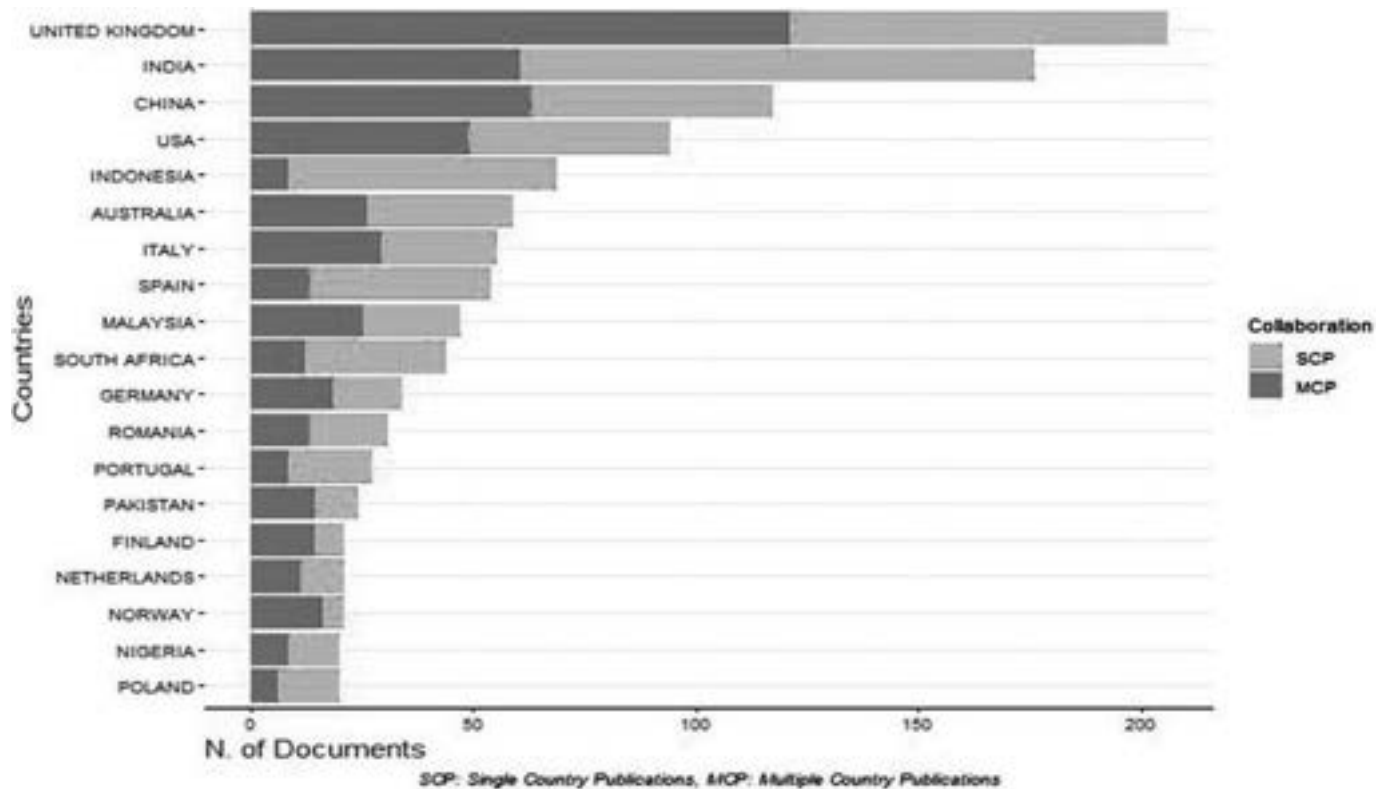


Figure 10: Corresponding Author's Countries

Johannesburg, Jiangsu University, King Abdulaziz University and the University of Economic Studies of Bucharest, all of which contribute significantly to the discourse of researchers with their respective research output.

### Corresponding Author's Countries

In summarizing data on the countries of the authors involved, the United Kingdom emerges as the most frequent country with a high correlation of multi-page publications (MCP), indicating an active international collaboration. India and China lag far behind in the execution of important scientific results, the relationship between single-country (SCP) publications in India shows. The United States also maintains a notable aspect with a balanced distribution between the SCP and MCP. Other countries such as Indonesia, Australia, Italy, Spain and Malaysia contribute to the global research landscape, with each country having its unique models of collaboration and publication output. In general, these data underline the character of scientific research and collaboration, with countries around the world actively engaging in cooperative efforts to transfer knowledge and innovation.

### Country Production Over Time

Table 11

Country	Year	Articles
India	2010	1
India	2011	1
India	2012	1
India	2013	1
India	2014	2
India	2015	14
India	2016	20
India	2017	25
India	2018	45
India	2019	87

There has been a steady increase in the production from India over the years, reflecting its growing contribution to the scientific panorama. There has been a significant increase in production since 2015 from a single article per year from 2010 to 2014. The number of articles went up to 14 in 2015 and reached 87 articles in 2019, indicating a growth path. This trend suggests an increasing presence of Indian researchers in academic publishing, possibly driven by progressive research

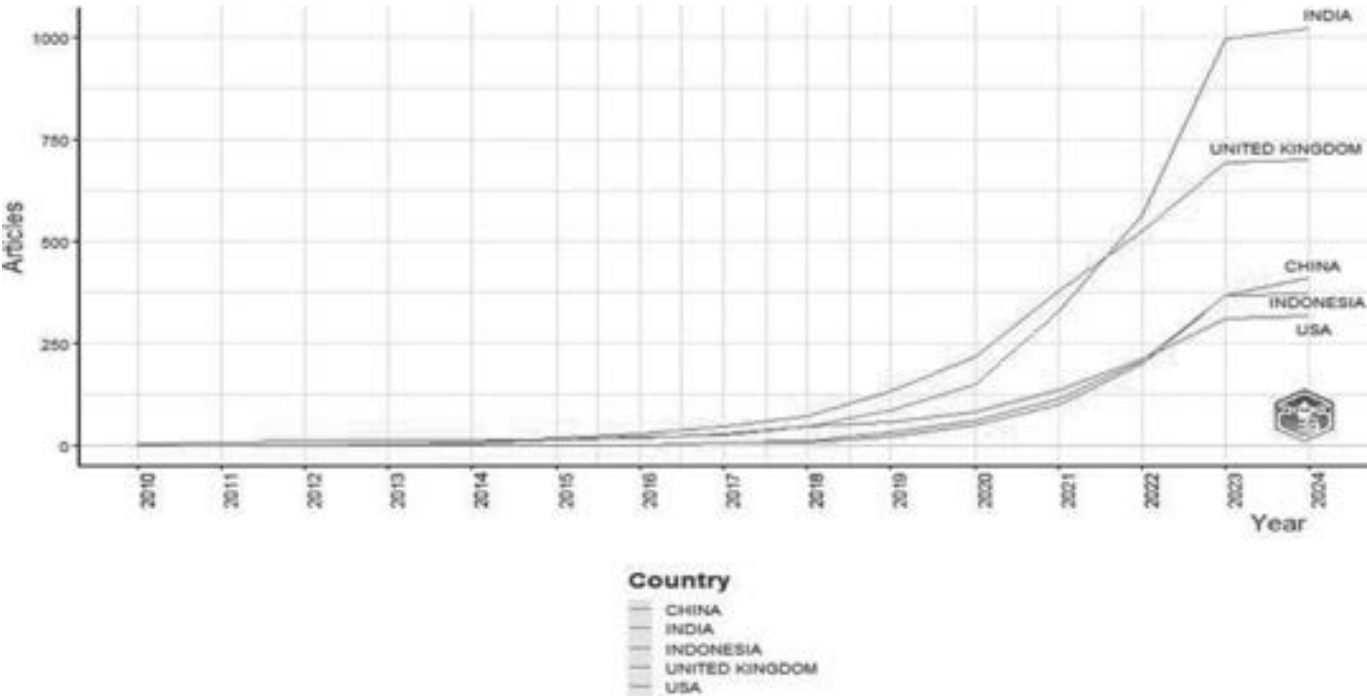


Figure 11: Country Production Over Time

funding, collaboration opportunities and research infrastructure in the country.

Country Scientific Production

Table 12

Region	Freq
India	1022
UK	701
China	410

Region	Freq
Indonesia	372
USA	320
Malaysia	267
Australia	215
Italy	183
South Africa	178
Spain	169

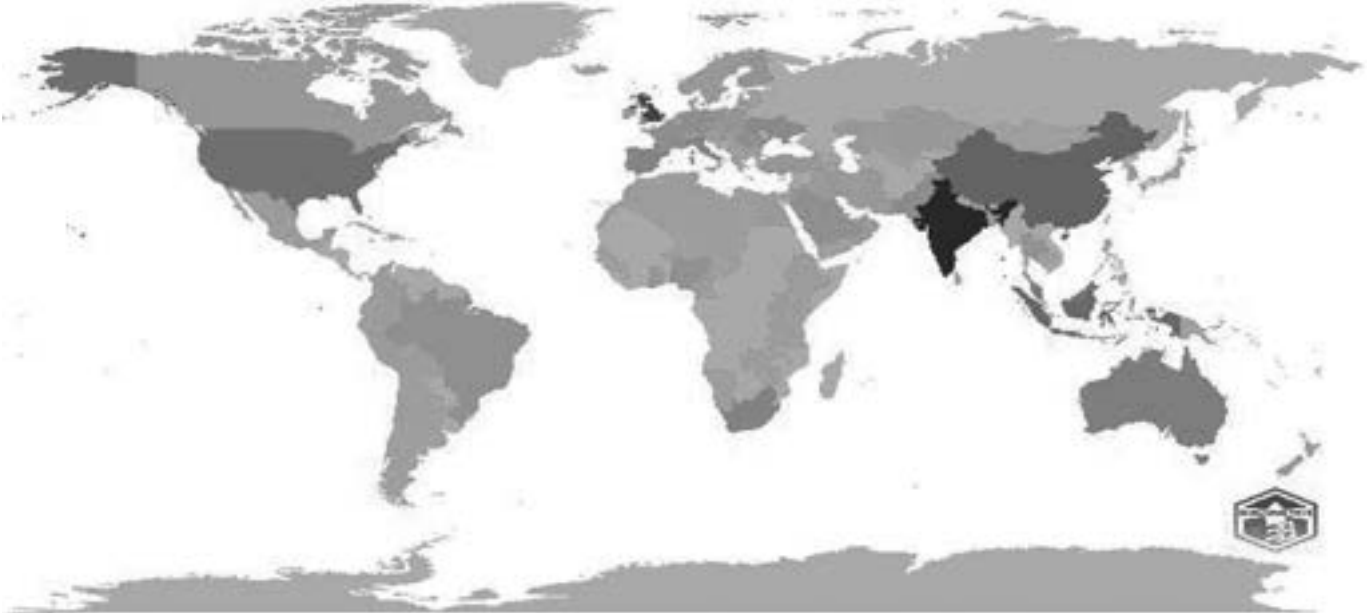


Figure 12: Country Scientific Production

The scientific production of different countries reflects a diverse global research landscape. India leads the list with 1,022 articles indicating a significant contribution to the output of scientists. The United Kingdom is just behind with 701 articles, which indicates a solid research environment and active researchers' participation. China and Indonesia also show notable scientific output, with 410 or 372 articles each, highlighting their growing presence in the global research community. The United States, Malaysia, Australia, Italy, South Africa and Spain also make significant contributions to scientific research in various fields and highlight collaboration and global knowledge exchange.

### Most Cited Country

**Table 13**

Country	TC	Average Article Citations
United Kingdom	7472	36.3
India	2908	16.5
USA	2469	26.3
China	1687	14.4
Australia	1301	22.1
Spain	858	15.9
Italy	839	15.3
France	777	51.8
Germany	712	20.9
Malaysia	615	13.1

The most cited country based on total citations (TC) is the United Kingdom with 7,472 citations, indicating its considerable influence on scientists' research. Although they are not mentioned in the first five countries by CT, France is also in the clear, with an average percentage

of citations and citations by article of 51.8 articles. The United States also shows a substantial impact with 2,469 tenders, while Australia, Germany and Italy show significant average article citations, reflecting the impact of their research output compared to the number of articles published. In general, these figures underline the different contributions of different countries to the global scientific landscape, leading to the United Kingdom's total citations.

### Most Globally Cited Document

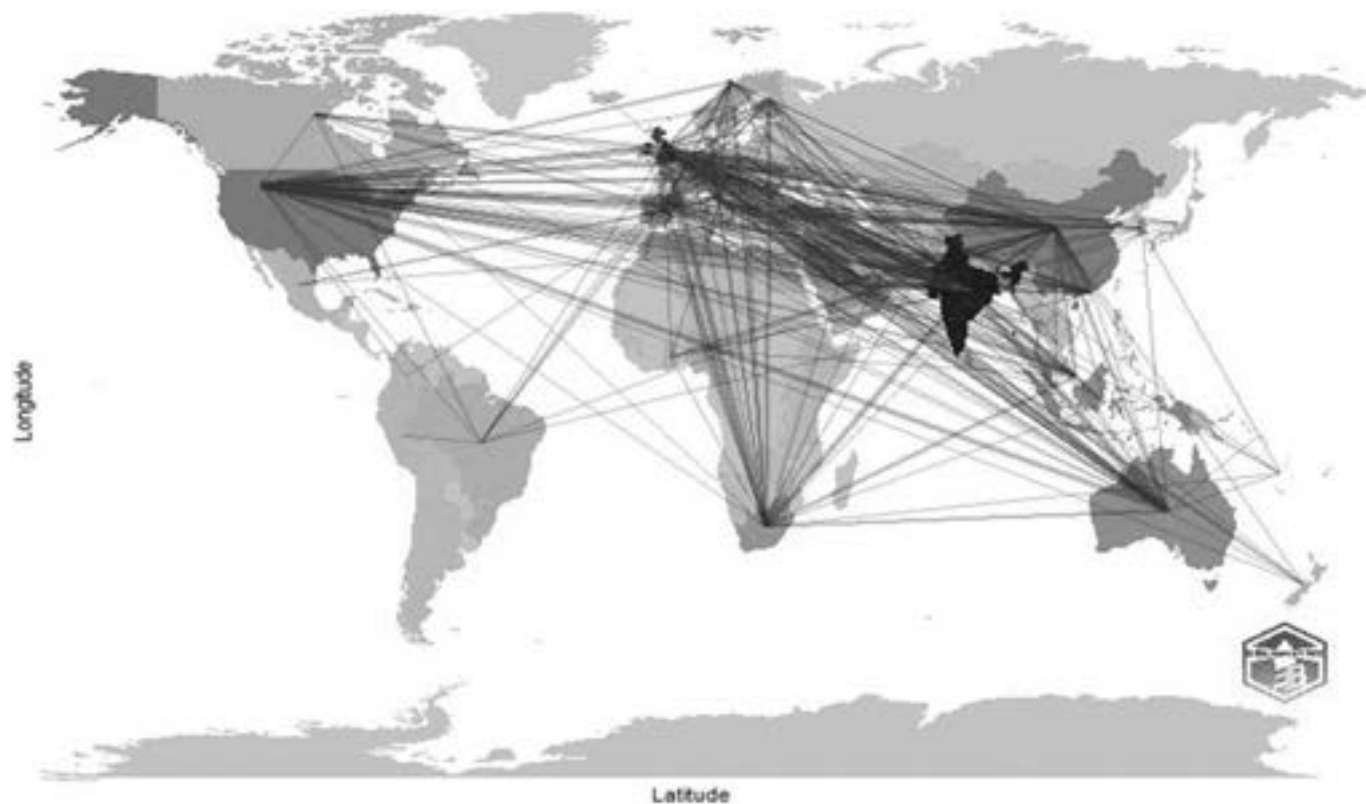
The most globally cited document (Table 14) based on total citations is "wamba sf, 2017, j bus res\\"", having Doi\"10.1016/j.jbusres.2016.08.009\", with a total of 1,148 citations. This document has an impressive average of 143.5 citations per year. Other highly cited documents include 913 citations to \"Dwivedi YK, 2021. An average of 110.4 citations per year. These documents represent significant contributions to their respective fields and have received substantial attention and recognition from the academic community.

### Collaboration World Map

The data highlights collaboration between countries around the world. It reflects various partnerships of economic, and cultural cooperation with scientific. India is a major ally that connects with many countries in various sectors, especially with the United Kingdom and the United States. China also shows generalized cooperation, especially between the United States and Asia. Other countries such as Australia, Germany and Saudi Arabia have committed to substantial international cooperation. This large cooperation

**Table 14**

Wamba Sf, 2017, J Bus Res	10.1016/j.jbusres.2016.08.009	1148	143.5	11.3561151
Dwivedi Yk, 2021, Int J Inf Manage	10.1016/j.ijinfomgt.2019.08.002	913	228.25	42.6162103
Dutta P, 2020, Transp Res Part E Logist Transp Rev	10.1016/j.tre.2020.102067	552	110.4	19.1527706
Dwivedi Yk, 2022, Int J Inf Manage	10.1016/j.ijinfomgt.2022.102542	527	175.666667	40.5918367
Hughes L, 2019, Int J Inf Manage	10.1016/j.ijinfomgt.2019.02.005	483	80.5	14.1089271
Dwivedi Yk, 2023, Int J Inf Manage	10.1016/j.ijinfomgt.2023.102642	414	207	115.259468
Kshetri N, 2017, Telecommun Policy	10.1016/j.telpol.2017.09.003	402	50.25	3.97661871
Binz C, 2017, Res Policy	10.1016/j.respol.2017.05.012	335	41.875	3.31384892
De Angelis R, 2018, Prod Plann Control	10.1080/09537287.2018.1449244	325	46.4285714	8.46654825
Dubey R, 2020, Int J Prod Res	10.1080/00207543.2020.1722860	318	63.6	11.0336613



**Figure 13:** Collaboration World Map

network highlights the interaction of nations in today's global scenario and promotes mutual development and progress.

### **Opportunities and Challenges of Digital Finance in India in the Context of Corporate Governance**

The growing Indian digital finance environment offers both promising opportunities and important issues in terms of corporate governance. On the other hand, the advent of digital financial services such as mobile banking, digital payments, Digital loans, etc. guarantees access to financial products and services, promotes financial inclusion in particular and gives economic capabilities while occupying the population. Is. extended. Additionally, financial process digitalization has the opportunity to enhance transparency, effectiveness, and accountability in corporate management through real-time reporting, automated monitoring of consistency, and enhanced risk management to enhance transparency, effectiveness, and accountability in corporate governance practice. . , However, in these cases, some great problems must be paid and considered. One of these issues relates to the regulations and legal framework that governs

digital finance. Digital finance is often delayed by the rapid pace of technological innovation, which leads to ambiguity of rules, requirements and potential arbiters of regulations. Furthermore, issues related to data privacy, security, and cybersecurity vulnerabilities pose a serious risk to the continuity and reliability of digital financial systems that require powerful cybersecurity measurements, data protection rules, and risk management protocols. In addition, the development of digital financial services has given rise to the complexities of risk assessment and management, such as operational risk, credit risk and market risks requiring aggressive management and management structures. Furthermore, the proliferation of digital platforms and fintech startups, especially in case of platform failure or illegality, brings new participants who raise questions about responsibilities, obligations and management structures, and who have an interest in the financial ecosystem. To solve these problems and harness the potential offered by India's digital finance, a powerful multi-pronged approach based on the principles of accountability, transparency, solid and resilient digital financial ecosystem is required. Resilient digital financial ecosystem. Innovation, technological



innovation, and technological innovation calls include initiatives that create and enhance possibilities. Ethical behaviour in business management practice.

## CONCLUSION

Ultimately, the study describes the transformative impacts of digital finance in the Indian financial industry, catalysing innovation progress, efficiency and progress. With the growth of digital payments, mobile banking services and fintech startups, democratised financial services have been provided to accelerate coverage and acceleration of economic growth. Nevertheless, these matters, in particular, pose problems, particularly regulatory requirements, cybersecurity and risk management. This document emphasizes the importance of good corporate governance for businesses in navigating this dynamic landscape, sustainability, transparency and accountability. By incorporating digital finance and corporate governance principles, companies can contribute to sustainability and greater benefits for all stakeholders. Pre-exercises, which are a multi-disciplinary approach that focuses on accountability, transparency and flexibility, are necessary to fully utilize its potential and eliminate the difficulties and risks of the digital finance ecosystem in India.

## LIMITATIONS OF THE STUDY

The scope of this study lies in the limitation of the data sources used in systematic reviews and bibliometric analysis. It does not cover the multitude of Indian digital fund and fund management scenarios. Furthermore, the scope of this study may be limited by high-quality literature and the latest information on the possibility of obtaining the subject. This may affect findings. Furthermore, the complexity and dynamic nature of digital finance and corporate governance provide all the relevant factors in a single research and analyses them thoroughly.

## FURTHER RESEARCH SCOPE

Through the actual impact of corporate governance on digital finance and interviews with experts, additional research can be deepened on specific aspects, such as the actual relations. Comparative research across different regions of India can provide valuable information. As time progresses, deep research,

following the dynamics of digital finance development and corporate governance, clearly understands the trends and problems. Furthermore, the integration of different fields can provide an essential approach for interdisciplinary research.

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# Mediating Role of Green Mindfulness on Green Transformational Leadership and Innovative Work Behavior

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## ABSTRACT

*The concept of “greening” has gained popularity recently among academicians and industry professionals as a means of reducing the hazards and industrial waste generated by traditional products and businesses. Organizations have come under pressure from stakeholders and academicians to develop policies to accomplish the intended environmental, social, and economic goals. This study explored innovative work behavior among employees, green transformational leadership and green mindfulness. Standardized instruments have been used to collect data from 152 respondents. SPSS 26 has been used for the analysis. It has been found that green mindfulness mediates employees’ innovative work behavior and green transformational leadership.*

**Keywords:** Innovative Work Behavior, Employee Innovative Work Behavior, IWB, Green Mindfulness, Green Transformational Leadership, GTL.

## INTRODUCTION

According to certain recent research, for example, firms can cut back on energy use, carbon waste, and disposal operations by using green IT and computer practices (Bai et al., 2017). Green transformational leadership is crucial due to increasing environmental concerns. The quick technology growth nowadays offers possibilities for a better way of life. On the other hand, it causes issues for the natural environment that surrounds humans. Rapid development in practically every sector of society today puts pressure on leaders and their relationships with their teams in order to improve the clean and green environment through green motivation. However, research for a sustainable environment has thoroughly studied green transformational leadership.

According to Avolio et al. (1999), desired change is identified by leaders using the paradigm of transformational leadership and assist staff members in realizing a vision by inspiring and motivating them. By means of greater values such as equity, justice, and liberty, they motivate the team and increase

subordinates’ awareness (Woods, 2007). These peculiar qualities, which combine into four aspects of inspiring that are drive, intellectual stimulation, charm, and thoughtfulness for each individual, are vital for fostering employees’ creativity (Avolio et al., 1999). Study of both individual and organizational awareness within an organization has brought mindfulness into organizational studies. Organizational mindfulness is the sharing and linking of individual mindfulness to help the organization and its members achieve greater alignment between their aims and results. Green mindfulness reflects “a state of conscious awareness in which individuals are implicitly aware of the context and content of environmental information and knowledge”. Individuals practicing green mindfulness are able to make objective assessments of their surroundings while maintaining complete awareness and focusing on different stimuli dependent on their current, moment-to-moment experiences.

Innovative work behavior among employees is a multidimensional behavior that combines ideation, promotion, and execution of original concepts that might

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improve organizational performance (Janssen, 2005). Researchers claim that all three phases are necessary for the full process of innovative work behavior. When people at work come up with a solution to an issue related to their job, they then look for support to help them spread their ideas. Once implemented, these ideas open up new doors for workplace innovation, which is extremely advantageous for the business (Vegt and Janssen, 2003).

## **THEORETICAL BACKGROUND**

### **Transformational Leadership Theory**

Burns (1978), one of the pioneers in transformational leadership theory defined it as “Transformational leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality.” Transformational leadership involves a dynamic and active engagement between leaders and followers. It’s not a one-way process; it’s a reciprocal relationship where both parties play an active role. The core idea is that leaders and followers elevate each other. They inspire and motivate one another to strive for greater achievements, both in terms of motivation (inner drive) and morality (sense of ethical responsibility). A sense of passion and purpose can be sparked in their followers by transformational leaders. They delve into more profound, inherent impulses as opposed to merely transactional interactions, where rewards or penalties influence conduct. Burns gives leadership a moral component. He contends that transformative leaders elevate their followers’ moral compass in addition to their followers’ achievement of goals. This suggests a dedication to moral conduct and morally sound judgment. Transformational leaders often provide a compelling vision of the future. They inspire others with their passion, enthusiasm, and a clear sense of direction.

Burns’ definition emphasizes that transformational leadership transcends conventional ideas of leadership, which may place the emphasis on authority or hierarchy. Instead, it places emphasis on a relationship between leaders and followers that is dynamic, empowering, and morally grounded and promotes significant individual and group growth. Understanding how leadership may be a force for good change and development in

a variety of circumstances, including the promotion of green and sustainable practices, is based on this notion.

## **LITERATURE REVIEW**

### **Green Transformational Leadership**

Wang et al. (2018) examined how employees’ green behavior was impacted by GTL. Path analysis was used to examine data from 193 subordinate-leader pairs. The findings indicated that green identity, via value congruence, GTL impacts employees’ green behavior; the indirect effect was more advantageous at higher levels of green identity than at lower ones. By examining the connections between value congruence, EGB, and GTL, these findings have a significant impact on all three. Future research endeavors’ practical ramifications are also highlighted.

Mittal and Dhar (2016) concentrated on how GTL and a green organizational identity could promote green innovation. To gather information for the research, a survey questionnaire was distributed to 250 managers and staff members of hotels in Uttarakhand, India, that accommodate tourists. The results of the investigation showed GTL has a favorable impact on the company’s green corporate identity, which in turn fosters green innovation.

### **Green Mindfulness**

Chen et al. (2015) explored the mediating functions that green self-efficacy and green mindfulness play, as well as how green shared vision influences green creativity. Structural equation modeling is employed. Findings showed self-efficacy, mindfulness, and green creativity all are positively impacted by a shared green vision. Additionally, this study showed green self-efficacy and green mindfulness are primarily responsible for these results.

Ho et al. (2022) discovered that companies must continue to prioritize putting environmental management into practice. The proposed multilevel model explains how individual and organizational antecedents impact green mindfulness and the implications they have on both.

Zhao et al. (2023) explored green creative behavior and green mindfulness relate to each other, as well as how green shared vision and green intrinsic motivation moderate each other. The goal was to optimize frontline

managers' capacity for innovative and sustainable thinking and behavior. The data is analyzed using SmartPLS. Internal consistency was used as criterion to assess the measuring model.

Chen et al. (2023) explored the association between environmental consciousness and their organizations' adherence to environmental sustainability. The authors also claim that the moderating effects of GTL and the mediator effects of green intrinsic motivation impact direct association between GM and G-OCB. The authors use SmartPLS SEM (v4) to analyze data. This is done through a time-lagged, multisource study strategy.

### **Employee Innovative Work Behavior**

Bysted et al. (2014) developed an internal environment that supports idea creation and implementation through the use of financial, participatory, and decentralized processes is a complex process that aims to increase employees' innovative work behavior. In this paper, the effectiveness of these managerial techniques is compared between public and private settings. 8,310 full-time workers from a study in Scandinavia who were divided into public and private employees had their efficacy compared using regression models. Two different perspectives were revealed by the findings. Innovative work practices are viewed as extracurricular activities by public employees that should be rewarded. Private employees understand that adopting new work practices is essential for career progress.

Nazir and Islam (2020) investigated how important it is to meet employees' psychological requirements for autonomy, competence, and relatedness through CSR-specific initiatives that inherently inspire workers to find their work interesting and carry out their duties in a creative manner. Respondents were 585 employees of different high-end hotels in India. This study's findings extend upon and surpass those of previous research in the growing subject of corporate social responsibility. By establishing some new links, the work theoretically increases understanding in the field of micro-CSR, where research is still scattered.

Bantha and Nayak (2020) examined the association between workers' creative work practices and workplace spirituality. A web-based poll was administered to 340 workers from various multinational corporations

(MNCs) with US headquarters that operate in India. The findings showed a strong positive correlation between employees' creative work practices and their spirituality at work. It has been discovered that psychological empowerment completely mediates the relationship between workers' creative work behaviors and workplace spirituality.

### **Green Transformational Leadership and Green Mindfulness**

Chen et al. (2014) examined the knowledge gap in the area GTL and green performance. This work creates a new paradigm for research. Green mindfulness mediates GTL and green performance relationship. Green performance and green mindfulness have all been demonstrated to benefit from green transformational leadership.

Van et al. (2023) investigated moderating role of GTL on green innovation and green mindfulness. 278 managers of Vietnamese manufacturing companies participated in an online survey that yielded data, which was then analyzed using Smart PLS software. The findings demonstrated how green innovation, which in turn improves environmental performance, is directly impacted by green mindfulness. By acting as a mediator, green innovation also improves environmental performance through green awareness. The ability of manufacturing enterprises to meet environmental targets is enhanced by these results.

### **Green Mindfulness and Employee Innovative Work Behavior**

Zheng et al. (2022) investigated 361 questionnaires that were filled out by workers in the Chinese healthcare industry reveals that innovative activity among employees is positively and significantly connected with attentive leadership. Engagement in the creative process was discovered to mediate this link.

Khari and Bali (2022) examined the relationship between leader mindfulness, job engagement, and employee learning orientation as a mediator and regulator of employee innovation at work. The 337 data points were from full-time workers in the Indian IT industry who responded to a survey. Through Process Macro, the proposed mediated moderation model was evaluated. The results showed how leadership may

encourage employees to engage in creative problem-solving.

### **Green Transformational Leadership and Employee Innovative Work Behavior**

Basu and Green (1997) examined 225 leader-member pairs which showed a positive correlation between exchange quality and follower autonomy, follower commitment to the company, and leader support of followers. Additionally, followers who felt committed to the group and received support from their leaders were more likely to be creative. Moreover, there was a strong correlation between exchange quality and innovative activity. The creative acts of followers were found to be negatively connected with transformative leadership, which defied expectations.

Mukonza et al. (2019) examined the potential for green transformational leadership to promote eco-friendly organizational practices. Green organizational behavior has been found to be influenced by green transformational leadership. GTL is characterized by four qualities: intellectual stimulation, customized concern, inspirational motivation, and idealized influence. In order to motivate employees, the leadership must establish a connection with its clients and provide incentives for environmentally conscious behavior.

Sudibjo and Prameswri (2021) investigated how teachers were affected by transformational leadership, person-organization fit, and creative work practices. It also looked at how these factors functioned as mediators and the impact of knowledge-sharing behavior. In South Jakarta, Indonesia, 260 private elementary school instructors provided data for analysis. Findings suggest transformational leadership might not directly improve creative work behavior; it can positively influence innovative work behavior when knowledge-sharing is done.

## **RESEARCH METHODOLOGY**

### **Need and Significance of Study**

This study is based on how green transformational leadership affects the employee innovative work behavior via mediating effect of green mindfulness in the organisations under study. This study helps managers to understand the workforce. Managers of I.T.

industry can use the results to motivate the employees for innovative work behavior. The findings can be used to know the factors why green transformational leadership with mediating effect of green mindfulness can lead to employee innovative work behavior.

### **Scope of the Study**

Study involves employees working within various roles and levels in IT companies in Delhi/NCR Region of India. This includes software developers, engineers, project managers, IT consultants, and other professionals associated with the sector. The study may encompass various types of IT organizations, including multinational corporations, startups, and medium-sized enterprises, recognizing that different organizational structures and cultures may influence the variables under investigation.

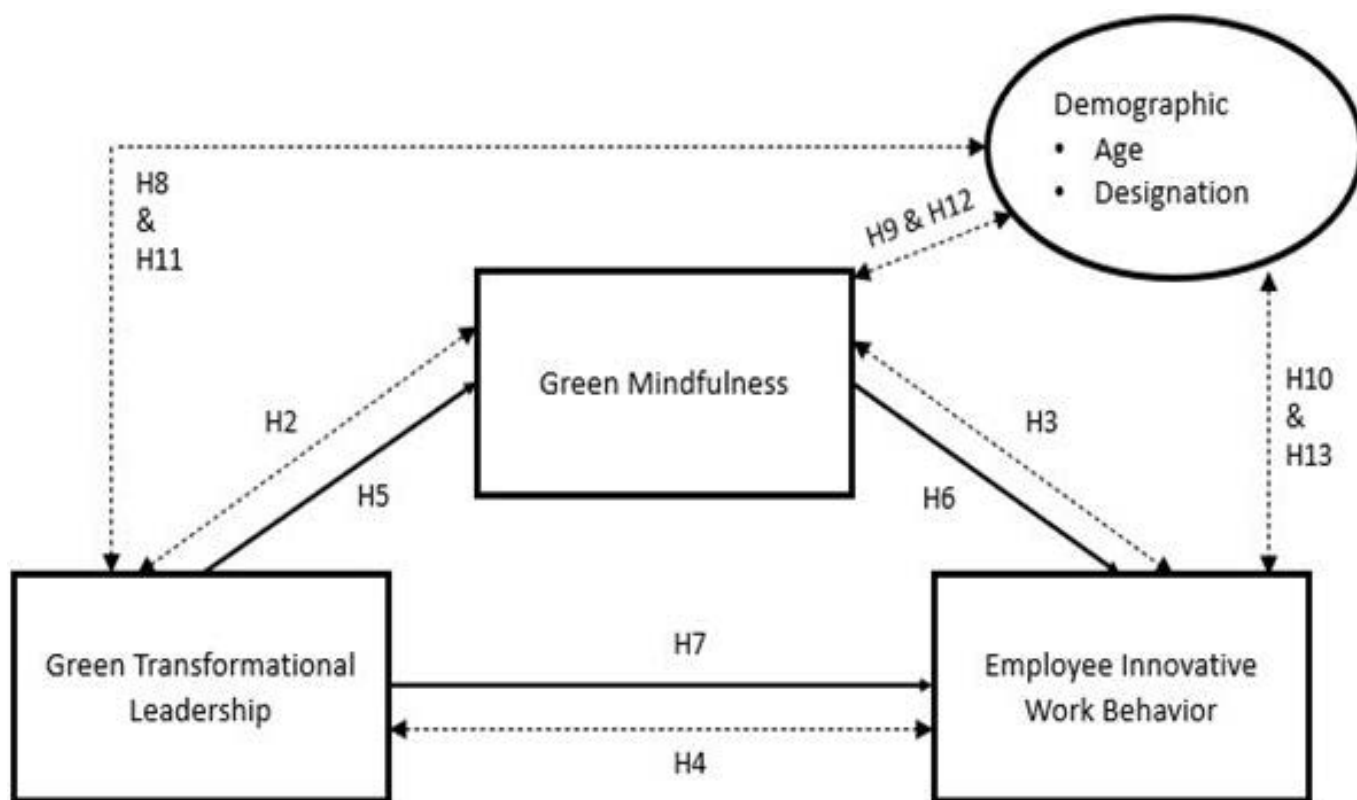
### **Objectives of the Study**

1. To study the level of Green Transformational Leadership, Green Mindfulness and Employee Innovative Work Behavior among working professionals in select IT companies of Delhi/NCR.
2. To examine the relationship and impact of Green Transformational Leadership and Green Mindfulness among working professionals in select IT companies of Delhi/NCR.
3. To examine the relationship and impact Green Mindfulness and Employee Innovative Work Behavior among working professionals in select IT companies of Delhi/NCR.
4. To examine the relationship and impact of Green Transformational Leadership and Employee Innovative Work Behavior among working professionals in select IT companies of Delhi/NCR.
5. To examine the mediating role of Green Mindfulness in explaining the relationship between Green Transformational Leadership and Employee Innovative Work Behavior among working professionals in select IT companies of Delhi/NCR.
6. To find out the relationship of demographic variables (age, designation) with Green Transformational Leadership and Employee Innovative Work

Behavior among working professionals in select IT companies of Delhi/NCR.

### Hypotheses of the Study

- **H1:** There are high levels of Green Transformational Leadership, Green Mindfulness and Employee work Innovative Behavior among working professionals in select IT Companies of Delhi/NCR.
- **H2:** Green Transformational Leadership is positively related to Green Mindfulness among working professionals in select IT Companies of Delhi/NCR.
- **H3:** Green Mindfulness is positively related to Employee Innovative work Behavior among working professionals in select IT Companies of Delhi/NCR.
- **H4:** Green Transformational Leadership are positively related to Employee Innovative work Behavior among working professionals in select IT Companies of Delhi/NCR.
- **H5:** Green Transformational Leadership has a significant impact on Green Mindfulness among working professionals in select IT Companies of Delhi/NCR.
- **H6:** Green Mindfulness has a significant impact on Employee work Innovative Behavior among working professionals in select IT Companies of Delhi/NCR.
- **H7:** Green Transformational Leadership has a significant impact on Employee Innovative work Behavior among working professionals in select IT Companies of Delhi/NCR.
- **H8:** Age has a significant relationship with Green Transformational Leadership among working professionals in select IT Companies of Delhi/NCR.
- **H9:** Age has a significant relationship with Green Mindfulness among working professionals in select IT Companies of Delhi/NCR.
- **H10:** Age has a significant relationship with Employee work Innovative Behavior among



**Figure 1: Conceptual Model**

Source: Author



working professionals in select IT Companies of Delhi/NCR.

- **H11:** Designation has a significant relationship with Green Transformational Leadership among working professionals in select IT Companies of Delhi/NCR.
- **H12:** Designation has a significant relationship with Green Mindfulness among working professionals in select IT Companies of Delhi/NCR.
- **H13:** Designation has a significant relationship with Employee Innovative work Behavior among working professionals in select IT Companies of Delhi/NCR.

## SAMPLING DESIGN

- **Population:** The top 15 IT firms as ranked by Glassdoor in 2023 make up the study's population.
- **Sampling Unit:** Employees from IT companies of Delhi/NCR.
- **Sample Size:** From 5 IT companies, 152 respondents are chosen for the study. A sample of around 30 respondents from each IT company is be used.
- **Sampling Technique:** Simple Random Sampling

## Sources of Data

The secondary data is collected from publications like books, journals and companies' website. And for primary data, employees of IT companies, were given standardized questionnaires.

## DATA COLLECTION

### Data Collection and Tools

The questionnaire is divided into four sections. These are as follow:

- Section A contains demographic information of respondent which will include age, designation and work experience)
- Section B includes measurement scale of Green Transformational.
- Section C contains measurement scale of Green Mindfulness.
- Section D includes measurement scale of Employee Innovative work Behavior.

## Data Collection and Procedure

Data is gathered using google forms and questionnaires. The questionnaires are prepared to discover how Green Transformational Leadership with mediating effect of Green Mindfulness impacts Employee IWB.

## DATA ANALYSIS

The middle-level employees working in these sectors were studied using the variables through standardized scales. The tabulation of the data was done for the three variables under the study: Green transformational Leadership, Employees innovative Work Behavior and Green Mindfulness were analyzed using the SPSS package.

## NORMALITY OF DATA

Before applying various tests, the normality of the data was checked and the following observations were noticed.

**Table 1:** Descriptive Statistics

<i>Variable</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Deviation</i>
Green Transformational Leadership	3.6513	3.6667	0.54972
Green Mindfulness	3.5263	3.5000	0.64281
Employee Innovative Work Behavior	3.6693	3.7273	0.52087

**Table 2:** Test of Normality

	<i>Shapiro-Wilk</i>		
	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>
Green Transformational Leadership	.943	152	.000
Green Mindfulness	.970	152	.002
Employee Innovative Work Behavior	.923	152	.000

Table 1 shows the values of mean, median, and standard deviation and Table 2 shows that distributions were significantly non-normal for the variables Green Transformational Leadership ( $W = 0.943$ ,  $p < 0.05$ ), Green Mindfulness ( $W = 0.970$ ,  $p < 0.05$ ) and Employee Innovative Work Behavior ( $W = 0.923$ ,  $p < 0.05$ ) according to Shapiro-Wilk tests. Based on these outcomes, non-parametric tests are used.

Green Transformational Leadership and Green Mindfulness association is tested using the Spearman's

**Table 3:** Correlation between Green Transformational Leadership and Green Mindfulness

			<i>Green Transformational Leadership</i>	<i>Green Mindfulness</i>
Spearman's rho	Green Transformational Leadership	Correlation Coefficient	1.000	.154
		Sig. (2-tailed)	.	.058
		N	152	152
	Green Mindfulness	Correlation Coefficient	.154	1.000
		Sig. (2-tailed)	.058	.
		N	152	152

**Table 4:** Regression Analysis

<i>Hypothesis</i>	<i>Regression Weights</i>	<i>Beta Coefficients</i>	<i>Beta Coefficients</i>	<i>R<sup>2</sup></i>	<i>F</i>	<i>p-value</i>	<i>Hypothesis Supported</i>
H5	GTL → GM	2.844	.229	.072	11.579	.001	Yes

**Table 5:** Correlation between Green Mindfulness and Employee Innovative Work Behavior

			<i>Green Mindfulness</i>	<i>Employee Innovative Work Behavior</i>
Spearman's rho	Green Mindfulness	Correlation Coefficient	1.000	.264**
		Sig. (2-tailed)	.	.001
		N	152	152
	Employee Innovative Work Behavior	Correlation Coefficient	.264**	1.000
		Sig. (2-tailed)	.001	.
		N	152	152

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 6:** Regression Analysis

<i>Hypothesis</i>	<i>Regression Weights</i>	<i>Beta Coefficients</i>	<i>Beta Coefficients</i>	<i>R<sup>2</sup></i>	<i>F</i>	<i>p-value</i>	<i>Hypothesis Supported</i>
H6	GM → IWB	2.538	.321	.157	27.893	.000	Yes

rho which is the pre-condition for testing the impact by using the regression analysis. With reference to Table 3, the correlation analysis between Green Transformational Leadership and Green Mindfulness revealed a statistically significant positive correlation ( $r = 0.154$ ,  $p = 0.05$ ) with a sample size of 152 participants. Hence H2 is supported

Table 4 shows that the dependent variable was regressed on predicting Green Transformational Leadership to test hypothesis H5. As per results, GTL has a significant impact on Green Mindfulness ( $\beta = .229$ ,  $F = 11.579$ ,  $p = 0.001$ ). Moreover,  $R^2 = 0.072$  depicts that the model explains 7.2% of the variance in GM. Hence H5 is supported.

As shown in Table 5, Spearman's rho between Green Mindfulness and IWB yielded a highly significant positive correlation ( $r = 0.264$ ,  $p = 0.05$ ) based on a sample size of 152 participants. Hence H3 is supported.

Table 6 shows that the dependent variable Employee work Innovative Behavior was regressed on predicting the variable Green Mindfulness to test hypothesis H6. The results revealed that Job Satisfaction has a significant impact on Job-Hopping Intentions ( $\beta = .321$ ,  $F = 27.893$ ,  $p = 0.05$ ). Moreover,  $R^2 = 0.157$  depicts 15.7% variance in EIWB. Hence H6 is supported.

As shown in Table 7, insignificant positive correlation between EIWB and GTL ( $r = 0.408$ ,  $p = 0.05$ ) based on a sample size of 152 participants. The correlation coefficient of 0.408 suggests a weak positive relationship between Employee Innovative Work Behavior and Green Transformational Leadership, but the non-significant p-value indicates that this correlation could be due to random chance.

Therefore, H4 is supported but there is strong evidence to support a significant association between Employee

**Table 7:** Correlation between Employee Innovative work Behavior and Green Transformational Leadership

			<i>Employee Innovative Work Behavior</i>	<i>Green Transformational Leadership</i>
Spearman's rho	Employee Innovative Work Behavior	Correlation Coefficient	1.000	.408**
		Sig. (2-tailed)	.	.000
		N	152	152
	Green Transformational Leadership	Correlation Coefficient	.408**	1.000
		Sig. (2-tailed)	.000	.
		N	152	152

**Table 8:** Regression Analysis

<i>Hypothesis</i>	<i>Regression Weights</i>	<i>Beta Coefficients</i>	<i>Beta Coefficients</i>	<i>R<sup>2</sup></i>	<i>F</i>	<i>p-value</i>	<i>Hypothesis Supported</i>
H7	GTL → IWB	2.142	.418	.195	36.332	.000	Yes

**Table 9:** Mediation Analysis Summary

<i>Relationship</i>	<i>Total Effect</i>	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Confidence Level</i>		<i>t- Statistics</i>	<i>Conclusion</i>
				<i>Lower Bound</i>	<i>Upper Bound</i>		
Green Transformational Leadership > Green Mindfulness > Employee Innovative Work Behavior	.4184 (0.000)	.3425 (0.000)	.0759	.0059	.1653	6.0276	Partial Mediation

Innovative Work Behavior and Green Transformational Leadership in this analysis.

Table 8 shows that the dependent Employee Innovative work Behavior was regressed on predicting variable Green Transformational Leadership to test hypothesis H8. The results revealed that GTL have a significant impact on EIWB ( $\beta = 0.418$ ,  $F = 36.332$ ,  $p < 0.05$ ). Moreover,  $R^2 = 0.195$  depicts 19.5% variance in EIWB. Hence H7 is supported.

### MEDIATION ANALYSIS

The results revealed a significant indirect effect of the GTL on EIWB ( $b = .1504$ ). Furthermore, in the presence of the mediator the direct effect of the GTL was found insignificant ( $b = .0050$ ,  $p < .05$ ). Hence, H14 is supported (Table 9).

### DEMOGRAPHIC ANALYSIS

Demographic analysis is the study of populations and their characteristics. It involves examining statistical data related to the structure, distribution, and dynamics of populations. Demographic analysis is often used to understand population trends, make predictions about future population changes, and inform decision-making

processes. Under this study, only two demographic variables are studied, i.e. age and gender.

**Table 10:** Age Differences in Green Transformational Leadership, Green Mindfulness and Employee Work Innovative Behavior

	<i>Age</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>Asymp. Sig.</i>
Green Transformational Leadership	25–35	49	80.86		1.366
	35–45	66	77.02		
	45 or above	37	69.81	.505	
	Total	152			
Green Mindfulness	25–35	49	79.34		.365
	35–45	66	74.34	.833	
	45 or above	37	76.59		
	Total	152			
Employee Innovative Work Behavior	25–35	49	77.18	.565	1.141
	35–45	66	79.61		
	45 or above	37	70.05		
	Total	152			

To assess the significance of differences in Green Transformational Leadership across different age groups, the Kruskal-Wallis H test was used. The age

divided into four groups namely, 25-35, 35-45, 45 or above.

The results revealed no significant impact (Chi-Square (2) = .505,  $p > 0.05$ ). Mean Rank analysis revealed that the respondents falling in the age group (25–35) had the highest Green Transformational Leadership (Mean Rank = 80.86) in comparison to the age group (35–45) (Mean Rank = 77.02) and in comparison, to the age group (45 or above) with the mean 69.81.

To assess the significance of differences in Green Mindfulness across different age groups, the Kruskal-Wallis H test was used. The age divided into four groups namely, 20–30, 31–40, 41–50 and 51 or above.

The results revealed no significant impact (Chi-Square (2) = .833,  $p > 0.05$ ). Mean Rank analysis revealed that the respondents falling in the age group (25–35) had highest Green Mindfulness (Mean Rank = 79.34) in comparison to age group (45 or above) with (Mean Rank = 76.59) and in comparison, to age group (35–45) with the mean 74.34.

The results revealed no significant impact (Chi-Square (2) = .565,  $p > 0.05$ ). Mean Rank analysis revealed that the respondents falling in the age group (35–45) had highest Employee Innovative Work Behavior (Mean Rank = 79.61) in comparison to age group (25–35) with (Mean Rank = 77.18) and in comparison, to age group (45 or above) with the mean 70.05. Hence H8, H9 and H10 are rejected.

To assess the significance of differences in Green Transformational Leadership between managerial and non-managerial respondents, the Mann-Whitney U test was used. The results revealed a significant

impact of managerial and non- managerial respondents (Mann-Whitney U = 2818.000,  $p < .05$ ) in Green Transformational Leadership were higher in managerial respondents (Mean Rank = 77.42) as compared to non-managerial respondents (75.63).

To assess the significance of differences in Green Mindfulness between managerial and non- managerial respondents, the Mann-Whitney U test was used. The results revealed a significant impact on managerial and non- managerial respondents (Mann-Whitney U = 2739.500,  $p < .05$ ). Green Mindfulness were higher in non- managerial respondents (Mean Rank = 78.38) as compared to managerial respondents (74.52).

To assess the significance of differences in Employee Innovative Work Behavior between managerial and non-managerial respondents, the Mann-Whitney U test was used. The results revealed a significant impact on managerial and non-managerial respondents (Mann-Whitney U = 2846.500,  $p < .05$ ). Employee Innovative Work Behavior were higher managerial respondents (Mean Rank = 77.03) as compared to non-managerial respondents (75.99). Hence H11, H12 and H13 are accepted.

## CONCLUSION

The study investigated the interplay between motivational factors, job satisfaction, and turnover intentions among IT professionals in Delhi/NCR. Analysis revealed that GTL positively influence GM among this demographic. In conclusion, the study provides insights into the relationships between GTL, GM, and EIWB among IT professionals in Delhi/NCR. While some relationships were statistically significant,

**Table 11:** Marital Status Differences in Green Transformational Leadership, Green Mindfulness and Employee Innovative Work Behavior

	<i>Designation</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>Mann-Whitney U</i>	<i>Asymp. Sig. (2-tailed)</i>
Green Transformational Leadership	Managerial	74	77.42	5729.00	2818.000	.800
	Non-Managerial	78	75.63	5899.00		
	Total	152				
Green Mindfulness	Managerial	74	74.52	5514.50	2739.500	.588
	Non-Managerial	78	78.38	6113.50		
	Total	152				
Employee Innovative Work Behavior	Managerial	74	77.03	5700.50	2846.500	.884
	Non-Managerial	78	75.99	5927.50		
	Total	152				

others require further exploration. Age and designation did not show significant relationships with the variables. Additionally, a partial mediation effect was identified in context of GTL, GM, and EIWB. These findings contribute to our understanding of factors influencing workplace behaviors in the IT sector.

## **RECOMMENDATIONS AND IMPLICATIONS OF THE STUDY**

Based on the data analysis conducted, several recommendations and implications can be drawn for organizations and policymakers. Organizations should invest in leadership development programs to enhance Green Transformational Leadership skills among managers. This can positively influence Green Mindfulness and Employee Innovative Work Behavior. Implement mindfulness training programs to foster Green Mindfulness among employees. Such programs can contribute to a positive work environment and innovative work behavior. These initiatives could include stress reduction programs and mental health support. Regularly evaluate and enhance leadership practices to ensure they align with green and sustainable values. This can contribute to a more inclusive workplace culture. Explore the identified partial mediation effect further by investigating specific extrinsic motivators that impact job satisfaction and subsequent job hopping. Understanding these factors can inform targeted interventions. Conduct longitudinal studies to assess the sustainability and long-term effects of leadership development programs and mindfulness training on employee behavior. Facilitate platforms for knowledge sharing and collaboration, as increased Green Transformational Leadership and Green Mindfulness were associated with higher levels of Employee Innovative Work Behavior.

## **DIRECTIONS FOR FUTURE RESEARCH**

Based on the data analysis conducted, several directions for future research can be identified. Investigate different dimensions of green leadership and their specific impacts on employee attitudes and behaviors. Understanding nuances in green leadership styles can provide more tailored insights for organizational development. Conduct cross-cultural studies to examine the generalizability of the current findings. Different

cultural contexts may influence the relationships between leadership, mindfulness, and innovative work behavior. Conduct longitudinal studies to assess the long-term effects of green leadership development and mindfulness training on employee behavior. This can provide insights into the sustainability of positive impacts over time. Explore the mediating mechanisms between green leadership, mindfulness, and innovative work behavior. Understanding the underlying processes can help in designing more effective interventions and organizational strategies. Investigate the role of a green work environment in fostering innovation. Assess how aspects like eco-friendly workplace design, sustainable practices, and green policies contribute to employee creativity and innovation. Examine age-related preferences for specific leadership styles, particularly in the context of green leadership. This can provide insights into tailoring leadership development programs for different age groups. Explore inclusive leadership practices that promote diversity and inclusion in the workplace. Investigate how inclusive leadership contributes to a culture of innovation among diverse groups of employees. Investigate the impact of technology integration on green leadership and mindfulness. Explore how emerging technologies can be leveraged to enhance leadership practices and mindfulness in the workplace. Conduct a comparative analysis of green leadership practices across different industries. Understanding industry-specific challenges and opportunities can guide the customization of leadership development programs. Explore employees' perceptions of green leadership and mindfulness initiatives. Investigate how employees interpret and respond to these organizational initiatives, and how these perceptions influence their work behaviors.

## **LIMITATIONS**

Study was limited to Delhi/NCR region only. The sample size selected for research is 152 only which may not be sufficient to reach the final conclusion. Sampling error could occur because of random sampling technique and there are chances that sample may not reflect the general population. Some respondents might not have paid much attention towards the questions. Due to time constraints, may be results are not reliable.

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# The Impact of Human Resource Management Practices on Innovative Work Behavior

## *A Study of Employees in the Indian IT Industry*

Rachna Kumari\*

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### ABSTRACT

*This study explores the impact of Human Resource Management (HRM) practices on innovative work behavior among employees in the Indian IT industry, focusing on the National Capital Region (NCR). Utilizing a quantitative research design, data were collected from 430 respondents through a structured questionnaire. The study examined five dimensions of HR practices: Reward & Recognition, Training & Development, Career Management, Compensation Management, and Performance Appraisal. Reliability analysis confirmed acceptable to very good internal consistency for all constructs. Structural equation modeling (SEM) demonstrated a good fit between the model and the observed data. The findings highlight the crucial role of effective HRM practices in fostering employee innovation. Consequently, the study rejects the null hypothesis, affirming that HR practices significantly impact innovative work behavior, thereby providing organizations with actionable insights to enhance employee innovation and achieve competitive advantage.*

**Keywords:** Human Resource Management Practices, Innovative Work Behavior, etc.

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### INTRODUCTION

Businesses invest in their workforces via Human Resource Management (HRM) to boost employee happiness and productivity, based on the idea that workers are an organization's most valuable asset. HRM plays a crucial role in enhancing organizational performance and outcomes by maximizing employee engagement and motivation (Wright & Boswell, 2002). It facilitates the identification and reduction of performance gaps between current and future expectations through diverse training programs. The efficacy and value of an organization's human resources are critical factors that determine its success (Khan, 2010). According to Pfeffer (2005), creating a competitive advantage relies on talent acquisition, development, and retention across various businesses and nations. Therefore, it is crucial for any organization to recruit and retain skilled human resources to flourish and stay competitive. Human resources are essential for attaining a competitive advantage due to their unique ability to convert other resources into output and their

inherent adaptability and flexibility (Kianto, Sáenz, & Aramburu, 2017). Research has shown that HRM can influence the attitudes and behaviors of employees (Laursen & Foss, 2000). A substantial body of research, including studies by Laursen and Foss (2000), has demonstrated a positive relationship between HRM and innovation, highlighting the growing importance of innovative work behavior within organizations. Strong HR systems have been linked to lower employee fatigue (Ghosh & Gurunathan, 2015), reduced occupational injuries (Barling et al., 2003), and higher employee satisfaction. HRM practices impact organizational effectiveness by influencing employee attitudes and performance. In recent years, policymakers and business organizations have shown considerable interest in investigating the impact of HRM practices on employees. To improve quality, performance, and long-term competitive advantage, businesses are striving to understand what drives employee innovation. This study aims to explore the different dimensions of HRM practices in the Indian

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IT industry and identify their impact on employees' innovative work behavior.

## REVIEW OF LITERATURE

Ashfaq (2011) conducted an empirical investigation in Pakistan to examine the relationship between the work environment and employee performance. The study evaluated a theoretical framework incorporating five distinct dimensions of the work environment and their impact on employee performance. Similarly, Güngör (2011) analyzed the correlation between the implementation of reward management systems and job performance among bank employees in global banks located in Istanbul, emphasizing the role of motivation as an intervening variable. The extant literature suggests that organizations employ reward systems and strategies to incentivize their workforce and enhance productivity. Syed and Yan (2012) focused on the impact of high-performance HRM practices on employee job satisfaction, exploring how several renowned HRM practices affect workers' overall job satisfaction. In a related study, et al. (2012) explored the potential benefits of an employee training program within a medium-sized logistics and distribution service business, finding that training programs effectively enhance a company's performance from both sales and financial perspectives. Al-Refaie (2015) examined the effects of HRM practices, service quality, employee satisfaction, employee loyalty, customer satisfaction, and customer loyalty on hotel performance in Jordan, investigating the interrelationships between these characteristics. In a conceptual model proposed by Kianto et al. (2017), a HRM system comprising knowledge-based HRM practices was found to influence a company's intellectual capital, leading to increased innovation performance. The study identified Spanish businesses with at least 100 workers using the SABI database as the target audience. Kloutsiniotis and Mihail (2017) examined the relationship between high performance work systems and job satisfaction among 296 physicians and nurses, finding a significant correlation between high performance work systems and job satisfaction. Sattar et al. (2015) analyzed the influence of HRM practices on raising employee performance and satisfaction levels, using employee engagement as a mediator, with a focus on individuals working in Pakistan's banking industry. Jain, V. K.

(2014) investigated the relationship between HR practices and employee commitment in the Pakistani telecommunications industry. Using PLS-SEM to analyze data from 218 respondents, the study revealed that incentive practices are the best predictors of commitment levels, followed by the work environment. Training and development practices did not directly impact organizational commitment, but there was a link when work satisfaction was used as a mediator. Ahmed et al. (2021) studied factors impacting employee environmental performance, using green motivation and proactive environmental management maturity as mediators. The survey data was analyzed using confirmatory factor analysis and partial least square structural equation modeling, showing that proactive environmental management maturity and green intrinsic and extrinsic motivation are positively associated with green HR practices. Lastly, Saad et al. (2021) investigated the effects of HRM practices on employee engagement within the Egyptian setting, aiming to understand the principles of human resource management practices and their influence on employee engagement. The study highlighted the moderating function of strategy implementation, particularly in the banking sector, where limited research has been conducted on this topic. Turner et al. (2021) examined the predictive power of five HRM strategies—systematic selection, in-depth training, performance assessment, high relative pay, and empowerment—on future organizational-level injury rates.

## RESEARCH METHODOLOGY

The objective of the current study is to examine the impact of HR practices on innovative work behavior. The study focused on software engineers employed in IT companies based in the National Capital Region (NCR) of India. The quantitative research design, also known as descriptive research, was utilized to survey respondents, collect data, and analyze the results. The aim was to gain a deeper understanding of HRM practices, innovative work behavior (IWB), and employee performance in NCR-based IT firms. The data were collected from 430 respondents with the help of a structured questionnaire. The concurrent mixed method sampling, ensured a representative and targeted sample. Secondary data were sourced from research databases such as Ebsco Host, Elsevier, JSTOR, and



SCOPUS, along with newspapers, websites, web blogs, annual reports, and government reports. Primary data were collected using a well-structured questionnaire.

## FINDINGS AND SUGGESTIONS

To examine the impact of HR practices on innovative work behavior, five dimensions of HR practices were considered i.e. Reward & Recognition, Training & Development, Career Management, Compensation Management and Performance Appraisal. These were measured on likert scale by considering 28 statements. Moreover, innovative work behavior was measured on likert scale by considering 10 statements. Structure equation Modeling was implemented to examine the significance of the relationship.

**Table 1:** Reliability Statistics of Variables under Study

S. No.	Constructs	N of Items	Cronbach's Alpha
1	Reward & Recognition	6	.795
2	Training & Development	8	.708
3	Career Management	5	.805
4	Compensation Management	4	.769
5	Performance Appraisal	5	.867
6	Innovative work behavior	10	.735

Cronbach's Alpha values above 0.7 are generally considered acceptable, while values above 0.8 are considered good, and values above 0.9 are excellent. However, extremely high values (above 0.95) might indicate redundancy among items. All the constructs listed have Cronbach's Alpha values above 0.7, indicating that they all have acceptable to very good levels of internal consistency. This suggests that the items within each construct are reliably measuring their respective underlying concepts.

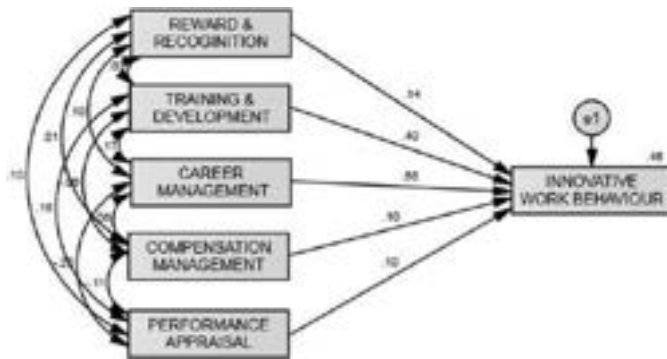
**Table 2:** Model Fit Estimates

Estimates	Values	Threshold Values
CMIN/DF	2.83	< 3
CFI	.903	> 0.90
GFI	.987	> 0.95
AGFI	.869	> 0.80
RMSEA	.010	< 0.05
PCLOSE	.055	> 0.05

The fit indices from the structural equation model (SEM) provide insights into how well the model aligns with the observed data. The CMIN/DF value of 2.83, though slightly below the recommended threshold of 3, indicates a reasonably good fit, suggesting the model adequately accounts for discrepancies between observed and predicted data considering the degrees of freedom. The Comparative Fit Index (CFI) at 0.903 meets the threshold of 0.90, indicating an acceptable fit where the model performs better than a baseline model. The Goodness of Fit Index (GFI) stands at 0.987, exceeding the threshold of 0.95, which signifies an excellent fit where the model's predicted relationships closely match the observed data. The Adjusted Goodness of Fit Index (AGFI) at 0.869, though slightly above the 0.80 threshold, suggests a satisfactory fit considering the model's complexity and degrees of freedom. The Root Mean Square Error of Approximation (RMSEA) of 0.010 is well below the 0.05 threshold, indicating a very good fit where the model's error in predicting the data is minimal per degrees of freedom. Lastly, the PCLOSE value of 0.055, marginally above the 0.05 threshold, suggests that the RMSEA is not significantly different from the ideal fit, reinforcing the overall adequacy of the model fit.

**Table 3:** Regression Weights and p-values of Dependent Variables

Dependent Variable		Independent Variables	Unstandardised Estimate	Standardised Estimates	S.E.	C.R.	P
Innovative Work Behavior	←	Reward & Recognition	.107	.139	.028	3.841	***
Innovative Work Behavior	←	Training & Development	.265	.399	.024	10.895	***
Innovative Work Behavior	←	Career Management	.402	.564	.027	15.147	***
Innovative Work Behavior	←	Compensation Management	.080	.104	.028	2.881	.004
Innovative Work Behavior	←	Performance Appraisal	.075	.100	.028	2.684	.007



**Figure 1:** Input Model for HR Practices and Innovative Work Behaviour

- H01: HR practices (Reward & Recognition, Training & Development, Career Management, Compensation Management and Performance Appraisal) have no significant impact on Innovative work behavior.
- H1: HR practices (Reward & Recognition, Training & Development, Career Management, Compensation Management and Performance Appraisal) have a significant impact on Innovative work behavior.

The unstandardized estimates provide the magnitude of influence of each independent variable on Innovative Work Behavior, with Training & Development ( $\beta = 0.265$ ), Career Management ( $\beta = 0.402$ ), and Compensation Management ( $\beta = 0.080$ ) showing notable effects. The standardized estimates, which account for the relative impact of each variable considering their scales, reveal that Career Management ( $\beta = 0.564$ ) has the strongest positive association with Innovative Work Behavior, followed by Training & Development ( $\beta = 0.399$ ) and Reward & Recognition ( $\beta = 0.139$ ). These findings indicate that organizational initiatives focusing on career development, training opportunities, and recognition are particularly influential in fostering innovative behavior among employees. Additionally, the statistical significance of these relationships, as indicated by the critical ratios and p-values, underscores the importance of these findings, highlighting their relevance for organizations seeking to enhance innovation within their workforce. The statistical analysis revealed that all HR practices, have a statistically significant impact on Innovative Work Behavior. Specifically, Reward & Recognition, Training & Development, and Career Management were found to significantly influence Innovative

Work Behavior, with higher levels of these practices correlating with increased innovative behavior among employees. Thus, the null hypothesis was not accepted, indicating the significant impact of HR practices on innovative work behavior.

## CONCLUSION

This study aimed to examine the impact of HR practices on innovative work behavior among software engineers in the Indian IT industry, specifically within the National Capital Region (NCR). The findings provide valuable insights into how various HR practices, including Reward & Recognition, Training & Development, Career Management, Compensation Management, and Performance Appraisal, influence employees' innovative behaviors. The reliability analysis showed that all constructs measured had acceptable to very good internal consistency, confirming the reliability of the survey items. The model fit indices indicated a good alignment between the observed data and the hypothesized model, reinforcing the robustness of the findings. Specifically, the CMIN/DF, CFI, GFI, AGFI, RMSEA, and PCLOSE values collectively suggest that the structural equation model fits the data well, validating the relationships examined. SEM revealed that Career Management had the strongest positive association with Innovative Work Behavior, followed by Training & Development and Reward & Recognition. All the HR practices studied were found to have a statistically significant impact on Innovative Work Behavior. These results underscore the importance of organizational initiatives focusing on career development, training opportunities, and recognition in fostering innovative behavior among employees.

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# An Analysis of Farmers' Behaviour Towards Stubble Burning and Promoting Sustainability

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## ABSTRACT

*This research paper analyses the dynamics surrounding stubble burning, particularly focusing on the behaviour of farmers in its management. It is divided into three sections. Section I elucidates the multifaceted reasons that dissuade farmers from resorting to stubble burning, as well as the factors that lead them towards adopting proper stubble management practices. Section II examines the sources of information that farmers access regarding the uses and awareness of stubble, shedding light on the channels through which knowledge dissemination occurs. Finally, Section III presents a set of proactive measures aimed at fostering improved stubble management practices, with a view towards mitigating environmental hazards while enhancing agricultural sustainability. This paper not only contributes to a deeper understanding of farmer behaviour concerning stubble burning but also offers pragmatic solutions to promote more sustainable agricultural practices.*

**Keywords:** Stubble Burning, Reasons, Source of Information, Suggestions, Sustainability.

## INTRODUCTION AND LITERATURE REVIEW

Around Diwali days, increasing pollution (due to smoke of paddy stubble burning) has become a matter of concern for policy makers. Environmental scientists consider this smoke a threat on environment and human health both (Ref/OL/1). They have attempted to prove this fact with several theories as well as data collection. Many health experts consider this problem as a challenge for well being as well as a major source of serious diseases (Ref/OL/2). Agricultural scientists co-relate stubble burning with threat to infertility of soil in near future. In addition to this, agricultural economists aspire to convert this problem of stubble burning into an opportunity to generate revenues (Ref/OL/3). It is a dilemma in India, that the case of crop stubble burning and raising price of fodder co-exists (report 1).

The present paper attempts to explain the nature, reason and cause of stubble burning with the aid of providing previous studies and research on the same. With the help of primary survey, researcher also highlights

the module of stubble management among different categories of farmers.

In this era, crop stubble burning is becoming a global challenge. Different parts of the world deal with this problem differently. Developed countries like US, UK and Australia strictly prohibit stubble burning. Australia follows comprehensive stage wise management, while in UK various regulations are used to eliminate stubble burning practices. In Netherlands and Switzerland there is a mandatory scale for nutrients, some countries like Philippines put strict ban over crop stubble burning. In our neighboring country China different schemes and subsidies are implemented to manage crop stubble (Leena A.K., 2021). In case of India all possible methods have been applied by different states and central governments. State like Punjab put more focus on subsidy for machinery to manage crop stubble (Ref/OL/4) (Taranpreet S. et al., 2021), in Haryana various schemes were announced for crop diversification and cash schemes are also provided to farmers to avoid burning paddy stubble (Ref/OL/4).

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On all India level crop stubble burning has declared as a punishable offence under the section of Indian Penal Code section-188.

**Table 1:** Stubble Burning Incident

Year	Haryana	Punjab	Total in Delhi, Haryana, Punjab, Western UP and Rajasthan
2021	2413	9001	11461
2022	1813	12112	13964
2023	1094	5254	6391

Source: Ministry of Environment, forest and climate change

Table 1 indicates the decline in stubble burning in last three years, but still the rate is very high. As far the above said methods, these methods are not sufficient to deal with these issues and more efforts are required in this direction.

The term used for stubble often confused non-farming class with paddy stalks and *Parali*, the stalks of rice are called stubbles and waste material of rice is called *Parali*. Basically, stubble referred to the residue of straw that left in the field after the harvesting of paddy, specially by combine harvesting. The collected material of straight straw known as *Parali*.

In last decade, several studies have been conducted on stubble burning across the world. With the help of keyword finding methods, around 60 studies and reports have filtered to explain the reasons and consequences of stubble burning. On the basis of filtered research articles and reports it is found that main cause behind stubble burning was the short time span between paddy harvesting and wheat sowing. This time period is only 10-20 days, the increasing and decreasing on this time periods is depending on the variety of the paddy. When the time is limited farmers hurries to clear the field in order to sow another crop (Anuradha et al., 2021). Due to this reason, instead of dealing with the paddy stubble in a sustainable or eco-friendly way, the farmers decide to burn the stubble altogether. Sometime farmers grow three crops in a year with a very short gap of few days between the crops. Many state governments took incentive in this direction and passed different laws to set a time limit for paddy sowings (Diksha et al., 2021).

The second reason that reported is the shortage of labor. After the released regulations of MNREGA, labor from Bihar, Orisha and MP shifted to their respective states that shorted the supply of labor in Haryana, Punjab and

western UP (Diksha et al., 2021). The role of labor is very crucial in Paddy harvesting and to manage the stalks in productive manners.

The farmer is unable to manage this due to several factors that is why he ends up burning stubble. Stubble tends to spread because of combine harvesting. From the last decade the trend of combine harvesting has sky rocketed (report by Indian Agricultural Research Institute). Harvesting by combine is easy and fast as well, but it leaves rice straw behind in the field itself. To avoid the problem of straw left farmers choose to burn that stubble and get rid of it. The segregated paddy straw has to be managed in order to utilize it for several other purposes, which is difficult due to shortage of labor. In nutshell we may conclude on the basis of several studies that increasing trend of combine and limited supply of labor fueling up the problem of stubble burning. Another significant reason for burning paddy stubble is the decreasing demand of paddy stalks for domestic purposes especially for cattle fodder. NW states of India do not practice feeding cattle due to its non-digestive nature as it contains high silica and lingo-cellulosic (Shiv Kumar Lohan et al., 2017). The less economic worth and less use of paddy stubble for domestic purposes and due to the implementation of minimal applications at personal level, farmers are compelled to destroy it by burning in the fields instead of its storage (Shruti Chopra and Surbhi Bansal, 2022). Many Reports have been found that stubble burning results adverse effects like skin allergies, lung cancer, pulmonary diseases, respiratory infections etc. on human health. As a matter of fact, stubble burning also creates endangering vision infection which might lead to blindness (Charu Batra, 2017). Another research concludes that in 2015, stubble burning could be held responsible for nearly 66000 deaths in India (Preseela Satpathy and Chinmay Pradhan, 2020). Chronic cardiac and lung diseases can also be induced by minute substances present in smoke that is produced by stubble burning (Dinesh Kumar Saini et al., 2019). Stubble burning also influence environment in a worse manner we can observe the increase in level of AQI during paddy peak harvesting season (Gaurav Govardhan et al., 2023). The particulate matters in Delhi have been more than 5 times beyond the safe limit majorly when the crops are set on fire every year (Preseela Satpathy and Chinmay Pradhan, 2020). The level of pollution

caused by stubble burning does not decrease suddenly due to its complex nature they remain in atmosphere for more extended period (Partika Chawala & H.A.S. Sandhu, 2019). The most adverse effect of stubble burning embody the emission of greenhouse gases, that contribute to the global climate change (Gaurav C.P. et al., 2021). In case of soil health, due to burning the upper temperature of soil increases and lead to destroyed useful micro-organism (Muhammad Isa A. et al., 2020). If this practice repeated for a prolonged time it causes the soil to turn into barren soil (Gaurav C.P. et al., 2021). Moreover, stubble burning also impacted on the ecology of soil structure by removal of a large portion of the organic matter, nitrogen, phosphorus and loss of useful micro-flora and fauna (Dinesh Kumar Saini et al., 2019). Clouds generated by stubble burning causes acid rain which destruct plant growth and fresh growth lakes. Moreover, it destroyed the structure of the buildings also. In order to deal with grave consequences, several measures have been taken or suggested by various studies. Uses of happy/super seeder is a cost friendly method to sowing wheat seed in paddy harvesting field without removing paddy routes and stubbles. This method would be help full to manage the ecosystem of soil also (Kurinji L.S. and Srish Prakash, 2021). Moreover, stubble can be converted into compost by following standard procedure in the field (Muhammad Isa A. et al., 2020). Agriculture research institute provides required assistance to farmers in these directions (Kurinji L.S. and Srish Prakash, 2021). Straws of various crops have been containing high methane content of up to 70 percent. Biogas production from stubbles not only offer a source of clean energy also reduce the pollution from environment (Preseela Satpathy and Chinmay Pradhan, 2020).

Keeping all these aspects in view the present research work is attempt to examine the difference of reaction for paddy stubble management among different category of farmers. The basic motive of researcher is to find out the effect of size of land holding on multiple uses and related factors of paddy stubble.

## RESEARCH OBJECTIVES

1. To highlight the reasons, impact and possible solution of paddy stubble burning with the help of earlier research.

2. To explore the impact of land holding size on the decision of paddy stubble management.
3. To highlight the various types of sources of information regarding paddy stubble uses for farmers of different categories.

## SCOPE OF STUDY

The study was design with an objective in mind to investigate the role of land holding in stubble management. With the help of this study, we can find different factors that leads farmers not to burn paddy stubble or for the best uses of paddy among different categories of farmers. Present research paper will help policy makers to identify percentage of farmers affected by which variables to deal with uses of paddy stubble as well to prevent the incident of paddy stubble burning. In the state like Punjab where the incident of stubble burning were recorded high, government can easily format policy outline to deal with this challenge according to different categories of farmers and their financial abilities.

## RESEARCH METHODOLOGY

### Data Collection

The study was based on primary as well secondary data. For the purpose of collecting data multi stage sampling technique has been used. On the first stage a list of NCR districts in Haryana has been prepared, from the list district Sonipat has been selected from random basis. On second stage block Ganaur has been selected out of eight blocks of Sonipat districts on convenient basis. For targeting the paddy producer Regulated market yard of Ganaur has been selecting on self-observation basis as on the fact that maximum number of farmers sold out their paddy in peak season in regulated market yard.

During the field survey it was found that almost 400 to 500 farmers/day used to visit in market yard during peak session of paddy harvesting for sale and other purposes. In the first week approximately 3160 farmers had been visit to mandi yard. A total 10 percent (number of sample 316) of week farmers were selected for interviewed via scheduled bi-lingual questionnaire. The questionnaire were tested by pilot survey to know the viability of the questions before final survey. Interviewed sample were categorised in to

five categories according to their area of land holding. Finally a total 316 farmers from different categories, i.e. marginal farmers 98, small farmers 146, semi-medium farmers 55, medium farmers 12 and large farmers 5 were interviewed.

### Data Analysis

Data is analysed using absolute frequency, relative frequency (across farm size) and presented with the help of bar plot for each variable separately.

Multinomial logistic regression analysis was employed to explore the relationship between farm size and the variables (reasons/source of information/suggestions) behind stubble management practices. Odds ratios were calculated to quantify the association between farm size and the likelihood of farmers mentioning specific variables (reasons/source of information/suggestions) for stubble management. p-values are too computed to assess the statistical significance of the associations observed in the multinomial logistic regression analysis.

### LIMITATION OF THE STUDY

The study was conducted in Ganaur block of Sonipat district. The base of sample selection was purely based on the arrivals of the farmers in market yard in peak session of paddy. The number of the sample is not sufficient to present the all farmers of the Ganaur block as many farmers used to sale private traders or prefer to sale after the peak week of peak seasons. Moreover, paddy stubble burning is illegal offence, that is why if farmers burn stubble, they will try to hide it and give wrong information regarding the uses of stubble.

### Section I: Reasons that Lead Farmers not to Burn Stubble/Lead Farmers for Proper Management of Stubble

- R\_1: Uses of power seeders/happy seeders
- R\_2: Harvesting and managing by labor
- R\_3: Sowing other than wheat crop for next session
- R\_4: for Sale the stubble to private traders or other farmers
- R\_5: Uses of stubble for domestic/farm/other purposes
- R\_6: Enforced by legal actions
- R\_7: For the shake of Environment protection
- R\_8: By the incentive/schemes of governments

Table 2 outlines the reasons behind farmers' decisions not to burn paddy stubble, categorised by farm size. Each row corresponds to a specific reason (R\_1 through R\_8), while the columns represent different farm sizes: Marginal, Small, Semi-Medium, Medium, and Large. The numbers within the table cells denote the count of respondents who cited each reason, followed by the percentage of respondents within each farm size category in parentheses.

By analysing the data, we can observe the distribution of reasons across different farm sizes. Reasons such as employing labour for harvesting and managing stubble (R\_2) and sowing crops other than wheat for the next season (R\_3) are more prevalent among smaller farms, while larger farms tend to prioritize reasons like selling stubble to private traders or other farmers (R\_4) and utilizing stubble for various domestic or farm purposes (R\_5).

**Table 2:** Reasons Behind Paddy Stubble Burning

Reasons	Marginal (< 1.0 hec.)	Small (1–2 hec.)	Semi-Medium (2–4 hec.)	Medium (4–10 hec.)	Large (10 < hec.)	Total
R_1	7(7.14)	19(13.01)	15(27.27)	5(41.67)	3(60.0)	49
R_2	24(24.49)	43(29.45)	2(3.64)	0(0.0)	0(0.0)	69
R_3	9(9.18)	16(10.96)	5(9.09)	1(8.33)	0(0.0)	31
R_4	9(9.18)	9(6.16)	11(20.2)	3(25.0)	1(20.0)	33
R_5	17(17.35)	21(14.38)	1(1.82)	0(0.0)	0(0.0)	39
R_6	14(14.29)	26(17.81)	7(12.73)	1(8.33)	0(0.0)	48
R_7	5(5.1)	7(4.79)	3(5.45)	0(0.0)	0(0.0)	15
R_8	13(13.27)	5(3.42)	11(20.0)	2(16.67)	1(20.0)	32
Total	98	146	55	12	5	316

Source: Primary Survey

This indicates that smaller farmers may be more inclined to diversify their crops, possibly to improve soil health, enhance crop rotation, or adapt to changing market demands. Such practices align with sustainable agricultural methods and can contribute to overall farm resilience. On the other hand, larger farms exhibit a different set of priorities. This suggests that larger farms may be more focused on leveraging stubble as a resource for additional income generation or for meeting on-farm needs such as fodder, bedding, or soil amendment. A graphical representation of the same is given in Chart 1.

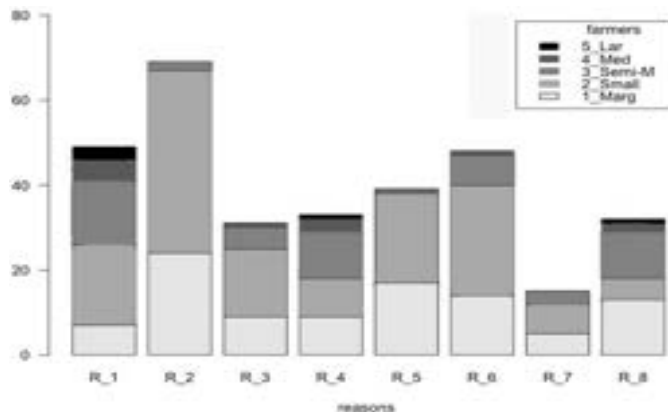


Chart 1

	> exp(coefficients(x))				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
R_2	3.4292941	0.6599388	0.03887189	4.697692e-08	3.623834e-08
R_3	1.2859638	0.6548073	0.25919160	1.555205e-01	1.047412e-07
R_4	1.2859825	0.3683277	0.57020352	4.665525e-01	2.592395e-01
R_5	2.4290870	0.4549991	0.02743594	6.601947e-08	5.252194e-08
R_6	2.0004440	0.6840488	0.23327119	9.997816e-02	6.262229e-08
R_7	0.7144358	0.5156481	0.27992003	2.612816e-07	1.900497e-07
R_8	1.8575064	0.1416646	0.39476532	2.153311e-01	1.794727e-01

The odds ratios obtained from the multinomial logistic regression analysis provide valuable insights into how farm size influences the likelihood of farmers mentioning specific reasons for not burning paddy stubble. Across various reasons (R\_2 to R\_8), the odds

ratios demonstrate significant variations, indicating distinct patterns of association between farm size and stubble management motivations. For instance, smaller farms, represented by the category “Small,” generally exhibit lower odds of mentioning reasons such as utilizing stubble for various purposes (R\_5) or participating in government incentive schemes (R\_8) compared to Marginal farms. Conversely, for certain reasons like selling stubble (R\_4), the odds ratios are notably lower for Small farms compared to other categories.

Given below are the p-values for each odd ratio.

	> p				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
R_2	0.004122256	0.415420879	0.0001792213	0.00000000	0.00000000
R_3	0.617748006	0.485858776	0.0613191023	0.12275097	0.00000000
R_4	0.617726497	0.122268417	0.3812192092	0.39022811	0.2839243
R_5	0.048140178	0.151848515	0.0014102168	0.00000000	0.00000000
R_6	0.134195830	0.492005774	0.0253648185	0.05282224	0.00000000
R_7	0.565794190	0.366696976	0.1396083822	0.00000000	0.00000000
R_8	0.186571120	0.004465665	0.1302762290	0.10935300	0.1680979

These findings highlight the complex interplay between farm size and stubble management decisions, underscoring the need for tailored interventions and policies to promote sustainable agricultural practices across different farm sizes.

## Section II: Source of Information Regarding the Uses/Awareness of Paddy Stubble

- SI\_1: News channels/news papers
- SI\_2: Government agencies/marketing board
- SI\_3: Other farmers/arthis
- SI\_4: Self-awareness/other sources

Table 3 outlines the reasons behind farmers’ decisions not to burn paddy stubble, categorized by farm size. Each row corresponds to a specific source of information (SI\_1 through SI\_4), while the columns

Table 3: Source of Information for Paddy Stubble Burning

Reasons	Marginal (< 1.0 hec.)	Small (1–2 hec.)	Semi-Medium (2–4 hec.)	Medium (4–10 hec.)	Large (10 < hec.)	Total
SI_1	37(37.76)	53(36.3)	17(30.91)	2(16.67)	1(20.0)	110
SI_2	13(13.27)	21(14.38)	13(23.64)	1(8.33)	1(20.0)	49
SI_3	42(42.86)	67(45.89)	19(34.55)	6(50.0)	1(20.0)	135
SI_4	6(6.12)	5(3.42)	6(10.91)	3(25.0)	2(40.0)	22
Total	98	146	55	12	5	316

Source: Primary Survey



represent different farm sizes: Marginal, Small, Semi-Medium, Medium, and Large. The numbers within the table cells denote the count of respondents who cited each source of information, followed by the percentage of respondents within each farm size category in parentheses. By analysing the data, we can observe the distribution of reasons across different farm sizes. For instance, SI\_1 was cited more frequently among Marginal farmers compared to other farm sizes. Conversely, SI\_3 had a higher proportion of mentions among Large farmers. This suggests potential differences in information sources accessed by farmers of varying farm sizes, which could influence their decision-making processes related to stubble burning.

A graphical representation of the same is given below.

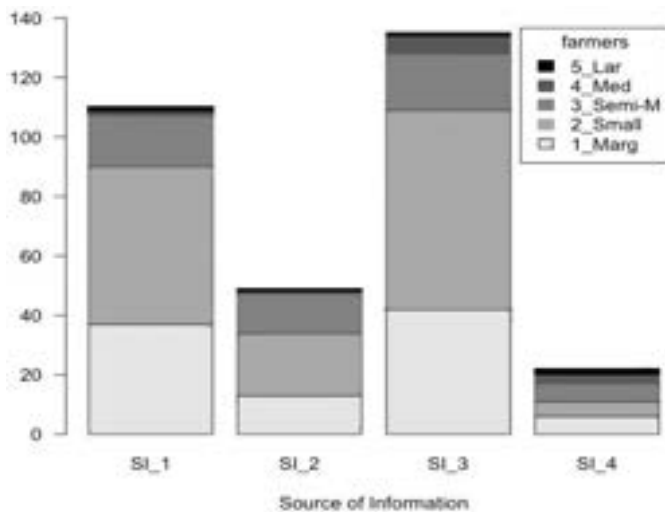


Chart 2

	> exp(coefficients(x))				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
SI_2	0.3513372	1.1277786	2.1766181	1.423965	2.8458620
SI_3	1.1351113	1.1137160	0.9845744	2.643897	0.8807773
SI_4	0.1621572	0.5818157	2.1764740	9.253613	12.3326986

The odds ratios obtained from the multinomial logistic regression analysis provide insights into how farm size influences the likelihood of farmers mentioning specific reasons for not burning paddy stubble. These ratios indicate the change in odds of mentioning a particular reason associated with a one-unit change in the predictor variable (farm size). In this analysis, odds ratios greater than 1 suggest increased odds of mentioning the reason, while those less than 1 indicate decreased odds. For example, for SI\_2, the odds of mentioning the reason are 2.18 times higher for Semi-Medium farms compared to Marginal farms. Similarly, for SI\_4, the odds of mentioning the reason are notably higher for Medium and Large farms compared to Marginal farms, indicating potential differences in stubble management motivations based on farm size. Given below are the p-values for each odd ratio.

	> p				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
SI_2	1.177429e-03	0.7708428	0.1121434	0.7801783	0.47087899
SI_3	5.740641e-01	0.7112165	0.9692181	0.2511004	0.92936186
SI_4	3.572812e-05	0.3991074	0.2296782	0.0281364	0.05354982

These findings shed light on the nuanced relationships between farm size and farmers' decisions regarding stubble burning.

### Section III: Suggestive Measures for the Better Management of Paddy Stubble

- S\_1: Government purchasing of Stubble
- S\_2: Open and more subsidy on power/happy seeder
- S\_3: More strict action against paddy stubble burning by Government (S\_3\_LA)
- S\_4: More incentive for crop diversification (S\_4\_In)

Table 4: Suggestive measures for Paddy Stubble Burning

Reasons	Marginal (< 1.0 hec.)	Small (1–2 hec.)	Semi-Medium (2–4 hec.)	Medium (4–10 hec.)	Large (10 < hec.)	Total
S_1	21(21.43)	37(25.34)	3(5.45)	5(41.67)	3(60.0)	69
S_2	17(17.35)	29(19.86)	17(30.91)	2(16.67)	1(20.0)	66
S_3	13(13.27)	18(12.33)	9(16.36)	1(8.33)	0(0.0)	41
S_4	36(36.73)	46(31.51)	13(23.64)	3(25.0)	0(0.0)	98
S_5	6(6.12)	9(6.16)	11(20.0)	1(8.33)	0(0.0)	27
S_6	5(5.1)	7(4.79)	2(3.64)	0(0.0)	1(20.0)	15
Total	98	146	55	12	5	316

Source: Primary Survey

- S\_5: Limiting the holding area for paddy crop (S\_5\_AP)
- S\_6: Organizing awareness camp for stubble uses for bio compost/bio energy (S\_6\_AC)

Table 4 presents suggestive measures for better management of paddy stubble burning, categorized by farm size. Each row corresponds to a specific measure (S\_1 through S\_6), while the columns represent different farm sizes: Marginal, Small, Semi-Medium, Medium, and Large. The numbers within the table cells denote the count of respondents who support each measure, followed by the percentage of respondents within each farm size category in parentheses. Analysis of the data reveals varying levels of support for different measures across farm sizes. For instance, measures like Government purchasing of stubble (S\_1) and Open and more subsidy on power/happy seeder (S\_2) have relatively higher support among larger farms, with Medium and Large farms showing notable percentages. Conversely, measures such as More strict action against paddy stubble burning by Government (S\_3\_LA) and more incentive for crop diversification (S\_4\_In) seem to have more support among Marginal and Small farms.

A graphical representation of the same is given below.

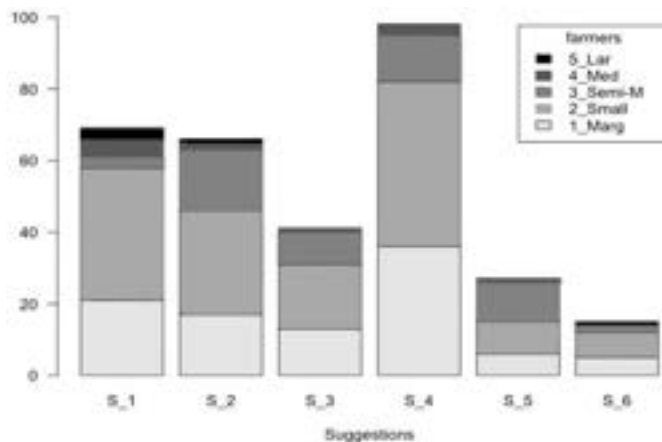


Chart 3

	> exp(coefficients(x))				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
S_2	0.8095308	0.9681933	6.999645	4.941650e-01	4.116911e-01
S_3	0.6190364	0.7858768	4.846057	3.231409e-01	1.886991e-07
S_4	1.7142777	0.7252274	2.527662	3.500308e-01	1.047458e-07
S_5	0.2857000	0.8513938	12.833403	7.001829e-01	1.445305e-06
S_6	0.2381021	0.7945467	2.799609	1.157797e-06	1.399620e+00

The odds ratios obtained from the multinomial logistic regression analysis shed light on the relationship

between farm size and farmers' support for various measures aimed at better managing paddy stubble burning. Across the different measures (S\_2 through S\_6), distinct patterns emerge regarding the likelihood of farmers from different farm sizes endorsing these strategies. For instance, measures like providing subsidies for power/happy seeder equipment (S\_2) and implementing stricter actions against stubble burning (S\_3) are more strongly associated with Small and Medium farms compared to Marginal farms. Conversely, incentives for crop diversification (S\_4) seem to garner higher support from Marginal farms, while measures such as limiting paddy crop holding areas (S\_5) and organizing awareness camps (S\_6) find stronger resonance among Semi-Medium and Large farms. Given below are the p-values for each odd ratio.

	> p				
	(Intercept)	farmers2_Small	farmers3_Semi-M	farmers4_Med	farmers5_Lar
S_2	0.517207251	0.9371338	0.005855476	0.4324923	0.4595363
S_3	0.174154402	0.5964977	0.036418964	0.3262988	0.0000000
S_4	0.049653582	0.3619016	0.183306951	0.1784841	0.0000000
S_5	0.006802964	0.7863924	0.001404342	0.7643968	0.0000000
S_6	0.003927619	0.7218908	0.322088346	0.0000000	0.7891800

These findings underscore the importance of tailoring policies and interventions based on farm size differences to effectively address the complex issue of paddy stubble burning and promote sustainable agricultural practices.

## CONCLUSION

The study investigated stubble management practices among 316 farmers, with different farm sizes. Smaller farms prioritise labour-intensive methods and crop diversification, likely aiming for soil health and market adaptation. Larger farms focus more on stubble as a resource for income or on-farm needs. The reasons why farmers opt not to burn stubble, such as environmental concerns and legal ramifications, exhibit differing degrees of importance depending on the size of their farms. Smaller farms may be more motivated by environmental stewardship and adherence to regulations due to limited resources, while larger farms may consider these factors alongside economic considerations. Information sources and suggested measures also vary by farm size, emphasising the need for policies. For instance, smaller farms lean towards stricter regulations and incentives for diversification, while larger farms prefer subsidies for equipment

and awareness campaigns. Such insights underscore the necessity of farm-specific approaches to address stubble burning and promote sustainable agriculture.

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**Online Links**

- <https://histecon.fas.harvard.edu/climate-loss/crops/index.html>
- [https://en.m.wikipedia.org/wiki/Stubble\\_burning](https://en.m.wikipedia.org/wiki/Stubble_burning)
- <https://fsii.in/technology-can-help-provide-economically-viable-solution-to-stubble-burning/>
- <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1864747>
- <https://agriharyana.gov.in/CRMCombineStraw>



## Book Review

**Dr. Surabhi Goyal\***

**Title : Mindset: Changing the Way You Think to Fulfil Your Potential**

**Author : Dr. Carol S. Dweck**

**Publisher: Constable and Robinson Ltd.**

**ISBN : 978-1-7803-3200-0**

**Year of Publication: 2017 | pp. 301 | Price: £ 10.99**

### INTRODUCTION

Dr. Carol S. Dweck's book "Mindset: Changing the way you think to fulfil your potential" is a profound exploration of the concept of mindset and its transformative power in personal and professional development. Originally published in 2006, this book continues to resonate widely across disciplines, offering practical insights into how individuals' beliefs about their abilities shape their achievements and resilience. The book is an extension of the previous work published by her in the name of "Mindset: The New psychology of Success".

### SUMMARY

At the heart of "Mindset" is Dweck's exploration of two distinct mindsets: the fixed mindset and the growth mindset. She propose that individuals with a fixed mindset believe their talents and abilities are fixed traits, leading them to avoid challenges and fear failure as a reflection of their inherent limitations. This leads to catastrophic situations. In contrast, those with a growth mindset believe that abilities can be developed through dedication, effort, and learning. This mindset fosters a love of learning, resilience in the face of setbacks, and a belief that intelligence and talents can be cultivated over time.

Dweck supports her arguments with extensive psychological research, real-life anecdotes, and practical examples from various domains such as

education, sports, business, parenting and relationships. She illustrates how mindset influences behavior, motivation, and ultimately, success. The book provides strategies for cultivating a growth mindset in oneself and others, emphasizing the importance of embracing challenges, learning from criticism, and persisting in the pursuit of long-term goals.

### ANALYSIS

"Mindset: Changing the way you think to fulfil your potential" is a ground-breaking work that combines academic rigor with practical applications. Dweck's writing is accessible yet profound, making complex psychological theories understandable and relevant to readers from all phases of life. She convincingly argues for the transformative power of adopting a growth mindset, not only for personal achievement but also for fostering a culture of innovation and resilience in organizations. The book challenges traditional notions of intelligence and talent, advocating for a paradigm shift towards viewing abilities as workable and modifiable through effort and perseverance. Dweck's insights have been widely embraced in educational organizations, where educators have integrated growth mindset principles to foster a positive learning environment and encourage students to embrace challenges as opportunities for growth.

There are few critical observations as well from readers point of view. While the concepts of fixed

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and growth mindsets are compelling, the empirical evidence supporting their distinct impact on behavior and outcomes could be further strengthened. More longitudinal studies and rigorous experimental designs could provide deeper insights into the causality and broader applicability of mindset effects. Socio-economic status, institutional barriers, and cultural factors can significantly shape opportunities and outcomes of mindset interventions in diverse situations. Promoting a growth mindset without addressing the systemic challenges in education and workplace environments could lead to superficial interventions that do not adequately support the desired results.

## **CONCLUSION**

In conclusion, “Mindset: Changing the way you think

to fulfil your potential” by Dr. Carol S. Dweck is a thought-provoking and influential book that offers a compelling argument for the power of mindset in shaping personal and professional success. By delineating between fixed and growth mindsets and providing practical strategies for cultivating the latter, Dweck equips readers with tools to unlock their full potential and achieve long-term goals. This book is essential reading for anyone interested in personal development, education reform, leadership, and organizational culture. It also prompts important discussions about the nature of human potential and the role of mindset in fostering resilience and achievement, yet it also invites ongoing scholarly inquiry and refinement in the application of mindset theory to diverse real-world settings.



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3. A final paper which would exceed 6000 words or occupy more than 15 pages of the Journal may be returned for abridgement.
4. The text of the paper should include title, abstract, keywords, text, references & notes, tables, figure captions, figures, but not the names of authors, their biographical notes or any acknowledgements. Author needs to submit a separate file containing the title of the paper, plus the names affiliation and complete addresses, e-mail and contact number of author(s), and an abstract, keywords, and any acknowledgements.

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#### **B. Title, Abstract, Keywords, Addresses, Biographical Notes**

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- Literature Review
- Research Method
- Analysis and Discussion
- Conclusion
- Limitations of the Study

- Scope for Further Research
- References

5. **Word Count**

- Article/Research Paper/Case Study: 6000 words maximum

**F. Address for Correspondence**

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### Dr. Amarjeet Kaur – *Editor-in-Chief*



An accomplished academician; an exemplary leader and an action-oriented self-motivated individual; Dr. Amarjeet Kaur has nearly three decades of experience in education and food industry. She is currently working as professor of Accounting; Dean, Faculty of Commerce & Management and Director, Foreign Students Cell at Gurugram University, Gurugram, India. She holds a Ph.D in Commerce from MD University, Rohtak, India and is a Certified Management Accountant (CMA) from the Institute of Management Accountants (IMA), USA. She has dual master's degree: an MBA from The University of the West of the Scotland (UWS), UK and M.Com from MD University, India. She is traveled extensively and has taught at two prestigious Universities of USA, viz., College of Business (AACSB Accredited) at Valparaiso University, Indiana and North Dakota

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Dr. Amarjeet is associated with UGC EDUSAT program for higher learning and delivers live lectures on Television at Doorsarshan VYAS Channel for Higher Education and has more than 120 videos available on YouTube. She has been conferred with 'Excellence in Academic Leadership' Award by Top Rankers, New Delhi and has been felicitated by Indian Society for Training & Development (ISTD) for her Innovative Practices at her workplace in the year 2015. She has also been conferred with 'Great Indian Woman Leader in Education' Award by Golden Signatures in the year 2021. She holds vast administrative experience as Director and Dean while working with prestigious business schools and regularly conducts training programs for corporate clients. As corporate trainer, she conducts management development programs on Trade Finance, IFRS, Cost Analysis, Letter of Credit and Finance for Non-Finance Executives. She is a very dedicated person, who loves and admires nature and enjoys yoga & travelling.

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Dr. Naveen Kumar has done B.com (Hons), MBA, M.Com; B.Ed. He has obtained his Ph.D Degree from Department of Commerce, MDU Rohtak. He has passed the UGC NET-JRF exam in both subjects (Commerce & Management). He is also passed the HTET (HSBE, Bhiwani), CTET (CBSE) & RTET exams (conducted by RPSC Rajasthan). His areas of interest are Quantitative Techniques, Statistics, Income Tax and Finance & Computer Application in Business. He has four-year teaching experience in the Department of Commerce, MDU Rohtak as a research scholar. He was the founder member of Commerce Department at Gurugram University, Gurugram. He has published 15 research papers in Peer-Reviewed International and National Journals. He has presented various research

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**Dr. Hawa Singh – Associate Editor**

Dr. Hawa Singh is a person of high intellect and insights. He started his academic journey with completion of Ph.D degree in Management from Institute of Management Studies And Research (IMSAR), Maharishi Dayanand University, Rohtak, Haryana. In 2012, he qualified the National Eligibility Test UGC-NET/JRF in Management subject. He obtained his master's degree in Master of Business Administration with specialization of Human Resource Management & Marketing Management. He has participated in a number of seminars and conferences and presented research papers. He has published several research papers/articles in the esteemed national and international journals and magazines of national repute.

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