

JOB CHARACTERISTICS AND QUALITY OF WORK LIFE ON EMPLOYEE PERFORMANCE: A CASE STUDY OF BEIJING YINGZHI XINYUAN TECHNOLOGY CO., LTD.

Qilong SUN¹ and Poompichai TARNDAMRONG²

1 Faculty of Business Administration, Thongsook College, Bangkok, Thailand;
kebin.thongsookcollege@gmail.com (O. S.); poompichai.t@gmail.com (P. T.)

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ABSTRACT

This research aims to examine the personal factors that influence employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd., investigate the job characteristics that impact employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd., and explore the quality of work life that affects employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd. The sample comprised 120 operational-level employees, and data were collected through a questionnaire. Data analysis included descriptive statistics such as frequency tables, percentages, means, and standard deviations, as well as hypothesis testing using t-tests, F-tests, and multiple regression analysis. The results indicate that personal factors, specifically age and work experience, statistically demonstrate a significant impact on employee performance at the 0.05 significance level. Job characteristics, including task variety, job autonomy, task significance, and feedback, also significantly impact employee performance at the 0.05 significance level, with a predictive power of 68.2%. Additionally, aspects of quality of work life such as adequate and fair compensation, safe and healthy conditions, and the development of human capacities significantly impact employee job performance at the 0.05 significance level, with a predictive power of 74%.

Keywords: Job Characteristics, Quality of Work Life, Employee Performance

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INTRODUCTION

Currently, technology plays a crucial role in the lives of every individual as it facilitates convenience and cost savings, resulting in various organizations recognizing the importance of utilizing these technologies. Consequently, new players have emerged in the digital technology industry, leading to a high growth rate driven by consumer demand and investments (Oztemel & Gursev, 2020). Particularly during the COVID-19 pandemic, the severity of the situation has further emphasized the efficiency of using these technologies, with China being considered a model for effectively managing such problems through the application of technology (Xie, Siau, & Nah, 2020).

China's technology industry has experienced rapid and substantial growth due to government support in infrastructure preparation and policies that benefit technology-driven businesses. This growth is also bolstered by China's large economy and its status as the most populous country in the world, with a population exceeding 1.4 billion people. Currently, China is transitioning into China 5.0 by operating within the framework of the new economy, with initiatives such as "Made in China 2025" and "AI 2030," aiming to transform China into a technological powerhouse by 2030 (Wübbeke, Meissner, Zenglein, Ives, & Conrad, 2016).

Beijing Yingzhi Xinyuan Technology Co., Ltd. is a rapidly growing technology company renowned for its innovative products and services in the security field. With an average annual growth rate of 5-20%, the company has expanded its operations to encompass Beijing, Shanghai, and Jiangsu Province. While the company continues to evaluate the performance of its existing workforce, it also aims to identify factors that can enhance work efficiency and improve the overall well-being of employees within the organization. The goal is to establish essential models that inspire the recruitment of new employees to contribute to the organization's growth and bolster its competitive advantage.

In recent decades, there has been increasing recognition of the importance of factors that impact work efficiency and well-being (Nielsen, Nielsen, Ogbonnaya, Känsälä, Saari, & Isaksson, 2017). These factors have the potential to help organizations tailor job characteristics, improve the quality of work life, and enhance employee performance and satisfaction (Guest, 2017). Quality of Work Life (QWL) has become a significant area of research in understanding the factors influencing well-being, job satisfaction, and overall organizational performance (Martínez-Sánchez, Pérez-Pérez, & De-Luis-Carnicer, 2017). Furthermore, job characteristics contribute to improving the productivity and performance of employees in today's highly competitive business environment, prompting organizations to recognize the importance of creating positive job characteristics and enhancing quality of life (Elçi, Alpkан, & Yılmaz, 2012).

Given the rapid economic and social growth in China, people's expectations of job characteristics have increased as the country advances. Job characteristics such as meaningful work, job diversity, autonomy, and receiving feedback play a vital role in shaping job expectations (Nie, Ding, & Sousa-Poza, 2020). Additionally, quality of work life encompasses improved physical and mental well-being, work-life balance, occupational stability, necessary benefits for livelihood, and the use of technology that facilitates work (Xiao, Zhu, Fu, Hu, Li, & Xiao, 2020).

Furthermore, conducting an internal survey within a specific organizational context provides valuable in-depth information for understanding the factors that shape employee experiences and outcomes. Therefore, the objective of this research is to examine the relationship between job characteristics, quality of work life, and employee performance within Beijing Yingzhi Xinyuan Technology Co., Ltd. The study aims to gain insights into how specific job characteristics, such as job diversity, autonomy, skill variety, and feedback, influence the quality of work life among employees. Additionally, it explores how the quality of work life, including work-life balance, the work environment, job security, organizational support, and

well-being, impacts employee performance. By achieving the research objectives, the study will provide accurate guidelines related to job characteristics and quality of work life that contribute to enhancing employee performance, satisfaction, and well-being.

This research aims to examine the personal factors that influence employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd., investigate the job characteristics that impact employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd., and explore the quality of work life that affects employee performance at Beijing Yingzhi Xinyuan Technology Co., Ltd.

LITERATURE REVIEWS

Concepts and theories related to job characteristics

Job characteristics refer to the specific design of a job that can create a sense of career progress for employees or provide psychological conditions that motivate them to perform (Simonet & Castille, 2020). In essence, job characteristics form a framework for jobs that organizations must carefully design to encompass all dimensions, both specific and general, to help employees understand their work and achieve their goals (Johari & Yahya, 2016). These characteristics must appropriately balance the interaction of key dimensions related to the job, including job structure and clarity of responsibilities, which may need adjustment as necessary. From a psychological perspective, emphasis is placed on the importance of individual factors, such as raising awareness and identifying values in work that can fulfill personal needs and lead to a certain level of personal satisfaction, resulting in effectiveness in work and organizational benefits (Batchelor, Abston, Lawlor, & Burch, 2014). Hackman and Oldham (1980) proposed a theory about the job characteristics that best explain work motivation. They believed that when employees are internally motivated by their work, they will perform well and continue to exhibit good behavior. The job characteristics model consists of five components: 1) Skill variety refers to the job characteristic that varies due to multiple aspects within the organization, requiring individuals to apply their knowledge, expertise, and skills in their work. 2) Task identity refers to the extent to which individuals complete a whole piece of work and can identify the specific tasks resulting from their efforts throughout the process. 3) Task significance refers to the impact of the job details on the lives or work of individuals within the same organization or external individuals. 4) Autonomy refers to the freedom employees have in thinking, decision-making, and planning work methods within their responsibilities. 5) Feedback refers to the extent to which employees receive direct and clear information on the effectiveness and outcomes of their work.

Concepts and theories related to quality of work life

The term “Quality of Working Life” was first introduced in the late 1960s to highlight the poor quality of work life at that time. Over the 15 years following its initial publication, the definition and application of this term and theory have evolved significantly (Alvesson, 2018). In the present context, Quality of Working Life refers to the simultaneous achievement of employees’ desired goals and organizational effectiveness. It is often associated with productivity. However, Quality of Working Life also encompasses participation in important decision-making processes (De Sivatte, Gordon, Rojo, & Olmos, 2015). The study of quality of work life began with the concept of Walton (1973), who was one of the first researchers to seriously study the subject. He considered the characteristics of individuals regarding quality of life, focusing on a humanistic approach by examining the personal and social environment that leads to successful work, the output that meets needs, and the satisfaction of individuals in their work. Walton pointed out that the factors impacting the creation of quality of work life include eight conditions as follows: 1) Adequate and Fair Compensation: Compensation should be sufficient to maintain a reasonable standard of living in society and should also be fair, derived from comparisons with compensation for similar positions and responsibilities or based on equal

performance. 2) Safe and Healthy Conditions: Employees should work in an environment that is not harmful to their physical and mental health. Organizations should establish standards for a healthy environment, including noise control and minimizing visual disturbances, ensuring employees can work in a safe and comfortable physical and mental environment. 3) Development of Human Capacities: Employees should have opportunities to develop and utilize their skills and knowledge in their work. This enables employees to feel valued, challenged, and engaged in their work, providing them with the chance to utilize their abilities to their full potential and have a sense of involvement in their work. 4) Growth and Security: Organizations should offer avenues for employees to enhance their capabilities beyond their current roles. Opportunities for new assignments or tasks requiring increased knowledge and skills should be available. Internal development opportunities should enable employees to experience professional growth and stability. 5) Social Integration and Work Relationships: Employees should feel valued, accepted, and supported by their colleagues, fostering a sense of teamwork and authenticity in the workplace. The environment should be positive and free from discrimination or harassment. Social integration also extends to employees' relationships outside of work, contributing to their sense of success and value. 6) Constitutionalism: Employees should have rights and mechanisms to protect those rights within the organization. This depends on the organizational culture, which determines the level of respect for individual rights, acceptance of diverse opinions, and fairness in rewards and treatment. Constitutionalism involves respecting individual rights, fair consideration of rewards, and equality in employee care. 7) Work-Life Balance: Individuals need to achieve a balance in life by allocating appropriate proportions of time and energy between work and personal life. This includes time management, career choices, and travel considerations, all requiring a suitable balance between personal leisure time and family responsibilities, as well as opportunities for personal and career growth. 8) Social Relevance: Employees should feel that their activities or work contribute to the betterment of society, fostering a sense of responsibility towards society and perceiving their organization as having a positive impact. This adds value and importance to their profession, fostering pride within the organization. For example, employees may take pride in their unit's social responsibility in production, waste disposal, marketing practices, training, and participation in political campaigns, among other activities.

Concepts and theories related to performance and related theories

According to Bartuševičienė and Šakalytė (2013), employee performance serves as a criterion to gauge the success of employees' work, taking into account both their productivity and the value of their management of personal abilities. Operational effectiveness, operational efficiency, and work behavior serve as indicators of performance. This implies that an organization must outperform its competitors in generating profit and experiencing faster growth. Performance is often evaluated by comparing achieved goals; successful performance is indicated by goal attainment. Furthermore, work performance is frequently assessed by comparing output with resources utilized or by analyzing input-output to ascertain organizational goal achievement (Mensah, 2015). However, the measurement of performance can have multiple dimensions. For instance, from an economic perspective, it extends beyond financial matters to encompass other resources utilized in the production process, such as time or raw materials. The management perspective may prioritize member satisfaction with the management methods employed to achieve goals, while the social dimension (Hosie & Nankervis, 2016) can reflect potential effectiveness in work. Two key components crucial for achieving performance are employees' work and the structure of work. Regarding employees' work, they should possess a sense of purpose in their roles and a commitment to continuous self-development (Adjibolosoo, 2018). The important concept proposed by Peterson and Plowman (1953), widely referenced, discusses the components of efficiency, which comprise quality, quantity, time, and costs, as follows: 1) Quality: This refers to the requirement for high-

quality work where both producers and users benefit and are satisfied. The results of the work should be accurate, meet standards, and be efficient. High-quality work brings benefits to the organization and ensures customer satisfaction. 2) Quantity: This refers to the amount of work that should align with the expectations of the organization. The actual output should be in line with planned quantity or organizational goals. 3) Time: This refers to the appropriate time taken to carry out the work, following principles and being suitable for the task. It also includes keeping up with advancements in work techniques, making operations more convenient and efficient. Time management involves completing tasks within specified deadlines accurately and swiftly.

From the literature review, the conceptual framework can be depicted as shown in Figure 1.

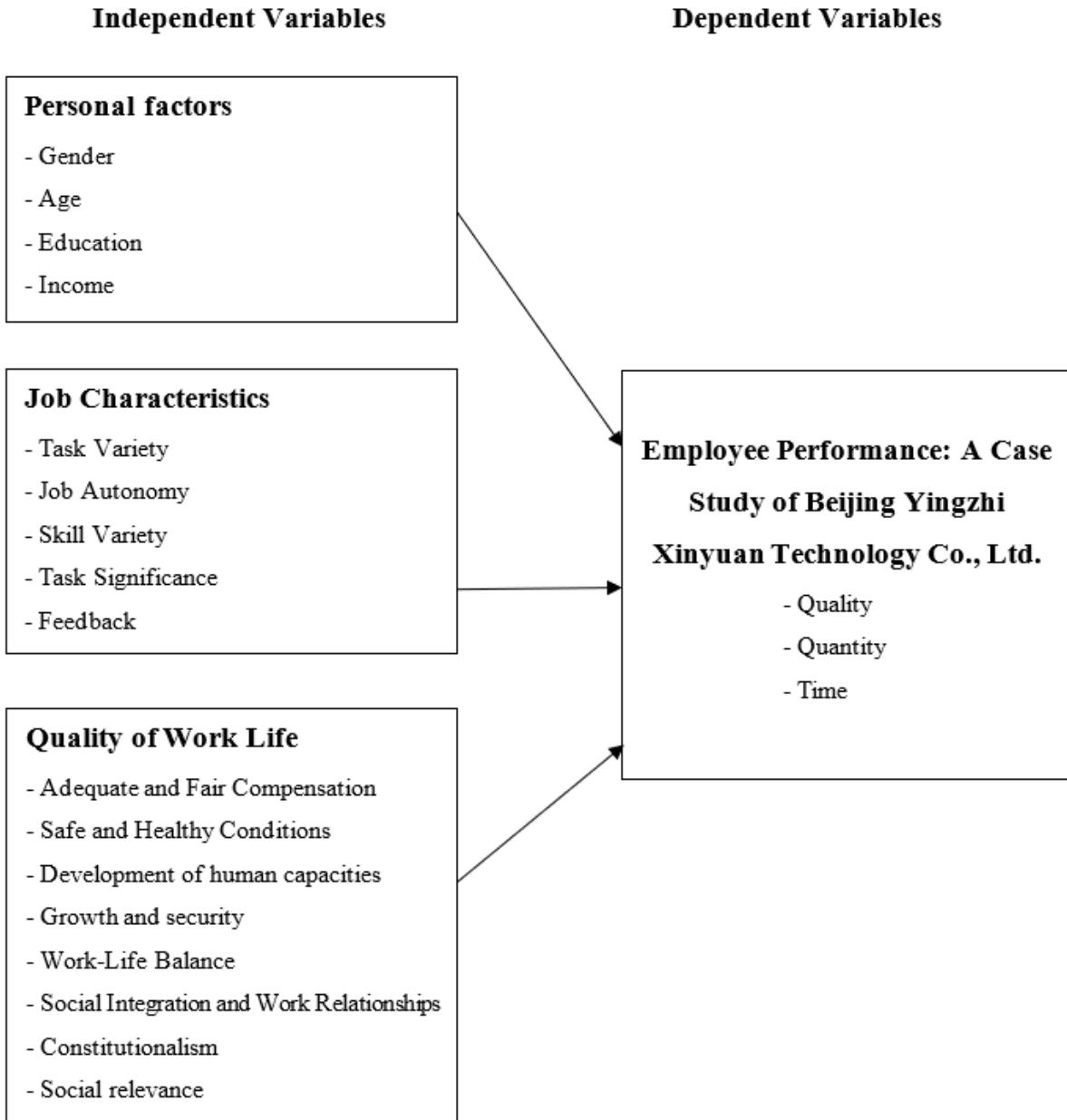


Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

The research population consisted of 160 employees of Beijing Yingzhi Xinyuan Technology Co., Ltd., as reported in the company's annual report for the year 2022. Given that there are a total of 120 operational-level employees, the researcher collected data from all operational-level staff members.

The research questionnaire was developed based on a comprehensive literature review and related research to ensure that the questions aligned with the research objectives. It was divided into 5 parts as follows: Part 1 General Information; Part 2 Job Characteristics; Part 3 Quality of Work Life; Part 4 Employee Performance; and Part 5 Comments and Other Suggestions.

Data analysis encompassed descriptive statistics, including frequency tables, percentages, means, and standard deviations, to provide a preliminary understanding of the data. Inferential statistical analyses were conducted to test research hypotheses, using a significance level of 0.05. These analyses included t-tests, F-tests, and multiple regression analysis.

RESEARCH RESULTS

The results of the data analysis indicate that a majority of questionnaire respondents are male (60.8%), fall within the age range of 31-40 years (60.0%), possess an undergraduate educational background (72.5%), have an average monthly income in the range of 3,001-4,000 yuan (53.3%), and exhibit work experience spanning 1-5 years (56.7%). Notably, respondents' perceptions regarding job characteristics, quality of work life, and employee performance, when considered collectively, are predominantly at a high level.

Table 1 shows a summary of hypothesis testing of personal factors.

Personal factors	Statistics used	Statistics	Sig.	Test results
- Gender	t-test	-0.273	0.785	-
- Age	F-test	4.243	0.007*	✓
- Education	F-test	0.402	0.670	-
- Income	F-test	2.242	0.087	-
- Work experience	F-test	3.227	0.025	✓

According to Table 1, the personal factors, specifically age and work experience, statistically demonstrate a significant impact on employee performance, as evidenced by results at the 0.05 significance level.

Table 2 shows a summary of hypothesis testing of job characteristics.

Job characteristics	b	Std. Error	β	t	Sig.	Tolerance	VIF
Constant	-0.006	.269		-0.022	0.982		
-Task Variety	0.356	0.087	0.305	4.087	0.000*	0.502	1.993
- Job Autonomy	0.210	0.101	0.204	2.070	0.041*	0.286	3.494
- Skill Variety	-0.028	0.088	-0.029	-0.321	0.749	0.335	2.982
- Task Significance	0.217	0.106	0.218	2.052	0.042*	0.248	4.040
- Feedback	0.243	0.080	0.259	3.019	0.003*	0.379	2.639

R = 0.826, R² = 0.682, Adjusted R² = 0.682, SE_{EST} = 0.298, F = 48.834, Sig. = 0.000*

* Statistically significant at the 0.05 level.

According to Table 2, the job characteristics, including task variety, job autonomy, task significance, and feedback, significantly impact employee performance at the 0.05 significance level. The statistical analysis further indicates a predictive power of 68.2%.

Table 3 shows a summary of hypothesis testing of quality of work life.

Quality of work life	b	Std. Error	β	t	Sig.	Tolerance	VIF
Constant	0.664	0.324		2.050	0.043		
- Adequate and fair compensation	0.226	0.083	0.202	2.717	0.008*	0.397	2.520
- Safe and healthy conditions	0.328	0.093	0.338	3.538	0.001*	0.240	4.174
- Development of human capacities	0.396	0.084	0.381	4.716	0.000*	0.335	2.982
- Growth and security	-0.057	0.069	-0.060	-0.833	0.406	0.422	2.372
- Work-life balance	-0.014	0.082	-0.015	-0.166	0.868	0.269	3.715
- Social integration and work Relationships	-0.139	0.082	-0.150	-1.697	0.092	0.282	3.550
- Constitutionalism	0.177	0.093	0.212	1.911	0.059	0.178	5.624
- Social relevance	-0.092	0.058	-0.125	-1.585	0.116	0.353	2.834

R = 0.870, R² = 0.757, Adjusted R² = 0.740, SEEST = 0.263, F = 43.259, Sig. = 0.000*

* Statistically significant at the 0.05 level.

According to Table 3, the quality of work life, including adequate and fair compensation, safe and healthy conditions, and development of human capacities, significantly impacts employee job performance at the 0.05 significance level. The statistical analysis reveals a predictive power of 74%.

DISCUSSION & CONCLUSION

The statistical analysis delving into personal factors, particularly age and work experience, illuminates a nuanced understanding of their influence on employee performance. The correlation observed at the 0.05 significance level signifies a robust connection between these variables and job effectiveness. Younger and less experienced employees may exhibit a learning curve, while older and more experienced individuals may bring valuable expertise. It is essential for organizations to tailor training programs, mentorship initiatives, and performance expectations based on these findings. This insight contributes to the development of targeted strategies for employee development and performance management. According to the findings of Wang, Song, Zhu, and Gao (2021), who investigated the impact of growth mindset on employee performance, growth mindset refers to the belief that abilities and intelligence can be developed through effort and learning. The study found a positive association between growth mindset and employee performance, suggesting that individuals with a growth mindset are more likely to achieve higher levels of performance.

The comprehensive examination of job characteristics, including task variety, job autonomy, task significance, and feedback, not only underscores their impact on employee performance but also provides insights into their individual contributions. Task variety ensures that employees are engaged in diverse activities, fostering skill development. Job autonomy empowers individuals, promoting a sense of responsibility and ownership in their roles. Task significance emphasizes the meaningfulness of job roles, enhancing employee motivation. Feedback loops facilitate continuous improvement. The statistical significance at the 0.05 level, coupled with a predictive power of 68.2%, emphasizes the practical implications for organizations to design roles that encompass these characteristics, thereby positively shaping employee performance and organizational outcomes. According to the findings of Tims, Bakker, and Derkx (2020), who examined the role of job crafting, a proactive behavior where employees shape and modify their job characteristics, on employee performance, the study

found that employees who engaged in job crafting behaviors, such as increasing task variety and seeking more opportunities for learning, demonstrated higher levels of job performance. The research highlighted the potential for employees to actively influence their job characteristics to optimize their performance.

The analysis of quality of work life components—adequate and fair compensation, safe and healthy conditions, and the development of human capacities—unveils critical facets of organizational dynamics. Adequate and fair compensation not only attracts but also retains skilled employees. Safe and healthy conditions contribute to employee well-being, directly impacting job performance. The focus on the development of human capacities aligns with continuous learning and skill enhancement, enhancing overall employee competence. The statistical significance at the 0.05 level, coupled with a compelling predictive power of 74%, accentuates the imperative for organizations to prioritize these aspects. Implementing policies that ensure fair compensation, prioritize safety, and invest in employee development becomes instrumental in fostering a positive work environment and optimizing employee performance. According to the findings of Aryee, Walumbwa, Seidu, and Otaye (2019), who investigated the influence of quality of work life on employee job performance and well-being in the context of the hospitality industry, the findings showed that employees who experienced a higher quality of work life, characterized by fair compensation, supportive supervision, and opportunities for growth and development, exhibited higher levels of job performance and job satisfaction. The study emphasized the importance of quality of work life factors in enhancing employee performance and well-being.

In summary, the detailed exploration of these dimensions emphasizes the intricate interplay between personal factors, job characteristics, and the quality of work life in shaping employee performance. Organizations equipped with this nuanced understanding can tailor their strategies to create an environment conducive to optimal employee performance and sustained organizational success.

REFERENCES

Adjibolosoo, S. (2018). *The human factor approach to managerial and organizational efficiency and effectiveness*. Springer International Publishing.

Alvesson, M. (2018). *Organization theory and technocratic consciousness: Rationality, ideology and quality of work (Vol. 8)*. Walter de Gruyter GmbH & Co KG.

Aryee, S., Walumbwa, F. O., Seidu, E. Y. M., & Otaye, L. E. (2008). Impact of high-performance work systems on individual-and branch-level performance: Test of a multilevel model of intermediate linkages. *Journal of Applied Psychology*, 93(6), 1294-1310.

Bartuševičienė, I., & Šakalytė, E. (2013). Organizational assessment: effectiveness vs. efficiency. *Social Transformations in Contemporary Society*, 1(1), 45-53.

Batchelor, J. H., Abston, K. A., Lawlor, K., & Burch, G. F. (2014). The job characteristics model: An extension to entrepreneurial motivation. *Small Business Institute Journal*, 10(1), 1-10.

De Sivatte, I., Gordon, J. R., Rojo, P., & Olmos, R. (2015). The impact of work-life culture on organizational productivity. *Personnel Review*, 44(6), 883-905.

Elçi, M., Alpkhan, L., & Yilmaz, G. (2012). The impacts of perceived organizational support on employees' organizational citizenship behaviour, job satisfaction and turnover intention. *Procedia-Social and Behavioral Sciences*, 58, 1353-1360.

Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*, 27(1), 22-38.

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied psychology*, 60(2), 159-170.

Hosie, P., & Nankervis, A. (2016). A multidimensional measure of managers' contextual and task performance. *Personnel Review*, 45(2), 419-447.

Johari, J., & Yahya, K. K. (2016). Job characteristics, work involvement, and job performance of public servants. *European Journal of Training and Development*, 40(7), 554-575.

Martínez-Sánchez, A., Pérez-Pérez, M., & De-Luis-Carnicer, P. (2017). Job characteristics and job satisfaction: A study among Spanish employees in the hospitality industry. *International Journal of Hospitality Management*, 64, 47-56.

Mensah, J. K. (2015). A "coalesced framework" of talent management and employee performance: For further research and practice. *International Journal of Productivity and Performance Management*, 64(4), 544-566.

Nie, P., Ding, L., & Sousa-Poza, A. (2020). What Chinese workers value: An analysis of job satisfaction, job expectations, and labour turnover in China. *Prague Economic Papers*, 29(1), 85-104.

Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Känsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress*, 31(2), 101-120.

Oztemel, E., & Gursev, S. (2020). Literature review of Industry 4.0 and related technologies. *Journal of intelligent manufacturing*, 31, 127-182.

Peterson, E., & Plowman, E. G. (1953). *Business organization and management*. Richard D. Irwin.

Simonet, D. V., & Castille, C. M. (2020). The search for meaningful work: A network analysis of personality and the job characteristics model. *Personality and Individual Differences*, 152, 109569.

Tims, M., Bakker, A. B., & Derkx, D. (2020). Job crafting and performance of Dutch and American health care professionals. *Journal of Occupational Health Psychology*, 25(2), 149-159.

Walton, R. E. (1973). Quality of working life: what is it. *Sloan management review*, 15(1), 11-21.

Wang, L., Song, Z., Zhu, Y., & Gao, J. (2021). How does a growth mindset influence job performance? The mediating role of job crafting and the moderating role of task complexity. *Frontiers in Psychology*, 12, 624872.

Wübbeke, J., Meissner, M., Zenglein, M. J., Ives, J., & Conrad, B. (2016). Made in china 2025: The making of a high-tech superpower and consequences for industrial countries. *MERICS Papers on China*, 2(74), 14-20.

Xiao, X., Zhu, X., Fu, S., Hu, Y., Li, X., & Xiao, J. (2020). Psychological impact of healthcare workers in China during COVID-19 pneumonia epidemic: A multi-center cross-sectional survey investigation. *Journal of affective disorders*, 274, 405-410.

Xie, X., Siau, K., & Nah, F. F. H. (2020). COVID-19 pandemic-online education in the new normal and the next normal. *Journal of information technology case and application research*, 22(3), 175-187.

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