



Enhancing Organizational Performance: Investigating the Intersection of Employees' Job Outcomes and Workplace Environment

Dr. Nasir Javed Awan¹

Abstract

Work engagement, job involvement, and job satisfaction are pivotal in shaping employees' job outcomes, which subsequently influence organizational performance. However, these critical factors are often deficient in Pakistan's pharmaceutical industry, leading to suboptimal performance levels. This study delved into the relationship between job outcomes and organizational performance, with a particular focus on the mediating role of the workplace environment. An analysis of data from 240 employees across 52 pharmaceutical companies in Lahore, utilizing SPSS and Hayes' PROCESS macro, revealed that job attitudes significantly impact performance, mediated by the workplace environment. The study identified management practices, effective communication, technology integration, feedback mechanisms, and resource empowerment as key drivers of improved performance. These findings offer valuable insights for policymakers aiming to enhance employee job outcomes and boost organizational performance within the pharmaceutical sector.

Keywords: Organizational performance, employees' job outcomes, work engagement, job involvement, job satisfaction, and the workplace environment

1. Introduction

In the dynamic and evolving modern business world, organizational success hinges on the intricate interplay between employees' job outcomes and their workplace environment. This relationship is central to organizational performance, as the workforce—an ensemble of skills and potentialities—makes operations possible. From routine tasks to strategic endeavors, employees articulate and achieve organizational objectives, with their efficiency and effectiveness pivotal to success (Continue & Edeh, 2015; Johari et al., 2012; Noor et al., 2020). Effective human resource management, akin to a conductor shaping a symphony, orchestrates productivity, profitability, and overall success. In a realm marked by fluidity and unpredictability, an adaptable and self-motivated workforce enables organizations to navigate market changes astutely, providing a competitive edge through intellectual capital (Munteanu et al., 2020). Employees are more than mere notes in the organizational symphony; they are virtuoso players whose individual and collective actions compose the melodies of business success. The pharmaceutical industry exemplifies this complex interplay, being crucial for healthcare provision and economic growth. This study, focusing on Pakistan's pharmaceutical sector, aims to unravel the relationship between employees' job outcomes, workplace environment dynamics, and their cumulative impact on organizational performance. It highlights the mediating role of the workplace environment in this intricate interrelationship, shedding light on a previously uncharted territory within Pakistan's pharmaceutical industry.

1.1. Contextualizing the Pharmaceutical Industry

The pharmaceutical industry, as a quintessential cornerstone of modern societal progress, rests at the juncture of scientific innovation, healthcare enhancement, and economic prosperity. Research by Qasem et al. (2024); Qurashi et al. (2020) underscores the industry's substantial contribution to economic development, underpinning advancements in research and development while fostering employment opportunities. In the context of Pakistan, where the pharmaceutical sector stands as a burgeoning pillar of the economy, the ramifications of this industry's performance are intricately woven into the fabric of the nation's progress. However, within the intricate web of achievements and prospects, an unsettling concern casts its shadow—the pervasive issue of high employee turnover, which leads to the loss of talented individuals, incurs substantial replacement costs, and decreases productivity (Braddock, 2024).

1.2. The Looming Challenge of High Employee Turnover

The pharmaceutical industry in Pakistan confronts a distinctive challenge that has far-reaching implications for its sustained growth and impact. The palpable and consistent oscillation in workforce allegiance, a hallmark of high employee turnover, not only ripples through the operational dynamics of the organizations but also permeates the fundamental essence of their functionality. This challenge is underscored by the study conducted by Khan (2020), which highlights that the sector's high attrition rates result from an intricate interplay of motivational deficits, organizational misalignment, and lack of engagement among employees.

1.3. Reframing Organizational Success: A Nexus of Factors

Amidst this backdrop, the fulcrum of organizational achievement revealed to be a multidimensional and synergistic interplay. The dimensions encompassed within the realm of employees' job outcomes—ranging from their levels of engagement, attitudes, and satisfactions—stand as foundational pillars that shape their contributions to the organization. This assertion resonates with the findings of Eresia-Eke et al. (2023); Khan et al. (2018), who expound upon the intrinsic link between employees' job outcomes and the broader organizational landscape.

1.4. The Mediating Role of Workplace Environment

A noteworthy facet emerges from the labyrinthine relationships that define organizational achievement—the mediating role of the workplace environment. As postulated by Brown and Leigh (1996), the workplace environment is not a mere backdrop but rather a dynamic catalyst that amplifies or dampens the effects of employees' job outcomes on the broader organizational performance canvas. This environment encapsulates the intricate interplay of organizational culture, leadership styles, and mechanisms of support,

¹ PhD, Asia e University, Malaysia

molding the very context within which employees' job outcomes flourish or falter. A positive workplace environment cultivates the growth of a constructive organizational culture, which in turn elevates employee morale and satisfaction, curbs turnover rates, and bolsters the industry's reputation (Smith & Fredricks-Lowman, 2020; Zhang & Zhang, 2023). Furthermore, contented employees inherently tend to prolong their tenures within the organization, thus reducing turnover rates and the associated costs linked to recruitment and training expenditures (Fair, 2023; Fulmore et al., 2023).

1.5. The Research Nexus: Addressing a Conspicuous Void

This study serves as a guiding light amidst the complex connections within the pharmaceutical industry in Pakistan, where high turnover signifies both a symptom and a cause of organizational challenges. It aims to uncover the intricate relationship between employees' job outcomes, the nuanced workplace environment, and their collective impact on organizational performance. Integrating diverse research paradigms, the study not only explores the facets of job outcomes and workplace dynamics but also examines how the latter influences these outcomes. Grounded in empirical research influenced by scholars like Allen and Meyer (1996), who defined affective commitment, and Kahn (1990), who explored employee engagement, this research seeks a deeper understanding of these critical organizational dynamics.

1.6. Research Aim and Objectives

The primary aim of this research was to untangle the intricate web of relationships among employees' job outcomes, the workplace environment, and organizational performance within the unique contours of Pakistan's pharmaceutical industry. To achieve this aim, the study pursues the following objectives.

1.6.1. Examine Employees' Job Outcomes

The research comprehensively explores the dimensions of work engagement, positive work attitude, job satisfaction, job involvement, affective commitment, and intent to stay among employees in the pharmaceutical sector. This examination forms the bedrock for understanding the foundations of employees' experiences and perceptions within their organizational roles.

1.6.2. Uncover Workplace Environment Dynamics

The study investigates the characteristics of the workplace environment, including organizational culture, leadership styles, and employee support mechanisms. By doing so, it seeks to illuminate the contextual factors that either nurture or hinder employees' positive job outcomes.

1.6.3. Analyze the Mediating Role of Workplace Environment

Central to this research is the exploration of how the workplace environment functions as a mediating factor between employees' job outcomes and organizational performance. By dissecting this intermediary mechanism, the study endeavors to reveal the extent to which a conducive workplace environment can potentially enhance organizational performance.

1.6.4. Propose Strategies for Enhancement

Guided by empirical evidence, the study aims to propose pragmatic strategies that organizations operating within Pakistan's pharmaceutical industry can implement to foster positive job outcomes, reinforce the workplace environment, and ultimately bolster organizational performance.

2. Review of Literature

2.1. Organizational Performance

Organizational performance is defined as the extent to which a corporation successfully achieves its intended objectives, goals, and targets, reflecting its effectiveness and efficiency in utilizing resources to deliver value to stakeholders. Anwar et al. (2016) highlight that performance involves the efficient and effective conversion processes at each organizational level. Performance is assessed by comparing actual output against set standards or goals, ensuring resource utilization in a well-structured manner (Abdulrahman & Garba, 2020), and benchmarking against similar organizations. This multifaceted concept includes financial and non-financial metrics like sales, productivity, market share, customer and employee satisfaction, management quality, innovation, and sustainability (Chen & Zhou, 2021; Rokni et al., 2021; Singh et al., 2022). Organizations must continually monitor and improve their performance to remain competitive and achieve long-term success. Traditionally, performance measurement focused on financial metrics such as return on assets, return on equity, and profit margin (Hernaus et al., 2012), but these have proven limited in communicating strategies and priorities (Neely, 2007). Since the mid-1980s, there has been a shift towards incorporating nonfinancial metrics like customer retention and employee turnover (Maldonado, 2021). Effective performance strategies require a blend of financial and non-financial measures, which are mutually reinforcing (Hernaus et al., 2012; Kihn, 2010).

In the pharmaceutical industry, profitability, return on assets (ROA), and productivity are critical for overall organizational performance. Profitability supports reinvestment in R&D, talent attraction, and regulatory compliance, enhancing product quality. ROA measures efficiency in generating earnings from total assets, reflecting financial stability and operational performance. Employee productivity, especially in sales and marketing, directly impacts market penetration and revenue. Metrics like value added per employee and commitment indicate workforce efficiency and collaborative strength. High commitment and low turnover reduce costs and improve performance. Managing absenteeism is crucial in this precision sector. Product quality and process efficiency are paramount, with leading companies setting benchmarks for regulatory compliance and customer trust. Innovation and strategic management sustain competitive advantage. A strong reputation attracts investors, government support, and expands market share. Customer retention hinges on addressing complaints promptly to prevent regulatory issues and build loyalty, essential for maintaining competitive positioning. Robust supplier relationships, emphasized during COVID-19, enhance resource sharing and risk management. Trust reduces conflicts, lowers costs, and fosters innovation. Efficiently managing service errors and waste levels preserves reputation, attracts stakeholders, and ensures long-term success in the competitive pharmaceutical landscape.

Regulatory changes in the pharmaceutical industry drive organizational performance by ensuring product safety and efficacy, demanding continuous adaptation amid scientific advancements and global health dynamics. Market competition spurs innovation and operational efficiency through substantial investments in research and development. Effective market access strategies are

crucial for reaching patients and impacting financial performance. Intellectual property rights, particularly patents, offer a competitive edge but present challenges like litigation. Drug approvals and clinical trials are pivotal, shaping market entry and revenue generation. Technological advancements streamline drug discovery and manufacturing. Economic conditions influence pricing strategies and supply chain stability, requiring agile fiscal navigation. Trade agreements enhance market access, revenue, and competitive positioning but affect pricing and intellectual property. They provide opportunities in emerging markets, necessitating regulatory compliance and robust risk management. Supply chain disruptions jeopardize product availability and financial stability, exacerbated by natural disasters and health crises. Ethical sourcing and regulatory compliance are essential to manage disruptions effectively. Stricter environmental regulations drive sustainable practices, reducing environmental impact and costs while enhancing reputation. Strong environmental and social governance attract investors, supporting growth and market expansion. Sustainability practices mitigate supply chain risks, foster innovation, and ensure competitive advantage, promoting ecofriendly and ethical operations for long-term organizational sustainability.

2.2. Work Engagement

Work engagement, extensively researched for its profound impact on individuals and organizations, encompasses cognitive, emotional, and physical dimensions, reflecting deep immersion, intense focus, and significant involvement in work tasks (Christian et al., 2011; Macey et al., 2011). It entails the expenditure of energy across these dimensions to effectively pursue job-related objectives (Cameron et al., 2003). Engagement also involves the authentic expression of one's self in work behaviors, fostering innovative performance and punctuality (Kahn, 1990; Turner, 2020). Defined as a positive, affective-motivational state with heightened energy, unwavering dedication, and a strong work-centric focus (Bakker & Albrecht, 2018; Schaufeli & Bakker, 2010), fostering work engagement is crucial in contemporary organizations, driving creativity, task performance, organizational citizenship behavior, and client satisfaction (Bakker, 2014; Bakker & Albrecht, 2018). Particularly pivotal in high-impact sectors like pharmaceuticals, where employee performance directly influences customer satisfaction and loyalty (Tsaur et al., 2019), engaged employees demonstrate elevated energy, involvement, concentration, and job satisfaction (Gersdorf-Van den Berg et al., 2024). While engagement primarily centers on the work role, the employee-organization relationship also plays a vital role in its cultivation (Rahmadani & Schaufeli, 2022). Ultimately, work engagement signifies a high level of energy and intrinsic connection to one's work, fostering organizational growth and prosperity through dedication, enthusiasm, and purposeful contributions (Chikobvu & Harunavamwe, 2022). Nurturing work engagement unlocks benefits such as increased productivity, positive work environments, and a ripple effect of engagement among employees, essential for thriving in today's dynamic work landscape.

2.3. Job Involvement

Job involvement encompasses a complex array of psychological attributes reflecting an individual's commitment, identification, and personal significance towards their employment, extending beyond mere work engagement to include cognitive preoccupation, emotional engagement, and a profound concern for one's job (Kanungo, 1982; Lambert et al., 2021; Lodahl & Kejnar, 1965). It signifies a deep psychological and emotional connection with one's work, where the job becomes integral to one's identity and personal importance (Sharma & Sharma, 2021). This multifaceted concept captures how individuals internalize the value and significance of their occupation, akin to a form of affection or keen interest in their job tasks (Pollock, 1997). Job involvement is influenced by personal contentment and the satisfaction of both intrinsic and extrinsic needs (Gopinath, 2021), with highly involved individuals seeing their job as central to life's rewards and benefits, impacting overall well-being (DeCarufel & Schaan, 1990; Lambert et al., 2021). Those deeply involved exhibit higher efficiency and diligence, viewing their job as integral to life's objectives, whereas lower levels of job involvement may lead to reduced creativity and innovation (Hogan et al., 2013). This intricate relationship underscores job involvement's importance in organizational research, shaping employee behaviours and outcomes within contemporary workplaces.

2.4. Job Satisfaction

Job satisfaction, a fundamental aspect of the work experience, emerges from an individual's evaluation of their job, rooted in emotional reactions and cognitive assessments (Brief & Weiss, 2002; Hoppock, 1935). Researchers have explored this multifaceted concept from diverse angles, yielding varied definitions and frameworks. Central to job satisfaction is whether one perceives his/her job positively or negatively, profoundly influencing overall attitude and emotional well-being (Brief & Weiss, 2002). High job satisfaction correlates with improved job performance, whereas dissatisfaction often leads to poorer outcomes (Bhatti et al., 2018). It encompasses emotional and cognitive responses to the work environment, encompassing attitudes, relationships, and compensation (Gopinath, 2020; Saal & Knight, 1995; Schwepker Jr, 2001), influenced by internal motivators, supervision effectiveness, and workplace social connections (Ali & Anwar, 2021). This comprehensive view significantly impacts an individual's job success. Moreover, job satisfaction serves as a critical determinant of organizational effectiveness, influencing employee commitment, turnover rates, absenteeism, tardiness, accidents, and grievances (Moorhead & Griffin, 1999; Sharma, 2017). It integrates emotional and cognitive dimensions, illuminating perceptions of the work environment and overall contentment (Ekhsan, 2019). Beyond personal disposition, it evaluates job-related factors like roles, the work environment, and interpersonal relationships, encompassing positive emotions, attitudes, values, and beliefs about the job (Lee & Kim, 2023). Research underscores intriguing connections such as the positive link between mental toughness and job satisfaction, juxtaposed with its negative relationship with job stress, highlighting the complex interplay of psychological factors in shaping job satisfaction (Burnett et al., 2020; Clair-Thompson et al., 2015).

2.5. Workplace Environment

The term "workplace environment" in the pharmaceutical industry encompasses a holistic perspective that includes physical, social, and psychological factors influencing employees, such as task execution, job activities, training opportunities, autonomy, sense of achievement, task variety, and intrinsic value (Asif & Rehman, 2021; Oludeyi, 2015; Osazevbaru & Amawhe, 2021). This tripartite entity integrates technical, human, and organizational aspects crucial for optimizing employee performance. The multifaceted nature of the workplace environment, as assessed by the Working Environment Scale-10 (Rössberg et al., 2004), underscores its impact on job satisfaction and well-being, influencing productivity and employee interactions (Akinyele, 2010; Havaei et al., 2020; Reina et

al., 2023; Sutaguna et al., 2023). Physical environments shape behavior, attitudes, and relationships, directly affecting productivity and satisfaction (Almohtasb et al., 2021; Badrianto & Ekhsan, 2020). Understanding the comprehensive impact of the workplace environment on psychological well-being and efficiency is crucial for influencing organizational performance (Sarode & Shirsath, 2014; Transilvanus et al., 2019). The workplace environment encompasses surroundings and conditions that impact employees' sense of security, comfort, and satisfaction in task execution, influencing their productivity and satisfaction (Anam, 2018; Saputra & Mahaputra, 2022). It includes elements that influence ongoing responsibilities and interactions within the organizational framework, emphasizing the importance of conducive environments that facilitate employee performance (Aristarini et al., 2024; Goet, 2022; Vischer, 2008). This environment extends beyond physical workspace to encompass supporting facilities, cleanliness, lighting, and interpersonal relationships, all crucial for enhancing work processes and organizational outcomes.

2.6. Theoretical Framework

This research study establishes a robust theoretical framework elucidating the intricate connections among employees' job outcomes, such as work engagement, job involvement, and job satisfaction, alongside the workplace environment and organizational performance. Central to this framework is the concept of work attitudes, encompassing individuals' emotional and cognitive orientations towards their jobs, influencing their overall satisfaction and performance (Ogunyemi, 2020). The study identifies job satisfaction as reflecting an individual's overall predisposition and well-being at work (Miao, 2011), while job involvement indicates psychological commitment and interest in one's role (Kanungo, 1982; Pollock, 1997). The Social Exchange Theory posits that favorable workplace exchanges enhance work engagement, involvement, and satisfaction, thereby bolstering organizational outcomes (Aldhuwaihi, 2013; Kidombo, 2007; Kidombo et al., 2012; Pinho et al., 2014). Moreover, the Affective Events Theory suggests that positive work events cultivate emotions conducive to higher performance (Redelinghuys et al., 2019). Furthermore, the Resource-Based View Theory asserts that effectively leveraging internal resources and capabilities enhances organizational performance and competitive advantage (Barney, 1991; Hsu & Pereira, 2008). Leadership plays a pivotal role in fostering team cohesion aligning individual aspirations with organizational goals to promote work engagement and enhances performance outcomes (Kidombo, 2007). In the specific context of the pharmaceutical sector in Pakistan, the study identifies critical gaps related to integrating these theoretical perspectives into organizational practices and underscores the need for strategic interventions to fortify workforce capabilities and enhance organizational performance. Addressing these gaps and fostering a conducive workplace environment that supports positive work attitudes, engagement, satisfaction, involvement, commitment, and retention is essential for pharmaceutical enterprises to achieve sustained success in Pakistan's competitive market. This research aims to provide valuable insights into these complex dynamics, offering a nuanced understanding of their impact on organizational performance within the specific context of the Pakistan's pharmaceutical industry.

2.7. Hypotheses Development

2.7.1. Work Engagement and Organizational Performance

Employee work engagement stands as pivotal for organizational success within the pharmaceutical industry, as evidenced by numerous critical studies. Defined as a proactive, enthusiastic mindset towards organizational goals and values (Christian et al., 2011; Song et al., 2023), work engagement fosters a deep understanding of the business environment and active collaboration among employees, thereby enhancing overall performance (Gupta & Sharma, 2016; Jenkins & Delbridge, 2013). Engaged employees contribute significantly to organizational profitability and performance by dedicating themselves to their work (Ahmed et al., 2020; Saks, 2006), thus bolstering the company's reputation and financial outcomes. The relationship between work engagement and organizational performance is paramount, with engaged employees consistently demonstrating better decision-making, proactive planning, and enthusiastic job execution (Khairy et al., 2023; Mansor et al., 2023), ultimately driving productivity and organizational growth (Sharma, 2021). Studies underscore how work engagement shapes a pharmaceutical company's success by highlighting the importance of supporting engaged employees for sustained performance and growth. Moreover, engaged employees find their work meaningful, enhancing their commitment and connection to the organization, thereby positively impacting business outcomes (Saks, 2006; Srimulyani & Hermanto, 2022). Their dedication and motivation contribute directly to organizational growth and financial success (Estimo & Villanueva, 2023; McCutcheon, 2019), further positioning the organization competitively in the market (Guo & Hou, 2022). Engaged employees within the pharmaceutical sector are meticulous and detail-oriented, crucial for compliance and quality control (Chen et al., 2022; Zaman, 2023), thereby enhancing the organization's reputation and market position. This proactive engagement not only drives operational success but also strengthens the sector's credibility and ethical standing, fostering continuous growth and high performance. Guided by the Affective Events Theory, the Resource-Based View Theory, and empirical literature, the study posits hypothesis to further explore these dynamics.

H1: There is a positive relationship between work engagement and organizational performance.

2.7.2. Job Involvement and Organizational Performance

The significance of job involvement in the pharmaceutical industry is paramount for organizational success, as it fosters employee loyalty and enhances performance. Job involvement reflects the extent to which individuals connect with their work, actively engage in tasks, and perceive job outcomes as integral to their self-concept (Anindyta & Anggraini, 2022; Gopinath, 2020). Eneh (2022) underscores its role in empowering employees and enhancing performance through active participation. High job involvement correlates with increased motivation and exceeding expectations, driven by a strong tie between self-esteem and job performance (Tariq & Diana, 2022). This connection extends to punctuality and a sense of accomplishment (Gilavand & Mehralizadeh, 2022), contributing to employee commitment and organizational success. Job involvement also strengthens organizational commitment, aligning employees with company goals and values, fostering a positive culture, and enhancing performance (Lambert et al., 2021). It reduces turnover rates and associated costs by retaining experienced employees (Al-Suraihi et al., 2021), ensuring operational continuity and stability. Moreover, job involvement positively impacts employee well-being, reducing stress and enhancing job satisfaction, thereby boosting productivity and reducing absenteeism (Al-Suraihi et al., 2021; Elorza et al., 2022). Employees' deep commitment to organizational goals and ownership is evident, enhancing engagement and loyalty (Purwanto, 2020; Rajendran & Doraisamy, 2022). In the pharmaceutical sector, job involvement is pivotal, influencing productivity, innovation, commitment to

quality, and overall organizational success. Guided by Affective Events Theory, Resource-Based View Theory, and literature, the study posits hypothesis to further explore these dynamics.

H2: There is a positive relationship between job involvement and organizational performance.

2.7.3. Job Satisfaction and Organizational Performance

Job satisfaction, essential for fostering positive employee orientation and emotional engagement with their work (Giri & Pavan Kumar, 2010), is pivotal in organizational development, correlating with enhanced performance and adverse outcomes in cases of dissatisfaction (Bhatti et al., 2018). It encompasses positive emotions such as pleasure, enthusiasm, passion, and affection (Jain, 2016). Organizational performance evaluates employee conduct and effectiveness within the organizational context (Kalogiannidis, 2021), influencing task quality. Job satisfaction significantly impacts job performance, thereby influencing overall organizational effectiveness (Kalogiannidis, 2021), fostering enthusiastic and dedicated task execution (Sathyanarayan & Lavanya, 2018). Moreover, job satisfaction bolsters morale, discipline, and work performance, facilitating achievement of organizational goals (Chih et al., 2008), with contented employees often outperforming dissatisfied counterparts (Basak et al., 2013). Satisfied employees are more likely to remain with the organization, further contributing to its success (Basak et al., 2013), while also enhancing production quality (Shahnawaz Adil, 2015). In the pharmaceutical sector, where precision and compliance are critical, job satisfaction significantly influences employees' meticulousness and commitment to stringent quality standards (Niaz & Nwagwu, 2023). Studies indicate a direct link between job satisfaction and reduced errors, improved precision, and regulatory compliance (Bhat et al., 2023; Schaufeli & Bakker, 2010; Wang & Li, 2021), crucial for organizational performance in pharmaceutical settings (Fu et al., 2023; Scanlan & Hazelton, 2019). Furthermore, job satisfaction correlates with increased motivation and innovation among employees, crucial for research and development outcomes (Nemaei, 2012; Shafaei & Nejati, 2023). This creativity contributes significantly to organizational success and competitiveness (Bakotić, 2016). Empirical studies consistently affirm the positive association between job satisfaction and various dimensions of organizational performance (Alrazehi et al., 2021; Hilton et al., 2021; Imran et al., 2021; Latif et al., 2013; Miah, 2018), substantiating its critical role in shaping organizational outcomes. Supported by Affective Events Theory, Resource-Based View Theory, and literature, the study posits hypothesis to further explore these dynamics.

H3: There is a positive relationship between job satisfaction and organizational performance.

2.7.4. Workplace Environment and Organizational Performance

The management of the workplace environment, encompassing physical and social dimensions, is crucial for employee performance and organizational success (Awan & Tahir, 2015; Galanti et al., 2021). Though not directly involved in production, the workplace environment significantly influences employee engagement and motivation (Al Sabei et al., 2020; Sutaguna et al., 2023). A well-designed environment that prioritizes employee well-being enhances productivity and performance (Badrianto & Ekhsan, 2020; Sutaguna et al., 2023). Conversely, an inadequate environment can hinder performance and reduce motivation (Nanzushi, 2015; Wilson, 2015). Factors influencing the workplace environment, both positive and negative, are critical in shaping employee behaviors and organizational outcomes (Goet, 2022; Lankeshwara, 2016). Improving the physical workspace can lead to significant productivity gains. Strategic interventions targeting workplace environment factors are essential to cultivate a positive culture and maximize productivity. Additionally, a diverse and inclusive workplace is a strategic advantage in the pharmaceutical industry (Nanzushi, 2015; Nurminen, 2023). Diverse teams enhance problem-solving and innovation, crucial for complex solutions (Kumar & Gupta, 2023). Collaboration and teamwork are vital for success, requiring supportive environments that facilitate communication and multidisciplinary approaches (Alshehhi et al. (2023); Osemwegie (2023)). Resilient workplace environments with clear communication and supportive cultures help organizations navigate challenges effectively (Yildiz & Akkas, 2023; Zhabin, 2023). Robust crisis management strategies enhance performance during turbulent times, emphasizing resilience in organizational settings (Roscoe et al., 2022; Wysokińska-Senkus et al., 2023). Compliance with regulatory standards ensures product quality and operational integrity in the pharmaceutical sector (Curcuruto & Griffin, 2023; Tawade & Pandya, 2023). Ethical leadership and governance foster integrity and stakeholder trust, essential for sustained success (Anggiriawan et al., 2023; Badar et al., 2023). A positive workplace culture reinforces ethical behavior and organizational values, enhancing employee commitment and performance (Jain et al., 2023; Raja et al., 2019). This comprehensive approach supported by theories like Social Exchange Theory, Affective Events Theory, and Resource-Based View Theory, forms the basis for hypothesis exploring these interconnected dynamics within the pharmaceutical industry.

H4: There is a positive relationship between the workplace environment and organizational performance.

2.7.5. Work Engagement and Workplace Environment

Work engagement significantly shapes the workplace environment within the pharmaceutical industry, reflecting a positive and fulfilling outlook characterized by strength, commitment, and immersion (Varghese & Joseph, 2020). This synergy fosters employee well-being, job satisfaction, positive work attitudes, and a strong intention to stay with the organization (Wan et al., 2018). Constructive attitudes enhance work engagement and job performance (Rich et al., 2010; Simbula & Guglielmi, 2013), affecting both individual workers and overall organizational performance (Chen, 2018; Mäkikangas et al., 2016). A workplace environment grounded in respect, dignity, and recognition promotes pride, collaboration, and an ethical culture (Sarwar & Abugre, 2013). Engaged employees contribute ideas and feedback, fostering transparency, innovation, and continuous improvement (Li et al., 2022; Sheoran et al., 2023). They also actively participate in wellness programs, enhancing mental and physical well-being (Jacobs et al., 2018; Munoz et al., 2022), and promote a robust health and safety culture (Bakker & Demerouti, 2017; Saleem et al., 2022). Work engagement affects productivity, innovation, well-being, safety, compliance, learning, recognition, adaptability, collaboration, sustainability, and social responsibility, driving organizational success. Its multifaceted nature includes talent acquisition, employee voice, health, safety, and ethical decision-making, aligning with organizational goals. Understanding and fostering work engagement are strategic imperatives, supported by theories like Social Exchange Theory, Affective Events Theory, and Resource-Based Theory, which leads to postulate hypotheses.

H5: There is a positive relationship between work engagement and the workplace environment.

H6: The workplace environment mediates relationship between work engagement and organizational performance.

2.7.6. Job Involvement and Workplace Environment

Job involvement, defined as the way individuals perceive their job and relationship with the workplace environment (Abdallah et al., 2017; Kappagoda, 2013), is crucial in shaping the dynamics of the pharmaceutical industry. Highly involved employees see their job as integral to their life, contributing significantly to their self-esteem, adaptability, dedication, and superior performance (Kanungo, 1982; Weng et al., 2023). In a business landscape characterized by evolving strategies for competitive advantage, organizations face increased complexity, challenging workplace environments, and heightened pressure on employees to meet tight deadlines with agility (Afshari et al., 2022). These high demands can lead to stress and burnout (Komlenac et al., 2022), making it essential for managers to establish a positive workplace environment and foster job involvement (Smith et al., 2018). Nelson (1993); Purwanto (2022) highlight that job involvement motivates employees to be more productive and creative, underscoring its importance for a thriving workplace in the pharmaceutical industry. Furthermore, job involvement enhances work-life integration (Bradley et al., 2023; Grant et al., 2007), reduces burnout, and promotes overall well-being in an industry with demanding workloads. It also positively influences workplace diversity and inclusion (Jaiswal & Dyaram, 2020); Singh and Gupta (2015), emotional intelligence (Papoutsi et al., 2019; Selvi & Aiswarya, 2023), and the effectiveness of employee recognition programs (Bhende et al., 2020). Additionally, job involvement fosters ethical decision-making (Schwarz et al., 2023), crucial for maintaining ethical standards in research and development. Recognizing and cultivating high levels of job involvement is thus essential for fostering a positive and supportive workplace culture, optimizing overall performance in pharmaceutical organizations (Kaur et al., 2022). Drawing on the Social Exchange Theory, Affective Events Theory, Resource-Based View Theory, and relevant literature, the following hypotheses were proposed:

H7: There is a positive relationship between job involvement and the workplace environment.

H8: The workplace environment mediates relationship between job involvement and organizational performance.

2.7.7. Job Satisfaction and Workplace Environment

Job satisfaction is a pivotal determinant of the pharmaceutical industry's workplace environment, influencing key dimensions crucial for organizational success. Research by De Simone et al. (2018); Halbesleben and Wheeler (2008) highlights its personal-level benefits, such as enhancing job performance and fostering employee retention. Elevated job satisfaction results in greater enthusiasm and commitment, positively shaping the overall organizational environment. This sentiment is closely tied to employees' attitudes and perceptions of their roles, including factors like compensation, challenge, autonomy, and collegial relationships (Bakotić, 2016). The complexity of job satisfaction involves the interplay of emotions, attitudes, and interactions within the workplace context (Badrianto & Ekhsan, 2020), and stakeholders' perceptions of the organization are significantly influenced by employee contentment (Gross et al., 2021). Employees form cognitive, emotional, and intentional responses to their job and workplace environment, determining their satisfaction levels (Wang et al., 2020). Job satisfaction also correlates significantly with a healthy and safe workplace environment (Donley, 2021) and is influenced by the characteristics of the workplace (Cera & Kusaku, 2021). Satisfied employees are more likely to align with organizational values and norms. Studies by Grawitch et al. (2006); Nader et al. (2022) highlight the connection between job satisfaction and well-being initiatives, which reduce absenteeism and improve morale. Job satisfaction also encourages participation in corporate social responsibility initiatives, crucial in the pharmaceutical industry where ethical considerations are paramount (Bakker et al., 2008; Silva et al., 2023). Satisfied employees contribute to a positive workplace environment, enhancing performance, resilience, innovation, and ethical behavior. Thus, pharmaceutical companies prioritize initiatives to enhance job satisfaction, fostering a positive and dynamic workplace. Based on the Social Exchange Theory, Affective Events Theory, Resource-Based Theory, and relevant literature, the following hypotheses were proposed:

H9: There is a positive relationship between job satisfaction and the workplace environment.

H10: The workplace environment mediates relationship between job satisfaction and organizational performance.

3. Methodology

3.1. Population

The research aimed to explore the impact of employees' job outcomes on organizational performance, specifically within Pakistan's pharmaceutical sector. A focused exploration of 52 pharmaceutical companies in Lahore was conducted to investigate the mediating role of the workplace environment in this context. This localized, industry-specific approach was crucial to understand complex relationship between job outcomes and organizational performance. Employees from these companies were selected as the sample, providing valuable insights due to their expertise in job outcomes, workplace environment, and organizational performance. The study faced challenges such as obtaining permissions from companies and potential non-response bias due to busy schedules. To address these, a non-probability purposive sampling technique was employed, securing a sample size of 240 participants. This approach ensured an adequate number of participants necessary for this study. The selection process prioritized including decisionmakers across various hierarchical levels to capture comprehensive insights into organizational dynamics and responsibilities within the pharmaceutical industry in Pakistan.

3.2. Research Approach

3.2.1. Design

The study employed a pragmatic research paradigm, meticulously designing its methodology to investigate the complex relationships between employees' job outcomes, the workplace environment, and organizational performance. This included developing testable predictions using quantitative methods aligned with an objectivist ontology. A cross-sectional correlational design was utilized, collecting data at two distinct time points to mitigate common method bias and enhance reliability. Data collection involved surveying employees on job outcomes and the workplace environment initially, followed by organizational performance measures later, ensuring a nuanced exploration over time. Purposive sampling was deliberately chosen to recruit participants from Pakistan's pharmaceutical sector, focusing on their unique insights relevant to the study's objectives. This approach facilitated an in-depth

examination of contextual nuances and personal experiences, enriching the study's contribution to academic discourse with profound insights from a specific group's perspectives.

3.2.2. Measures and Instrumentation

In the study, organizational performance was evaluated through financial and non-financial dimensions, with the latter including twelve items from Hernaus et al. (2012). Participants rated this on a 5-point Likert scale, with negatively worded items reverse scored to minimize bias. The overall score was calculated by averaging the items, with a higher score indicating better performance; Cronbach's alpha was 0.792, showing good reliability. Work engagement was measured using Schaufeli and Bakker's 9-item scale, with participants rating items from 1 (never) to 5 (always). The scores were summed and averaged, with higher scores indicating greater engagement; Cronbach's alpha was 0.837, reflecting very good reliability. Job involvement was evaluated using a 6-item scale by Lodahl and Kejnar, later validated by Ejiogu and Fiori, rated from 1 (disagree) to 5 (agree). The scores were averaged, with Cronbach's alpha of 0.757, indicating acceptable reliability. Job satisfaction was assessed with a 5-item scale based on Brayfield and Rothe's model, using a 5-point Likert scale. Negative items were reverse scored, and the average score was calculated, with Cronbach's alpha at 0.759, indicating acceptable reliability. The workplace environment was assessed using a 10-item scale by Røssberg et al. (2004), with ratings from 1 (not at all) to 5 (very often). The average score was calculated, with Cronbach's alpha at 0.825, showing very good reliability.

3.3. Data Collection

Internal validity is crucial in research, ensuring that causal relationships are accurately established without interference from external factors. Achieving strong internal validity involves meticulous design, experimental control, random assignment, and careful operationalization of variables to mitigate threats such as history, maturation, and selection bias. This approach enhances confidence in study outcomes and their alignment with hypothesized relationships. The questionnaire validation process focused on internal validity, analyzing correlation coefficients for 45 selected questions, which showed significant correlations and confirmed the reliability and validity of constructs like work engagement, job involvement, and job satisfaction. Test-retest reliability was also assessed by administering the questionnaire twice to ensure stable and consistent results over time, crucial for robust research findings. Additionally, the data collection process involved distributing surveys via questionnaires to employees in 52 pharmaceutical companies in Lahore, Pakistan, targeting job outcomes, workplace environment, and organizational performance. Following VanVoorhis and Morgan (2007), a sample size of 240 was calculated for eight variables, with 320 surveys distributed to accommodate potential non-response. After rigorous vetting, 240 completed surveys were included, utilizing carefully designed scales rated from 1 (strong disagreement) to 5 (strong agreement) to ensure validity and reliability, thus supporting robust statistical analyses and generating credible research outcomes.

3.4. Data Analysis

Data analysis in this study involved inspecting, cleaning, and interpreting data to draw insights and support research objectives. It included data preparation, descriptive statistics, Pearson's correlation, and linear regression to explore the impact of job outcomes on organizational performance, along with mediation analysis using Hayes Process to evaluate the workplace environment's role. SPSS v26 and data visualization ensured validity, reliability, and adherence to ethical standards. Reliability was measured through internal consistency, with Cronbach's alpha used to ensure that the tool consistently assessed the same construct, achieving a coefficient of 0.70 or higher for satisfactory reliability. Construct validity was established by defining a theoretical framework, reviewing literature, formulating items, seeking expert input, and conducting exploratory factor analysis and correlation checks. A comprehensive study examined the relationships between work engagement, job involvement, job satisfaction, and organizational performance, using correlation and regression analyses, including mediation analysis to reveal positive associations and significant effects. The workplace environment significantly and partially mediated these relationships, explaining 17.08% to 22.42% of the effects, highlighting its crucial role in enhancing organizational performance.

4. Results

4.1. Data Quality and Statistical Assumptions in Regression Analysis

Detecting and addressing outliers was crucial to ensure robustness and validity of the findings, and the dataset for this research study exhibited no outliers or missing values, enhancing the reliability of the statistical analyses and the overall integrity of the research findings. Linearity tests confirmed significant linear relationships between work engagement, job involvement, job satisfaction, and organizational performance, with non-significant deviations from linearity underscoring the stability of these connections. Homoscedasticity was validated through various plots and tests, indicating consistent error variance across independent variables. The independence of errors, crucial for reliable regression analysis, was affirmed using the Durbin-Watson statistic, with values indicating no autocorrelation, thus bolstering the credibility of the regression model. The normality assumption was satisfied as skewness and kurtosis values fell within acceptable ranges, ensuring the suitability of the data for analysis. Furthermore, the independence of independent variables was confirmed with variance inflation factor values below 1.2 and tolerance factors above 0.8, indicating no multicollinearity. This comprehensive attention to data quality and statistical assumptions strengthens the study's findings and enhances the robustness and generalizability of the research outcomes.

4.2. Descriptive Analysis of the Sample

Research questionnaires were distributed across 52 pharmaceutical companies in Lahore to ensure a diverse and representative sample, including employees from various managerial functions and demographic distributions. The survey included 240 participants, with 193 identifying as male (80.4%) and 47 as female (19.6%), allowing for a detailed examination of gender dynamics using SPSS, coded as 1 for male and 2 for female. Participants also specified their highest educational attainment, with 48 individuals (20%) holding master's degrees and 192 (80%) being graduates. Age data, collected across seven categories ranging from 26 to 60 years, showed that the predominant age group was 26-30 years (41.25%). Professional experience varied, with most participants having 6-10 years of experience (48.33%). The survey achieved a response rate of 84.69% from 320 targeted respondents, resulting

in 271 participants from the 52 pharmaceutical companies, with 240 completed questionnaires included for analysis. Ensuring data validity, a meticulous process involving a pilot test and comprehensive reliability testing using SPSS v26 was followed. Reliability, measured by Cronbach's alpha values closer to 1.0, ranged from 0.711 to 0.837, reflecting satisfactory internal consistency. These values align with standards set by recognized psychological societies and scholars like DeVellis and Nunnally, who set a threshold of 0.70 for reliability. Specific reliability tests yielded alpha coefficients of 0.837 for work engagement, 0.757 for job involvement, 0.759 for job satisfaction, 0.792 for organizational performance, and 0.725 for the workplace environment, ensuring the findings are credible and aligned with established psychometric standards. This comprehensive approach enhances the robustness and generalizability of the research findings.

4.3. Analysis of Data

4.3.1. Descriptive Statistics, Reliability and Correlations Analysis

Table 1 provides information on the descriptive statistics, including the mean, standard deviation, which allows for an understanding of the data pattern. The simple correlations test was applied to see the association between a) work engagement, b) job involvement, c) job satisfaction (IVs), and organizational performance (DV) and intervening variable i.e. the workplace environment. This statistical analysis helped us to understand the effects of IVs on DV and the mediating influence of the intervening variable.

Table 1 exhibited the reliabilities for this study estimated $\alpha = .837$ for work engagement (9 items, Mean= 4.1991, SD= .42651), $\alpha = .757$ for job involvement (6 items, Mean= 4.2417, SD= .45782), $\alpha = .759$ for job satisfaction (5 Items, Mean = 4.3500, SD= .51602), $\alpha = .825$ for the workplace environment (10 items, Mean= 4.2037, SD= .38019), and $\alpha = .792$ for organizational performance (15 items, Mean= 3.9731, SD= .30680).

Table 1: Means, standard deviations, correlations and reliabilities of work engagement, job involvement, and job satisfaction the workplace environment, and organizational performance

Variable	Mean	S.D.	WE	JI	JS	WpE	OP
WE	4.1991	.42651	(.837)				
JI	4.2417	.45782	.065	(.757)			
JS	4.3500	.51602	.141*	.251**	(.759)		
WpE	4.2037	.38019	.171**	.216**	.186**	(.825)	
OP	3.9731	.30680	.329**	.200**	.220**	.168**	(.792)

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

* Correlation is significant at the 0.05 level (2-tailed)

Note: N= 240, Alpha reliabilities are presented in parentheses. * $p < .05$, ** $p < .01$

The analysis shows that factor loadings for both independent and dependent variables are highly statistically significant, consistently meeting or exceeding the 0.70 threshold. This confirms the reliability of the variables and supports robustness and trustworthiness of the measurement model and the overall analytical framework.

4.3.2. Results of Correlation Analysis

The r-values, or correlation coefficients, indicate the strength and direction of the relationship between two variables. A positive rvalue suggests a positive correlation, meaning that as one variable increases, the other tends to increase as well. Conversely, a negative r-value indicates a negative correlation, implying that as one variable increases, the other tends to decrease. The magnitude of the r-value reflects the strength of the correlation, with values closer to 1 or -1 indicating a stronger relationship. As for the p-values, these play a crucial role in determining the statistical significance of the observed correlations. A p-value less than the chosen significance level (typically 0.05 or 0.01) suggests that the observed correlations are unlikely to have occurred by random chance. In other words, a low p-value provides evidence to reject the null hypothesis, indicating that the observed relationships are statistically significant.

The results of the present research reveal several noteworthy associations between key variables. Work engagement exhibits a stronger positive correlation with organizational performance ($r = .329$, $p < .01$), emphasizing on the pivotal role of engaged employees in fostering organizational success. Similarly, job involvement ($r = .200$, $p < .01$), and job satisfaction ($r = .220$, $p < .01$), all demonstrate positive and significant relationships with organizational performance, highlighting the importance of employee engagement, involvement, and satisfaction in contributing to enhanced organizational performance. These findings collectively underscore the multifaceted connections between employee attitudes and behaviours and the overarching success of the organization. The findings of the research study also highlight that work engagement exhibits a positive correlation with the workplace environment ($r = .171$, $p < .01$), emphasizing on the role of engaged employees in contributing to a positive workplace atmosphere. Similarly, job involvement ($r = .216$, $p < .01$), and job satisfaction ($r = .186$, $p < .01$), all demonstrate positive and significant relationships with the workplace environment, highlighting the influence of these factors on shaping a conducive and positive work setting. These findings collectively emphasize on the interconnectedness between employee attitudes and the broader work environment, emphasizing on the importance of fostering positive employee experiences for a healthier workplace.

The study discerns several other key associations among variables that a noteworthy positive and statistically significant relationship is identified between work engagement and job satisfaction ($r = .141$, $p < .05$), suggesting that heightened work engagement corresponds to increased job satisfaction. Despite a positive correlation between work engagement and job involvement, it is not statistically significant ($r = .065$, $p > .05$), implying a weak predictive connection between work engagement and job involvement. Moving to job-related variables, a positive and significant correlation is evident between job satisfaction and job involvement ($r =$

.251, $p < .01$), underscoring their interconnectedness. These nuanced associations shed light on the intricate dynamics among key variables, contributing valuable insights to organizational understanding.

4.4. Testing of Hypotheses

Grounded in an extensive literature review, this study formulated and tested ten hypotheses using data from 240 respondents across 52 pharmaceutical companies in Pakistan. Surveys were the primary data collection tool, and SPSS v26 was used for data analysis, employing descriptive statistics, Pearson correlation, linear regression, and Hayes Process mediation analysis. Regression analysis, key to this study, examined relationships between variables to assess the influence of independent variables on dependent ones. This robust analytical framework ensured methodological soundness, enhancing the study's credibility and reliability.

Figure 1: Path diagram indicating correlation between various constructs of theoretical model



The path diagram illustrates the direct and indirect relationships of the independent variables (work engagement, job involvement, and job satisfaction) with the dependent variable (organizational performance) through the intervening variable (workplace environment). The β values, or regression coefficients, indicate the strength and direction of these relationships: A positive β value suggests a positive relationship, while a negative β value indicates a negative one. P-values determine the statistical significance of these relationships; a p-value below 0.05 or 0.01 suggests that the results are unlikely due to chance. Thus, β values reveal the nature and direction of relationships, while p-values confirm their statistical significance.

The path diagram illustrates impact of work engagement on organizational performance, represented by a β value of .329 and a significance value $< .01$, confirms a positive significant relationship (H1). Job involvement, with a β value of .200 and a significance value $< .01$, demonstrates a positive significant relationship with organizational performance (H2). Likewise, job satisfaction exhibits a positive significant relationship with organizational performance, supported by a β value of .220 and a significance value $< .01$ (H3). Furthermore, the workplace environment, with a β value of .168 and a significance value $< .01$, confirms a positive significant relationship with organizational performance (H4).

The impact of work engagement demonstrates a confirmed positive significant relationship with the workplace environment, as indicated by a β value of .171 and a significance value $< .01$ (H5). Job involvement, with a β value of .216 and a significance value $< .01$, demonstrates a positive significant relationship with the workplace environment, confirming H7. Job satisfaction also establishes a positive significant relationship with the workplace environment, supported by a β value of .186 and a significance value $< .01$ (H9). However, the validation of hypotheses based on indirect relationships was accomplished through regression analysis, as detailed in the subsequent paragraphs.

4.5. Mediation Analysis

4.5.1. The Relationship of Work Engagement with Organizational Performance; Mediated by the Workplace Environment

The study favours to assess whether the workplace environment mediates relationship between work engagement and organizational performance. Employing SPSS v26 and Hayes' PROCESS v4.2 (Hayes, 2017), the data underwent mediation analysis utilizing the bootstrapping method, following the guidelines of Preacher and Hayes (2008). Initial Pearson r Correlation results indicate positive associations among all variables. As per Table 1 and 2, work engagement significantly predicts organizational performance ($\beta=.2364$, 95% CI [.1497, .3232], $p<.01$). Notably, the workplace environment significantly mediates this relationship ($\beta=.0141$, 95% CI [.0004, .0355], p remains significant), explaining 17.08% of the effect. However, work engagement retains a substantial positive direct effect ($\beta=.2223$, 95% CI [.1347, .3099], $p<.01$), fully supporting H6. The findings indicate that employees exhibiting work engagement foster vigour, dedication, and absorption, consequently enhancing organizational performance.

Table 2: Mediation model of work engagement with organizational performance through workplace environment (mediation WE \longrightarrow WpE \longrightarrow OP)

	95% Confidence Interval			
	β	P	LLCI	ULCI
Total Effect	.2364	.0000	.1497	.3232
Direct Effect	.2223	.0000	.1347	.3099
Indirect Effect	.0141	Sig.	.0004	.0355

Note: β = Unstandardized Coefficient, $p < 0.01$, LL = Lower Limit, UL = Upper Limit, CI = Confidence interval

4.5.2. The Relationship of Job Involvement with Organizational Performance; Mediated by the Workplace Environment

The study favours to assess whether the workplace environment mediates relationship between job involvement and organizational performance. Employing SPSS v26 and Hayes' PROCESS v4.2 (Hayes, 2017), the data underwent mediation analysis utilizing the bootstrapping method, following the guidelines of Preacher and Hayes (2008). Initial Pearson r Correlation results indicate positive associations among all variables. As per Table 1 and 3, job involvement significantly predicts organizational performance ($\beta=.1339$, 95% CI [.0500, .2177], $p<.01$). Notably, the workplace environment significantly mediates this relationship ($\beta=.0189$, 95% CI [.0013, .0439], p remains significant), explaining 21.55% of the effect. However, job involvement retains a substantial positive direct effect ($\beta=.1150$, 95% CI [.0297, .2003], $p<.01$), fully supporting H7. The findings suggest that employee job involvement enhances organizational performance through deep psychological and emotional connections.

Table 3: Mediation model of job involvement with organizational performance through workplace environment (mediation JI \longrightarrow WpE \longrightarrow OP)

	95% Confidence Interval			
	β	p	LLCI	ULCI
Total Effect	.1339	.0019	.0500	.2177
Direct Effect	.1150	.0085	.0297	.2003
Indirect Effect	.0189	Sig.	.0013	.0439

Note: β = Unstandardized Coefficient, $p < 0.01$, LL = Lower Limit, UL = Upper Limit, CI = Confidence interval

4.5.3. The Relationship of Job Satisfaction with Organizational Performance; Mediated by the Workplace Environment

The study favours to assess whether the workplace environment mediates relationship between job satisfaction and organizational performance. Employing SPSS v26 and Hayes' PROCESS v4.2 (Hayes, 2017), the data underwent mediation analysis utilizing the bootstrapping method, following the guidelines of Preacher and Hayes (2008). Initial Pearson r Correlation results indicate positive associations among all variables. As per Table 1 and 4, job satisfaction significantly predicts organizational performance ($\beta=.1307$, 95% CI [.0566, .2047], $p<.01$). Notably, the workplace environment significantly mediates this relationship ($\beta=.0145$, 95% CI [.0007, .0338], p remains significant), explaining 22.42% of the effect. However, job satisfaction retains a substantial positive direct effect ($\beta=.1162$, 95% CI [.0413, .1910], $p<.01$), fully supporting H9. The findings indicate that employees exhibiting job satisfaction foster positive behaviour and contentment, consequently enhancing organizational performance.

Table 4: Mediation model of job satisfaction with organizational performance through workplace environment (mediation JS \longrightarrow WpE \longrightarrow OP)

	95% Confidence Interval			
	β	p	LLCI	ULCI
Total Effect	.1307	.0006	.0566	.2047
Direct Effect	.1162	.0025	.0413	.1910
Indirect Effect	.0145	Sig.	.0007	.0338

Note: β = Unstandardized Coefficient, $p < 0.01$, LL = Lower Limit, UL = Upper Limit, CI = Confidence interval

5. Discussion

The regression coefficients, denoted as β values, indicate the strength and direction of associations between independent and dependent variables. A positive β value signifies a positive correlation, while a negative β value denotes an inverse relationship. The significance of these relationships is assessed through p-values, with a p-value below 0.05 or 0.01 indicating statistical significance. Hypothesis 1 found a significant positive impact of work engagement on organizational performance ($\beta = .329$, $p < .01$), aligning with studies by Waheed et al. (2017) and Markos and Sridevi (2010). Hypothesis 2 revealed that job involvement positively affects organizational performance ($\beta = .200$, $p < .01$), corroborating Brooke et al. (1988). Hypothesis 3 established a positive link between job satisfaction and organizational performance ($\beta = .220$, $p < .01$), consistent with Krishna et al. (2022). Hypothesis 4 found a significant positive impact of the workplace environment on organizational performance ($\beta = .168$, $p < .01$), supporting Chandrasekar (2011). Hypothesis 5 showed that work engagement positively influences the workplace environment ($\beta = .171$, $p < .01$), in line with Abun et al. (2021). Hypothesis 6 demonstrated that the workplace environment partially mediates the relationship between work engagement and organizational performance ($\beta = .0141$, $p < .01$), validating Ren et al. (2021). Hypothesis 7 revealed that job involvement positively impacts the workplace environment ($\beta = .216$, $p < .01$), agreeing with Raza et al. (2021). Hypothesis 8 confirmed that the workplace environment partially mediates the relationship between job involvement and organizational performance ($\beta = .0189$, $p < .01$), supporting Ali et al. (2020). Hypothesis 9 found that job satisfaction positively affects the workplace environment ($\beta = .186$, $p < .01$), consistent with Shuck and Wollard (2019). Hypothesis 10 showed that the workplace environment partially mediates the relationship between job satisfaction and organizational performance ($\beta = .0145$, $p < .01$), aligning

with Raza et al. (2020). Overall, the study highlights the significant roles of work engagement, job involvement, job satisfaction, and the workplace environment in enhancing organizational performance, underscoring the importance of fostering positive job outcomes to create a conducive workplace atmosphere.

6. Conclusions, Implications and Summary

6.1. Conclusions

This study critically examines the complex relationships among employees' job outcomes—work engagement, job involvement, and job satisfaction—the workplace environment, and organizational performance within the pharmaceutical sector in Pakistan. It underscores the profound impact of these factors on organizational success, highlighting their interconnectedness and the pivotal role of a supportive workplace environment. The findings emphasize the strategic importance of fostering positive job outcomes and a conducive workplace culture to enhance overall organizational effectiveness. Furthermore, the study provides actionable insights for optimizing performance through targeted human resource management strategies and adaptive organizational practices tailored to the specific dynamics of the pharmaceutical industry. It contributes to organizational theory by empirically validating these relationships, offering practical implications for enhancing job outcomes and sustaining organizational success amidst evolving global business landscapes.

6.2. Limitations and Future Research Directions

The study provides crucial insights for pharmaceutical organizations in Pakistan, focusing on the impact of employees' job outcomes (work engagement, job involvement, and job satisfaction) on organizational performance. It emphasizes the mediating role of the workplace environment in these relationships. While findings align with hypotheses, acknowledging study limitations is essential. These include generalizability beyond the pharmaceutical sector in Pakistan, the cross-sectional design's constraints on causal inference, and the omission of variables like job design and leadership. Methodologically, diversifying data collection methods and enhancing sample size and response rates could strengthen future research. Moreover, exploring negative outcomes, controlling for external variables, and addressing cultural and demographic factors would offer a more nuanced understanding and application of findings in diverse organizational contexts.

6.3. Implications of the Study

6.3.1. Theoretical Implications

The research delves deeply into the intricate dynamics of the pharmaceutical industry, where the dual imperatives of delivering high quality services and achieving financial success are paramount. Highlighting the pivotal role of skilled employees as indispensable assets, as emphasized by Noor et al. (2020), the study demonstrates that the workplace environment critically shapes employees' job outcomes, thereby influencing organizational performance. It underscores that an optimal workplace environment acts as a catalyst, enabling employees to fully utilize their potential and demonstrate their capabilities effectively, while a negative or unsupportive environment can lead to social conflicts, negative attitudes, dissatisfaction, and increased turnover rates, all of which detrimentally impact organizational success. Furthermore, the research significantly enriches the organizational knowledge landscape within the pharmaceutical sector by providing a nuanced understanding of how various aspects of employees' job outcomes—such as satisfaction, commitment, and engagement—interact with the workplace environment to enhance overall organizational effectiveness. This comprehensive exploration transcends traditional boundaries, offering insights that contribute to theoretical frameworks like the Job Characteristics Model and Social Exchange Theory. By highlighting the mediating role of the workplace environment, the study advances theoretical discourse and offers practical guidance for organizational leaders aiming to improve performance through strategic management of work environments. It advocates prioritizing the creation of supportive workplace environments conducive to positive job outcomes, including enhancing job resources, reinforcing psychological contracts, and promoting positive work attitudes among employees. These recommendations align with contemporary theories in organizational behavior and human resource management, ensuring that organizational practices are grounded in empirical insights into the complex dynamics of employee satisfaction and performance. In conclusion, the research establishes a robust foundation for future studies in organizational dynamics within the pharmaceutical sector, providing an integrated framework that synthesizes theoretical advancements with practical applications. By elucidating the intricate relationships between employee job outcomes, workplace environments, and organizational success, the study offers invaluable insights essential for fostering sustained performance and growth in this specialized industry context.

6.3.2. Practical Implications

Effective organizational management is integral to driving business performance, requiring meticulous evaluation of employee suitability for their roles. Certain employees consistently demonstrate hard work, high motivation, and favourable performance, significantly contributing to organizational success. The study emphasizes the substantial impact of employees' job outcomes on overall organizational performance, with the workplace environment being a critical mediating factor. This research provides valuable guidance for creating a supportive workplace conducive to positive job outcomes, thereby enhancing overall performance. It advocates for initiatives to improve workplace environments, such as equitable treatment, adequate resources, diversity, inclusion, and safety. Training on positive work attitudes and employee engagement is also recommended to foster optimism and proactive behavior, enhancing both individual and organizational prosperity. The findings, though focused on the pharmaceutical industry in Pakistan, have broader implications, offering a comprehensive framework for organizations worldwide to refine their practices, enhance employee satisfaction, and achieve sustained success. Strategies like job design, employee involvement, and training on engagement for fostering job satisfaction and organizational performance. Employee growth opportunities and a supportive environment, are vital for organizational stability. Leadership strategies, such as investing in employee development and feedback mechanisms, are essential for organizational success. Cultivating a culture of recognition, well-being, and growth, as well as leveraging team dynamics, technology, and mentorship, further enhances performance. Proactive crisis and change management, flexible work arrangements, and fostering diversity and inclusion are also critical. The research underscores the importance of

sustainable talent management and cross-functional training, emphasizing environmental sustainability and community engagement. Encouraging innovation and leveraging predictive analytics for human resource excellence are highlighted as strategic approaches for organizational success.

6.3.3. Diverse Ramifications

The study significantly enhances the methodological landscape of organizational research by integrating various job outcomes—such as work engagement, job involvement, and job satisfaction—into a comprehensive framework that elucidates their collective impact on organizational performance. Through mediation analysis and an examination of the workplace environment as a mediator, the study reveals complex relationships within organizational structures, particularly in the pharmaceutical sector in Pakistan. This industry-specific focus tailors methodologies to unique characteristics, contributing to discussions on the generalizability of organizational studies. Employing quantitative methods, especially regression analysis, ensures a rigorous exploration of the dynamics between job outcomes, the workplace environment, and organizational performance. The practical implications provide actionable insights, encouraging future researchers to incorporate applied approaches.

Policy implications offer a strategic blueprint for organizations to enhance job outcomes and foster a conducive workplace environment, aiding policymakers in shaping policies for a healthy, productive workforce, thereby boosting economic growth. The research also ignites academic discourse by providing fresh perspectives on the intricate relationship between job outcomes and organizational performance, stimulating further research and discussion within organizational behavior, management, and human resource development. Highlighting the importance of a positive workplace environment in regulatory compliance within the pharmaceutical sector, the study guides companies to enhance employee satisfaction, engagement, and performance, contributing to industry-wide best practices. Nationally, the research offers guidance for refining workplace management practices that align with fostering a productive workforce, with implications for diverse industries. Internationally, it enriches global discussions on effective organizational management, advocating for universal principles of leadership and employee management, and encouraging global collaboration and partnerships. Aligning with several United Nations Sustainable Development Goals (SDGs), the study promotes sustained and inclusive economic growth, drives innovation, creates sustainable workspaces, and fosters multi-stakeholder partnerships, ultimately supporting a broader vision of sustainable and inclusive development.

6.4. Recommendations

The current research unveils substantial insights into organizational dynamics and lays the foundation for future studies by examining the interplay between employees' job outcomes, the workplace environment, and organizational performance. It paves the way for future investigations to refine and expand these relationships. The suggestions presented serve as a roadmap for guiding prospective research initiatives, aiming to cultivate a more sophisticated understanding of organizational dynamics, particularly in the pharmaceutical industry in Pakistan. Longitudinal studies are recommended to scrutinize changes and causal relationships over time, providing insights into the dynamic nature of the investigated variables. Global and industry comparative studies could explore analogous relationships in diverse settings, enhancing cross-cultural comprehension and generalizability. Employing mixed-methods research could offer a more comprehensive exploration of the factors influencing job outcomes and organizational performance. Future research could also delve into the impact of negative outcomes, such as employee burnout, on organizational performance. The effects of remote and hybrid work models on job outcomes and the workplace environment warrant further investigation, as do industry-specific factors that influence these relationships. Exploring job design and specific tasks can provide a deeper understanding of their impact on job outcomes and performance. Additionally, the role of employee demographics, such as age, gender, education level, and experience, in shaping these dynamics should be examined. Intervention studies and experimental designs could assess the effects of targeted organizational interventions on job outcomes and performance, offering practical recommendations for organizational leaders. Emphasizing strategic initiatives to enhance positive job outcomes can significantly boost organizational performance. The role of technology, including AI and IT, in shaping job outcomes and organizational performance, particularly the impact of technostress, is another critical area for future research. The comprehensive impact of job outcomes and the workplace environment on employee well-being, mental health, and psychological safety within teams should be explored to understand their influence on organizational success. Investigating how leaders navigate and facilitate adaptation during external crises, such as pandemics, can provide valuable insights into the impact of such events on job outcomes and performance. Finally, delving into the diverse cultural and demographic dimensions across different regions of Pakistan can enhance the understanding of how these factors influence employees' interactions with organizational management and supervisors, contributing to a more holistic evaluation of organizational dynamics within Pakistan's unique cultural context.

6.5. Summary of the Study

The research has a look at examined key elements influencing employees' task consequences and their effect on organizational performance, highlighting the essential position of organizational management in shaping a conducive workplace environment. This environment influences employees' self-concept and motivational factors, fostering engagement, involvement, and positive work attitudes, which are essential for high organizational performance. The study revealed that the workplace environment mediates the relationship between job outcomes and performance, underscoring the need for organizations to cultivate supportive settings to enhance job outcomes like work engagement, job involvement, and job satisfaction. These findings provide practical insights for organizations aiming to improve performance through strategic initiatives that address workforce needs, foster positive ethics, and promote professional behavior. In the competitive pharmaceutical industry in Pakistan, these insights are particularly valuable, emphasizing the importance of employee engagement, commitment, and retention to gain a strategic advantage. By implementing strategies that enhance employee participation and satisfaction, organizations can achieve higher productivity and success, leveraging the study's findings to address gaps and fortify overall industry performance.

References

- Abdallah, A. B., Obeidat, B. Y., Aqqad, N. O., Al Janini, M. N. e. K., & Dahiyat, S. E. (2017). An integrated model of job involvement, job satisfaction and organizational commitment: A structural analysis in Jordan's banking sector. *Communications and Network*, 9(1), 28-53.
- Abdulrahman, S., & Garba, A. S. (2020). Corporate entrepreneurship and organizational performance. *KIU Journal of Humanities*, 4(4), 299-307.
- Afshari, L., Hayat, A., Ramachandran, K., Bartram, T., & Balakrishnan, B. K. (2022). Threat or opportunity: Accelerated job demands during COVID-19 pandemic. *Personnel Review*, 51(9), 2482-2501.
- Ahmed, T., Khan, M. S., Thitivesa, D., Siraphattada, Y., & Phumdara, T. (2020). Impact of employees engagement and knowledge sharing on organizational performance: Study of HR challenges in COVID-19 pandemic. *Human Systems Management*, 39(4), 589-601.
- Akinyele, S. T. (2010). The influence of work environment on workers productivity: A case of selected oil and gas industry in Lagos, Nigeria. *African Journal of Business Management*, 4(3), 299-307.
- Al Sabei, S. D., Labrague, L. J., Miner Ross, A., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N. (2020). Nursing work environment, turnover intention, job burnout, and quality of care: The moderating role of job satisfaction. *Journal of Nursing Scholarship*, 52(1), 95-104.
- Aldhuwaih, A. (2013). The influence of organisational culture on job satisfaction, organisational commitment and turnover intention: A study on the banking sector in the Kingdom of Saudi Arabia. *Victoria University*.
- Ali, B. J., & Anwar, G. (2021). An empirical study of employees' motivation and its influence job satisfaction. *International Journal of Engineering, Business and Management*, 5(2), 21-30.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3), 252-276.
- Almohtasb, A. A., Aldehayyat, J. S., & Alaodat, H. M. (2021). The impact of responsible leadership on affective commitment: An empirical evidence from SMEs. *Academy of Strategic Management Journal*, 20(1), 1-22.
- Alrazehi, H. A. A.-W., Amirah, N. A., Emam, A. S. M., & Hashmi, A. R. (2021). Proposed model for entrepreneurship, organizational culture and job satisfaction towards organizational performance in international bank of Yemen. *International Journal of Management and Human Science (IJMHS)*, 5(1), 1-9.
- Alshehhi, H. A., Jano, Z., & Kudus, N. (2023). Mediating effect of external factors to the relationship between leadership styles and organizational performance. *International Journal of Sustainable Construction Engineering and Technology*, 14(2), 7-22.
- Al-Suraihi, W. A., Samikon, S. A., & Ibrahim, I. (2021). Employee turnover causes, importance and retention strategies. *European Journal of Business and Management Research (EJBMR)*, 6(3), 10.
- Anam, C. (2018). Pengaruh motivasi, kompetensi, kepemimpinan, lingkungan kerja dan disiplin kerja terhadap kinerja guru di sekolah menengah kejuruan. *Dirasat: Jurnal Manajemen Dan Pendidikan Islam*, 4(1), 40-56.
- Anggiriawan, I. P. B., Yadnyana, I. K., Wirakusuma, M. G., & Putra, I. N. W. A. (2023). Mitigating fraud in accounting: A comprehensive literature review of prevention strategies. *Tec Empresarial*, 18(2), 288-305.
- Anindyta, A., & Anggraini, D. (2022). Job involvement and quality of work life among non-permanent teachers. *Jurnal Penelitian Psikologi*, 13(1), 1-9.
- Anwar, J., Shah, S., & Hasnu, S. (2016). Business strategy and organizational performance: Measures and relationships. *Pakistan Economic and Social Review*, 54(1), 97-122.
- Aristarini, C. C., Riyadi, S., & Halik, A. (2024). The effect of transformational leadership and organizational culture on employee performance with work environment as mediation variable (study at PT Japura Inti Pangan). *International Journal of Economics (IJE)*, 3(1), 98-108.
- Asif, F., & Rehman, A. (2021). The impact of gender discrimination on workplace environment and job satisfaction. *Research Journal for Societal Issues*, 3(1), 28-38.
- Awan, A. G., & Tahir, M. T. (2015). Impact of working environment on employee's productivity: A case study of banks and insurance companies in Pakistan. *European Journal of Business and Management*, 7(1), 329-345.
- Badar, K., Aboramadan, M., Alhabil, W., Dahleez, K. A., & Farao, C. (2023). Does employee relations climate mediate the effect of islamic work ethics on organizational performance? Evidence from Qatar. *Journal of Islamic Accounting and Business Research*.
- Badrianto, Y., & Ekhsan, M. (2020). Effect of work environment and job satisfaction on employee performance in Pt. Nesinak industries. *Journal of Business, Management, & Accounting*, 2(1), 85-91.
- Bakker, A. B. (2014). Daily fluctuations in work engagement. *European Psychologist*, 19(4), 227-236.
- Bakker, A. B., & Albrecht, S. (2018). Work engagement: Current trends. *Career Development International*, 23(1), 4-11.
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.

- Bakotić, D. (2016). Relationship between job satisfaction and organisational performance. *Economic Research-Ekonomska Istraživanja*, 29(1), 118-130.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Basak, E., Ekmekci, E., Bayram, Y., & Bas, Y. (2013). Analysis of factors that affect the intention to leave of white-collar employees in turkey using structural equation modelling. *Proceedings of the World Congress on Engineering and Computer Science*, 2(1), 1-3.
- Bhat, Z. H., Yousuf, U., & Saba, N. (2023). Revolutionizing work-life balance: Unleashing the power of telecommuting on work engagement and exhaustion levels. *Cogent Business & Management*, 10(2), 1-21.
- Bhatti, M. A., Alshagawi, M., Zakariya, A., & Juhari, A. S. (2018). Do multicultural faculty members perform well in higher educational institutions? Examining the roles of psychological diversity climate, HRM practices and personality traits (big five). *European Journal of Training and Development*, 43(1/2), 166-187.
- Bhende, P., Mekoth, N., Ingalhali, V., & Reddy, Y. (2020). Quality of work life and work-life balance. *Journal of Human Values*, 26(3), 256-265.
- Braddock, J. (2024). Attrition and turnover intentions of paramedic program directors in the State of Texas. *Abilene Christian University, Digital Commons @ ACU, Electronic Theses and Dissertations*.
- Bradley, L., McDonald, P., & Cox, S. (2023). The critical role of co-worker involvement: An extended measure of the workplace environment to support work-life balance. *Journal of Management & Organization*, 29(2), 304-325.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53(1), 279-307.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368.
- Burnett, M. E., Sheard, I., & Clair-Thompson, H. S. (2020). The prevalence of compassion fatigue, compassion satisfaction and perceived stress, and their relationships with mental toughness, individual differences and number of self-care actions in a UK police force. *Police Practice and Research*, 21(4), 383-400.
- Cameron, K. S., Dutton, J. E., & Quinn, R. (2003). An introduction to positive organizational scholarship. *Positive Organizational Scholarship*, 3(13), 1-21.
- Cera, E., & Kusaku, A. (2021). Factors influencing organizational performance: Work environment, training-development, management and organizational culture. *European Journal of Economics and Business Studies Articles*, 6(1), 16-27.
- Chen, J., & Zhou, Y. (2021). The impact of corporate social responsibility on organizational performance: A meta-analysis. *Sustainability*, 13(7), Article 4030.
- Chen, S. L. (2018). Cross-level effects of high-commitment work systems on work engagement: The mediating role of psychological capital. *Asia Pacific Journal of Human Resources*, 56(3), 384-401.
- Chen, Y., Chen, P., & Chen, C. (2022). The impact of employees' intent to stay on workplace environment: Evidence from the hospitality industry. *International Journal of Hospitality Management*, 100.
- Chih, W., Yang, T., & Liu, J. (2008). The influences of internal marketing and emotional intelligence on employee's performance. *Chung Hua Journal of Management*, 9(3), 1-22.
- Chikobvu, P., & Harunavamwe, M. (2022). The influence of emotional intelligence and resilience on work engagement amongst nurses in public hospitals.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89-136.
- Clair-Thompson, H. S., Bugler, M., Robinson, J., Clough, P., McGeown, S. P., & Perry, J. (2015). Mental toughness in education: Exploring relationships with attainment, attendance, behaviour and peer relationships. *Educational Psychology*, 35(7), 886-907.
- Continue, A., & Edeh, F. (2015). Social intelligence and employee intention to stay. *International Journal of Novel Research in Marketing Management and Economics*, 2(1), 27-34.
- Curcuruto, M., & Griffin, M. A. (2023). Upward safety communication in the workplace: How team leaders stimulate employees' voice through empowering and monitoring supervision. *Safety Science*, 157, 105947.
- De Simone, S., Planta, A., & Cicotto, G. (2018). The role of job satisfaction, work engagement, self-efficacy and agentic capacities on nurses' turnover intention and patient satisfaction. *Applied Nursing Research*, 39, 130-140.
- DeCarufel, A., & Schaan, J.-L. (1990). The impact of compressed work weeks on police job involvement. *Canadian Police College Journal*, 14(2), 81-97.
- Donley, J. (2021). The impact of work environment on job satisfaction: Pre-COVID research to inform the future. *Nurse leader*, 19(6), 585-589.
- Ekhsan, M. (2019). The influence job satisfaction and organizational commitment on employee turnover intention. *Journal of Business, Management, & Accounting*, 97, 201-208.
- Elorza, U., Garmendia, A., Kilroy, S., Van de Voorde, K., & Van Beurden, J. (2022). The effect of high involvement work systems on organisational performance and employee well-being in a Spanish industrial context. *Human Resource Management Journal*, 32(4), 782-798.
- Eneh, E. O. (2022). Effect of employees involvement in management decision making on organizational efficiency of pharmaceutical manufacturing firms in Enugu state. *European Journal of Marketing and Management Sciences*, 5(2), 23-35.

- Eresia-Eke, C., Ndlovu, O., & Nyanga, T. (2023). The role of dimensions of job engagement in organizational performance. *Prizren Social Science Journal*, 7(1), 53-65.
- Estimo, E. T., & Villanueva, M. J. C. (2023). Employees' work engagement before and during the COVID-19 Pandemic: A Comparative Analysis. *Journal of Human Resource Management*, 11(1), 13-22.
- Fair, T. S. (2023). Leadership support as an influence on frontline healthcare employee retention in the washington metropolitan area (DMV). *Liberty University*.
- Fu, J., Ji, Y., & Jing, J. (2023). Rank and file employee satisfaction and the implied cost of equity capital. *Journal of Accounting, Auditing & Finance*, 38(1), 182-210.
- Fulmore, J. A., Fulmore, A. L., Mull, M., & Cooper, J. N. (2023). Reducing employee turnover intentions in the service sector: The connection between human resource development practices and employee engagement. *Human Resource Development Quarterly*, 34(6), 127-153.
- Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak: The impact on employees' remote work productivity, engagement, and stress. *Journal of occupational and environmental medicine*, 63(7), e426.
- Gersdorf-Van den Berg, M. E., Akkermans, J., Hoeksema, L. H., & Khapova, S. N. (2024). The whole is greater than the sum of its parts: Exploring attributes of team work engagement climate. *Group & Organization Management*, 49(1), 3-39.
- Gilavand, A., & Mehralizadeh, Y. (2022). The effect of Iran's health transformation plan on job involvement of the clinical faculty members in ahvaz jundishapur university of medical sciences. *Studies*, 6(1), 16-22.
- Giri, V. N., & Pavan Kumar, B. (2010). Assessing the impact of organizational communication on job satisfaction and job performance. *Psychological Studies*, 55(2), 137-143.
- Goet, J. (2022). Workplace environment and its impact on employee's performance in nepalese commercial banks. *The EFFORTS, Journal of Education and Research*, 4(1), 1-10.
- Gopinath, R. (2020). Relationship of job involvement with job satisfaction. *Adalya Journal*, 9(7), 306-315.
- Gopinath, R. (2021). Role of self-actualization on job involvement, organizational commitment and job satisfaction of academic leaders in Tamil Nadu Universities. *Philosophical Readings*, 12(3), 415-432.
- Grant, A. M., Christianson, M. K., & Price, R. H. (2007). Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *Academy of Management Perspectives*, 21(3), 51-63.
- Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee well-being, and organizational improvements. *Consulting Psychology Journal: Practice and Research*, 58(3), 129.
- Gross, H. P., Ingerfurth, S., & Willems, J. (2021). Employees as reputation advocates: Dimensions of employee job satisfaction explaining employees' recommendation intention. *Journal of Business Research*, 134, 405-413.
- Guo, Y., & Hou, X. (2022). The effects of job crafting on tour leaders' work engagement: The mediating role of person-job fit and meaningfulness of work. *International Journal of Contemporary Hospitality Management*, 34(5), 1649-1667.
- Gupta, N., & Sharma, V. (2016). Exploring employee engagement—a way to better business performance. *Global Business Review*, 17(3_suppl), 45S-63S.
- Halbesleben, J. R., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), 242-256.
- Havaei, F., Astivia, O. L. O., & MacPhee, M. (2020). The impact of workplace violence on medical-surgical nurses' health outcome: A moderated mediation model of work environment conditions and burnout using secondary data. *International Journal of Nursing Studies*, 109, 103666.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *Journal of Educational Measurement*, 51(3), 335-337.
- Hernaus, T., Pejić, B., Mirjana, & Vukšić, V. B. (2012). Influence of strategic approach to BPM on financial and non-financial performance. *Baltic Journal of Management*, 7(4), 376-396.
- Hilton, S. K., Madilo, W., Awaah, F., & Arkorful, H. (2021). Dimensions of transformational leadership and organizational performance: The mediating effect of job satisfaction. *Management Research Review*, 46(1), 1-19.
- Hogan, N. L., Lambert, E. G., & Griffin, M. L. (2013). Loyalty, love, and investments: The impact of job outcomes on the organizational commitment of correctional staff. *Criminal Justice and Behavior*, 40(4), 355-375.
- Hoppock, R. (1935). Job satisfaction. *HarperCollins New York*, 16(7), 636-643.
- Hsu, C.-C., & Pereira, A. (2008). Internationalization and performance: The moderating effects of organizational learning. *Omega*, 36(2), 188-205.
- Imran, M., Ismail, F., Hussain, K., & Zeb, F. (2021). Job satisfaction and organizational performance: Empirical evidence from Pakistan's banking sector. *Proceedings of the International Conference on Industrial Engineering and Operations Management Sao Paulo, Brazil*, 1616-1625.
- Jacobs, B., McGovern, J., Heinmiller, J., & Drenkard, K. (2018). Engaging employees in well-being: Moving from the triple aim to the quadruple aim. *Nursing Administration Quarterly*, 42(3), 231-245.
- Jain, A. K. (2016). The mediating role of job satisfaction in the relationship of vertical trust and distributed leadership in health care context. *Journal of Modelling in Management*, 11(2), 722-738.

- Jain, R., Jayakumar, M., Christy, V., Singh, G., & Inamdar, A. M. (2023). The effect of organizational culture on employee engagement and job satisfaction: A HR perspective. *Journal of Survey in Fisheries Sciences*, 10(1S), 6212-6225.
- Jaiswal, A., & Dyaram, L. (2020). Perceived diversity and employee well-being: Mediating role of inclusion. *Personnel Review*, 49(5), 1121-1139.
- Jenkins, S., & Delbridge, R. (2013). Context matters: Examining 'soft' and 'hard' approaches to employee engagement in two workplaces. *The International Journal of Human Resource Management*, 24(14), 2670-2691.
- Johari, J., Yean, T. F., Adnan, Z., Yahya, K. K., & Ahmad, M. N. (2012). Promoting employee intention to stay: Do human resource management practices matter. *International Journal of Economics and Management*, 6(2), 396-416.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kalogiannidis, S. (2021). Impact of employee motivation on organizational performance. A scoping review paper for public sector. *The Strategic Journal of Business & Change Management*, 8(3), 984 - 996.
- Kanungo, R. N. (1982). Work alienation: An integrative approach. *Canadian Psychology*, 23(4), 200.
- Kappagoda, U. (2013). Job involvement as a mediator of the relationship between organizational commitment and job performance in the systemically important banks in Sri Lanka. *International Journal of Research in Computer Application & Management*, 3(2), 7.
- Kaur, M., Sinha, R., Chaudhary, V., Sikandar, M., Jain, V., Gambhir, V., & Dhiman, V. (2022). Impact of COVID-19 pandemic on the livelihood of employees in different sectors. *Materials Today: Proceedings*, 51, 764-769.
- Khairy, H. A., Liu, S., Sheikhsouk, S., El-Sherbeeney, A. M., Alsetoohy, O., & Al-Romeedy, B. S. (2023). The effect of benevolent leadership on job engagement through psychological safety and workplace friendship prevalence in the tourism and hospitality industry. *Sustainability*, 15(17), 13245.
- Khan, A., Ahmed, S., Paul, S., & Kazmi, S. H. A. (2018). Factors affecting employee motivation towards employee performance: A study on banking industry of Pakistan. *Proceedings of the Eleventh International Conference on Management Science and Engineering Management*, Springer, 615-625.
- Khan, U. (2020). Effect of employee retention on organizational performance. *Journal of Entrepreneurship, Management, and Innovation*, 2(1), 52-66.
- Kidombo, H. (2007). Human resource strategic orientation, organizational commitment and firm performance: The case of large private manufacturing firms in Kenya. *Doctoral Dissertation, PhD Thesis*.
- Kidombo, H. J., K'obonyo, P., & Gakuu, C. M. (2012). Human resource strategic orientation and organizational commitment in Kenyan manufacturing firms. *International Journal of Arts and Commerce*, 1(7), 7-28.
- Kihn, L. A. (2010). Performance outcomes in empirical management accounting research: Recent developments and implications for future research. *International Journal of Productivity and Performance Management*, 59(5), 468-492.
- Komlenac, N., Stockinger, L., & Hochleitner, M. (2022). Family supportive supervisor behaviors moderate associations between work stress and exhaustion: Testing the job demands-resources model in academic staff at an Austrian medical university. *International Journal of Environmental Research and Public Health*, 19(9), 5769.
- Kumar, N., & Gupta, N. (2023). Impact of workplace diversity on organizational performance through the mediating role of creative synergy. *Dinkum Journal of Economics and Managerial Innovations*, 2(5), 293-304.
- Lambert, E. G., Morrow, W., Vickovic, S. G., Leone, M. C., Keena, L. D., Haynes, S. H., & May, D. (2021). Work-family conflict's association with the work attitudes of job involvement, job satisfaction, and organizational commitment among southern prison staff. *Criminal Justice Policy Review*, 32(8), 865-889.
- Lambert, E. G., Qureshi, H., & Frank, J. (2021). The good life: Exploring the effects job stress, job involvement, job satisfaction, and organizational commitment on the life satisfaction of police officers. *International Journal of Police Science & Management*, 23(3), 279-292.
- Lankeshwara, P. (2016). A study on the impact of workplace environment on employee's performance: With reference to the brandix intimate apparel-awissawella. *International Journal of Multidisciplinary Studies*, 3(1).
- Latif, M. S., Ahmad, M., Qasim, M., Mushtaq, M., Ferdoos, A., & Naeem, H. (2013). Impact of employee's job satisfaction on organizational performance. *European Journal of Business and Management*, 5(5), 166-171.
- Lee, M., & Kim, B. (2023). Effect of the employees' mental toughness on organizational commitment and job satisfaction: Mediating psychological wellbeing. *Administrative Sciences*, 13(5), 133.
- Li, L., Zheng, X., & Zhang, Q. (2022). Does leaders' adoption of employee voice influence employee work engagement? *Personnel Review*, 51(2), 683-698.
- Lodahl, T. M., & Kejnar, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(1), 24.
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2011). Employee engagement: Tools for analysis, practice, and competitive advantage. *John Wiley & Sons*.
- Mäkikangas, A., Aunola, K., Seppälä, P., & Hakanen, J. (2016). Work engagement-team performance relationship: Shared job crafting as a moderator. *Journal of Occupational and Organizational Psychology*, 89(4), 772-790.
- Maldonado, E. T. V. (2021). Examining the relationship between non-financial performance factors and agile organizations. *Northcentral University*.

- Mansor, F. A., Jusoh, Y. H. M., Hashim, M. Z., Muhammad, N., & Omar, S. N. Z. (2023). Employee engagement and organizational performance. *International Journal of Accounting*, 8(50), 69-80.
- McCutcheon, T. N. (2019). Leadership strategies that promote employee engagement. *Walden University*.
- Miah, M. M. (2018). The impact of employee job satisfaction toward organizational performance: A study of private sector employees in Kuching, East Malaysia. *International Journal of Scientific and Research Publications*, 8(12), 270-278.
- Miao, R.-T. (2011). Perceived organizational support, job satisfaction, task performance and organizational citizenship behavior in China. *Journal of Behavioral and Applied Management*, 12(2), 105-127.
- Moorhead, G., & Griffin, R. (1999). Managing people and organizations. *Australia: south western*.
- Munoz, R. M., Andrade, S. M., Pena, I., & Donate, M. J. (2022). Wellness programs in times of COVID-19, perceived organizational support and affective commitment: effects on employee innovative behavior. *European Journal of Innovation Management*, 26(7), 23-44.
- Munteanu, A.-I., Bibu, N., Nastase, M., Cristache, N., & Matis, C. (2020). Analysis of practices to increase the workforce agility and to develop a sustainable and competitive business. *Sustainability*, 12(9), 3545.
- Nader, J., El-Khalil, R., Nassar, E., & Hong, P. (2022). Pandemic planning, sustainability practices, and organizational performance: An empirical investigation of global manufacturing firms. *International Journal of Production Economics*, 246, 108419.
- Nanzushi, C. (2015). The effect of workplace environment on employee performance in the mobile telecommunication firms in Nairobi city county. *University of Nairobi*.
- Neely, A. (2007). Business performance measurement. unifying theory and integrating practice, 2nd edition. *Cambridge University Press, Cambridge*, 64-81.
- Nelson, A. (1993). No investment in it, you have no pride in it. *Supervision*, 54(2), 6-8.
- Nemaei, B. (2012). The impact of participative leadership on employee's motivation, job satisfaction and innovation. *The British University in Dubai (BUiD)*.
- Niaz, M., & Nwagwu, U. (2023). Managing healthcare product demand effectively in the post-COVID-19 environment: Navigating demand variability and forecasting complexities. *American Journal of Economic and Management Business (AJEMB)*, 2(8), 316-330.
- Noor, A., Zainuddin, Y., Panigrahi, S. K., & Rahim, F. b. T. (2020). Investigating the relationship among fit organization, organization commitment and employee's intention to stay: Malaysian context. *Global Business Review*, 21(1), 68-87.
- Nurminen, P.-S. (2023). Perceived challenges of leading a diverse workforce from a leader perspective.
- Ogunyemi, A. O. (2020). Moderating role of work experience on career progression and work attitude. *KIU Journal of Humanities*, 4(4), 309-318.
- Oludeyi, O. S. (2015). A review of literature on work environment and work commitment: implication for future research in citadels of learning. *Journal of Human Resource Management*, 18(2), 32-46.
- Osazevbaru, H. O., & Amawhe, P. E. (2021). Empirical narratives on workplace environment and employees' performance nexus: New evidence from the knowledge industry. *Journal of Academic Research in Economics*, 13(3), 422-441.
- Osemwegie, O. (2023). Cross-functional team collaboration for enhancing timely and effective emergency department care. *Walden University*.
- Papoutsis, C., Drigas, A., & Skianis, C. (2019). Emotional intelligence as an important asset for hr in organizations: Attitudes and working variables. *International Journal of Advanced Corporate Learning*, 12(2), 21-34.
- Penrose, E. T. (2009). *The theory of the growth of the firm*. Oxford university press.
- Pinho, J. C., Rodrigues, A. P., & Dibb, S. (2014). The role of corporate culture, market orientation and organisational commitment in organisational performance. *Journal of Management Development*, 33(4), 374-398.
- Pollock, T. (1997). Building employee's interest in their work. *Automotive Manufacturing and Production*, 109(10), 10-11.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Purwanto, A. (2020). Effect of compensation and organization commitment on turnover intention with work satisfaction as intervening variable in Indonesian industries. *Systematic Reviews in Pharmacy*, 11(9), 287-298.
- Purwanto, A. (2022). Tourist satisfaction and performance of tourism industries: How the role of innovative work behaviour, organizational citizenship behaviour? *Journal of Industrial Engineering & Management Research*, 3(1), 1-12.
- Qasem, D. A. O. A., Shoukat, K., Ahmed, A., Muneeb, M. A., Zubair, M., Younas, M. W., . . . Nissa, L. U. (2024). International trade of pharmaceutical and health industries along the "belt and road" countries. *European Journal of Medical and Health Research*, 2(1), 43-49.
- Qurashi, I. A., Khaliq, M., Ramayah, T., Bontis, N., & Yaacob, M. R. (2020). Impact of intellectual capital on innovation in pharmaceutical manufacturing SMEs in Pakistan. *International Journal of Learning and Intellectual Capital*, 17(1), 61-76.
- Rahmadani, V. G., & Schaufeli, W. B. (2022). Engaging leadership and work engagement as moderated by "diuwongke": An Indonesian study. *The International Journal of Human Resource Management*, 33(7), 1267-1295.
- Raja, S., Madhavi, C., & Sankar, S. (2019). Influence of organizational climate on performance in manufacturing industry. *Suraj Punj Journal For Multidisciplinary Research*, 9(3), 147-157.

- Rajendran, N., & Doraisamy, L. (2022). The impact of employee engagement on organizational performance: A study on Malaysian pharmaceutical organization. *12*, 7, 246 – 313.
- Redelinghuys, K., Rothmann, S., & Botha, E. (2019). Flourishing-at-work: The role of positive organizational practices. *Psychological reports*, *122*(2), 609-631.
- Reina, C. S., Kreiner, G. E., Rheinhardt, A., & Mihelcic, C. A. (2023). Your presence is requested: Mindfulness infusion in workplace interactions and relationships. *Organization Science*, *34*(2), 722-753.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, *53*(3), 617-635.
- Rokni, L., Kianto, A., & Vanhala, M. (2021). Knowledge management, innovation and organizational performance in the digital age. *Journal of Knowledge Management*, *25*(4), 813-835.
- Roscoe, S., Aktas, E., Petersen, K. J., Skipworth, H. D., Handfield, R. B., & Habib, F. (2022). Redesigning global supply chains during compounding geopolitical disruptions: The role of supply chain logics. *International Journal of Operations & Production Management*, *42*(9), 1407-1434.
- Røssberg, J., Eiring, Ø., & Friis, S. (2004). Work environment and job satisfaction: A psychometric evaluation of the Working Environment Scale-10. *Social psychiatry and psychiatric epidemiology*, *39*, 576-580.
- Saal, F. E., & Knight, P. A. (1995). Industrial/ organizational psychology: Science and practice. *Thomson Brooks/ Cole Publishing Co.*
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, *21*(7), 600-619.
- Saleem, M. S., Isha, A. S. N., Yusop, Y. M., Awan, M. I., & Naji, G. M. A. (2022). The role of psychological capital and work engagement in enhancing construction workers' safety behavior. *Frontiers in Public Health*, *10*, 810145.
- Saputra, F., & Mahaputra, M. R. (2022). Building occupational safety and health (K3): Analysis of the work environment and work discipline. *Journal of Law, Politic and Humanities*, *2*(3), 105-114.
- Sarode, A. P., & Shirsath, M. (2014). The factors affecting employee work environment & its relation with employee productivity. *International Journal of Science and Research*, *3*(11), 2735-2737.
- Sarwar, S., & Abugre, J. (2013). The influence of rewards and job satisfaction on employees in the service industry. *The Business & Management Review*, *3*(2), 22.
- Sathyanarayan, D. K., & Lavanya, D. B. L. (2018). Effect of organizational commitment, motivation, attitude towards work on job satisfaction, job performance and turnover intention-VUCA perspective. *Journal of Management*, *5*(4).
- Scanlan, J. N., & Hazelton, T. (2019). Relationships between job satisfaction, burnout, professional identity and meaningfulness of work activities for occupational therapists working in mental health. *Australian Occupational Therapy Journal*, *66*(5), 581-590.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. *Work engagement: A handbook of essential theory and research*, *12*, 10-24.
- Schwarz, G., Newman, A., Yu, J., & Michaels, V. (2023). Psychological entitlement and organizational citizenship behaviors: The roles of employee involvement climate and affective organizational commitment. *The International Journal of Human Resource Management*, *34*(1), 197-222.
- Schweper Jr, C. H. (2001). Ethical climate's relationship to job satisfaction, organizational commitment, and turnover intention in the salesforce. *Journal of Business Research*, *54*(1), 39-52.
- Selvi, A. J. A., & Aiswarya, B. (2023). Examining the relationship between emotional intelligence and work engagement of automobile sector employees in Chennai. *Rajagiri Management Journal*, *17*(2), 156-169.
- Shafaei, A., & Nejati, M. (2023). Green human resource management and employee innovative behaviour: Does inclusive leadership play a role? *Personnel Review*, *53*(1), 266-287.
- Shahnawaz Adil, M. (2015). Strategic human resource management practices and competitive priorities of the manufacturing performance In Karachi. *Global Journal of Flexible Systems Management*, *16*, 37-61.
- Sharma, A. (2021). Retention and engagement of human capital: Causal contribution of perceived organizational prestige and job characteristics. *Journal of Applied Business & Economics*, *23*(2), 68-82.
- Sharma, A., & Sharma, A. (2021). Beyond exchange relationship: Exploring the link between organizational justice, job involvement, and citizenship behavior. *The Journal of Behavioral Science*, *16*(3), 123-135.
- Sharma, S. (2017). Effect of human resource management practices on job satisfaction: A study of pharmaceutical industry. *International Journal For Research In Management And Pharmacy*, *6*(5), 37-47.
- Sheoran, N., Goyal, R., & Sharma, H. (2023). Proactive personality and employee engagement: The mediating role of employee voice. *FIIB Business Review*.
- Silva, P., Moreira, A. C., & Mota, J. (2023). Employees' perception of corporate social responsibility and performance: The mediating roles of job satisfaction, organizational commitment and organizational trust. *Journal of Strategy and Management*, *16*(1), 92-111.
- Simbula, S., & Guglielmi, D. (2013). I am engaged, i feel good, and i go the extra-mile: Reciprocal relationships between work engagement and consequences. *Revista de Psicología del Trabajo y de las Organizaciones*, *29*(3), 117-125.
- Singh, A., & Gupta, B. (2015). Job Involvement, organizational commitment, professional commitment, and team commitment: A study of generational diversity. *Benchmarking: An International Journal*, *22*(6), 1192-1211.

- Singh, R. K., Singh, S. K., & Kumar, S. (2022). Exploring the impact of ethical leadership on organizational performance: Evidence from Indian healthcare sector. *Journal of Health Management, 24*(1), 46-57.
- Smith, M. B., Wallace, J. C., Vandenberg, R. J., & Mondore, S. (2018). Employee involvement climate, task and citizenship performance, and instability as a moderator. *The International Journal of Human Resource Management, 29*(4), 615-636.
- Smith, N., & Fredricks-Lowman, I. (2020). Conflict in the workplace: A 10-year review of toxic leadership in higher education. *International Journal of Leadership in Education, 23*(5), 538-551.
- Song, Q., Guo, P., Fu, R., Cooke, F. L., & Chen, Y. (2023). Does human resource system strength help employees act proactively? The roles of crisis strength and work engagement. *Human Resource Management, 62*(2), 213-228.
- Srimulyani, V. A., & Hermanto, Y. B. (2022). Organizational culture as a mediator of credible leadership influence on work engagement: Empirical studies in private hospitals in East Java, Indonesia. *Humanities and Social Sciences Communications, 9*(1), 1-11.
- Sutaguna, I. N. T., Yusuf, M., Ardianto, R., & Wartono, P. (2023). The effect of competence, work experience, work environment, and work discipline on employee performance. *Asian Journal of Management, Entrepreneurship and Social Science, 3*(1), 367-381.
- Tariq, M. H., & Diana, P. D. (2022). The role of self-efficacy on job involvement of academicians in higher education institutions. *Journal of Positive School Psychology, 6*(4), 4991-4999.
- Tawade, M., & Pandya, S. (2023). Optimizing pharmaceutical quality audits: Enhancing compliance and performance through best practices. *Journal for New Zealand Herpetology, 12*(3), 6514-6522.
- Transilvanus, V. E., Darsono, J. T., & Sumarsono, T. G. (2019). The impact of workplace environment, motivation and workplace discipline on employees' performance of local water supply utility at Sikka Regency, Indonesia. *International Journal of Advances in Scientific Research and Engineering-IJASRE, 5*(4), 141-148.
- Tsaur, S.-H., Hsu, F.-S., & Lin, H. (2019). Workplace fun and work engagement in tourism and hospitality: The role of psychological capital. *International Journal of Hospitality Management, 81*, 131-140.
- Turner, P. (2020). Employee engagement in contemporary organizations: Maintaining high productivity and sustained competitiveness. *Springer*.
- Varghese, A. M., & Joseph, D. M. (2020). Impact of Commitment, Boredom and Work Engagement on Workplace Spirituality in Organisations: With Special Reference to Private Sector. *Mukt Shabd, 9*(8), 642-661.
- Vischer, J. C. (2008). Towards an environmental psychology of workspace: How people are affected by environments for work. *Architectural science review, 51*(2), 97-108.
- Wan, Q., Li, Z., Zhou, W., & Shang, S. (2018). Effects of work environment and job characteristics on the turnover intention of experienced nurses: The mediating role of work engagement. *Journal of Advanced Nursing, 74*(6), 1332-1341.
- Wang, J., & Li, Y. (2021). The dynamic relationship between profitability and stock market performance: Evidence from pharmaceutical companies. *International Review of Economics & Finance, 71*, 1-16.
- Wang, Z., Asghar, M. M., Zaidi, S. A. H., Nawaz, K., Wang, B., Zhao, W., & Xu, F. (2020). The dynamic relationship between economic growth and life expectancy: Contradictory role of energy consumption and financial development in Pakistan. *Structural Change and Economic Dynamics, 53*, 257-266.
- Weiss, H. M., & Beal, D. J. (2005). Reflections on Affective Events theory. In *The Effect of Affect in Organizational Settings* (Vol. 1). Emerald Group Publishing Limited.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *18*(1), 34-74.
- Weng, T.-C., Shen, Y.-H., & Kan, T.-T. (2023). Talent sustainability and development: How talent management affects employees' intention to stay through work engagement and perceived organizational support with the moderating role of work-life balance. *Sustainability, 15*(18), 13508.
- Wilson, K. G. (2015). Impact of work environment on academic staff job performance: case of a Uganda university. *International Journal of Advances in Management and Economics, 4*(4), 95-103.
- Wysokińska-Senkus, A., Lechański, K., & Malinowski, J. (2023). Systemic business continuity management in the process of building the organization's resilience and improving its security. Experience of the organization in Poland. *Scientific Papers of Silesian University of Technology. Organization & Management/Zeszyty Naukowe Politechniki Slaskiej. Seria Organizacji i Zarzadzanie*(175), 671-685.
- Yildiz, R., & Akkas, H. (2023). Flexible work arrangements in the era of disasters and technology. *International Studies in Social, Human and Administrative Sciences-II, Ed. Catalcali-Ceylan A. and Batal S*, 157-172.
- Zafirovski, M. (2005). Effects of power, status and class on "who gets what" income. *International journal of sociology and social policy, 25*(12).
- Zaman, M. N. (2023). Human resource management in post COVID-19: A review. *Uttkarsh Prakashan, 20*(1), 554-565.
- Zhabin, A. (2023). Management strategies and enhancing enterprise efficiency in the context of contemporary geopolitical conditions. *E3S Web of Conferences, EDP Sciences, 420*, 04003.
- Zhang, M., & Zhang, X. (2023). Under the microscope: Analyzing the complex associations among organizational culture, job satisfaction, and employee commitment. *Interdisciplinary Research Journal of Management and Social Sciences (IRJMSS), 10*(3), 1-10.