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Empirical Investigation of Factors Influencing the Performance of Employees with Over Five Years of Work Experience in High-Tech Enterprises in China

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Abstract

Purpose: The objective of this study is to investigate the significant factors impacting the job performance of employees in high-tech enterprises located in Chengdu, China. The conceptual framework proposes causal relationships between variables such as job engagement, innovative behavior, distributive justice, training, job satisfaction, organizational commitment, and employee job performance. **Research Design, Data, and Methodology:** A questionnaire was distributed to collect data from 500 employees who have been working over five years in High-Tech Enterprises in China. The researcher used Item-Objective Consistency (IOC) and Cronbach's Alpha to test the designed scales before distributing the questionnaire. Nonprobability and probability sampling methods are used, including judgmental and stratified random sampling. The collected data were then subjected to statistical analyses, including Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), to assess reliability, validity, and model fit. **Results:** Through the analysis, eight hypotheses were confirmed. The analysis of the research findings demonstrates that training, job engagement, distributive justice, job satisfaction, innovative behavior, and organizational commitment have a significantly positive impact on job performance among employees in high-tech enterprises. **Conclusions:** This study provides recommendations for human resource management in high-tech enterprises, highlights the limitations of the research, and suggests directions for future research.

Keywords: Innovative Behavior, Organizational Commitment, Training, Job Satisfaction, Job Performance

JEL Classification Code: E44, F31, F37, G15

1. Introduction

With the advent of the information age, high-tech enterprises' internal and external environments have become increasingly dynamic. The complexity and uncertainty of the environment have increased the likelihood of companies facing crises. According to the "China Torch Statistical Yearbook 2021," data from 2016 to 2020 show that the number of high-tech enterprises has grown from over 100,000 to nearly 270,000, with an average annual growth rate of nearly 28%. As the number of enterprises grows rapidly, their operational indicators also continue to rise. In 2019, China's high-tech enterprises achieved a total operating income of 45.1 trillion yuan, a year-on-year increase of 15.9%, indicating that the high-tech industry has significant potential in developing the Chinese labor market. For enterprises engaged in high technology, the continuous development and application of new technologies require employees to contribute their wisdom and energy continuously. Human capital is a key driver of technological innovation in high-tech enterprises, directly influencing and determining innovation capabilities and performance (Lin et

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al., 2020).

Due to the creative, challenging, and uncertain nature of the work performed by employees in high-tech enterprises (Yang, 2006), these characteristics inevitably have a significant impact on work engagement, innovative behavior, satisfaction, organizational commitment, and job performance of research and development personnel in high-tech enterprises. Grounded in social exchange theory, the AMO theory, and other theoretical foundations, this study employs structural equation modeling and empirical investigation to analyze the impact and mechanisms of work engagement and innovative behavior on job performance among employees in high-tech enterprises operating in dynamic environments. The study also provides relevant management recommendations.

In the rapidly evolving landscape of high-tech enterprises in Chengdu, China, understanding the factors that significantly impact employee job performance is critical for both individual career development and the overall success of these enterprises. However, despite the growing importance of this issue, there is a notable gap in comprehensive research that explores the intricate relationships between various variables influencing job performance in this specific context.

While research on employee job performance is extensive, a specific focus on high-tech enterprises in Chengdu, China, remains relatively underexplored. Existing studies often lack the depth required to capture the unique dynamics, challenges, and opportunities associated with this sector. Consequently, there is a research gap in understanding the intricate interplay between job engagement, innovative behavior, distributive justice, training, job satisfaction, organizational commitment, and their collective impact on employee job performance within this context.

In summary, this study endeavors to bridge the research gap by comprehensively exploring the factors influencing job performance in high-tech enterprises in Chengdu, China. Through a detailed investigation of causal relationships and the impact of various variables, it aims to provide actionable insights for both practitioners and researchers, ultimately contributing to the advancement of knowledge in this critical area.

2. Literature Review

2.1 Job Engagement

Employee work engagement significantly impacts both individual and organizational overall effectiveness and performance levels, making it a crucial individual variable in performance research. Kahn (1990) pointed out that an individual's work engagement is significantly positively correlated with their job performance, and work engagement leads to improvements and enhancements in job performance. Schaufeli (2013) confirmed the positive impact of work engagement on job performance across various work contexts. Sun and Bunchapattanasakda (2019) indicated that work engagement significantly influences employees' relevant job attitudes, behaviors, and performance and positively correlates with customer satisfaction, profit margins, and organizational performance. Theoretical research and practical results demonstrate that high levels of work engagement contribute to joyful and efficient work among employees. Engaged in innovative activities, research and development personnel should possess abundant energy and strong psychological resilience, enabling them to engage in innovative behaviors persistently, embrace innovation, and bravely accept work challenges while fully immersing themselves in their tasks (Park et al., 2014). When employees are driven by high self-efficacy and exhibit a high degree of autonomy in their work, it results in positive work attitudes and higher levels of work engagement (Demerouti et al., 2010), effectively predicting employee job performance. Based on these premises, this study proposes the following hypotheses:

H1: Job engagement has a significant impact on innovation behavior.

H2: Job engagement has a significant impact on job performance.

2.2 Innovation behavior

Shalley et al. (2004) posits that individual employee innovative behavior is the foundation and starting point for organizational and team innovation. Jansen (2005) defines employee innovative behavior as the conscious application of innovative ideas and actions within the work context. Employee innovative behavior can generally be categorized into three stages: idea generation, promotion, and implementation. Knowledge-based employees in high-tech enterprises place considerable importance on motivational factors such as the work environment, personal growth, and job characteristics. These factors have been empirically demonstrated to influence employees' work enthusiasm and individual innovative behavior. Hakanen et al. (2008) found a positive correlation between job engagement and proactive behavior, positively affecting organizational innovativeness. Consequently, this study proposes the following hypothesis:

H3: Innovation behavior has a significant impact on job performance.

2.3 Job Satisfaction

Weiss (2002) defines job satisfaction as a psychological response and attitude that employees experience towards

their work, stemming from an overall evaluation of various aspects of their job. Yang et al. (2021), in their study involving high-tech industry employees, established a causal relationship between job satisfaction and job performance among knowledge-based employees within high-tech organizations. Furthermore, they found significant variations in the impact of job satisfaction on job performance among employees with different levels of work experience. Chi and Gursoy (2009), in a questionnaire-based survey of hotel employees, identified a positive relationship between employee satisfaction and task performance and contextual performance. Platis et al. (2015) observed that aspects of job satisfaction, such as leadership style, job characteristics, and self-worth, significantly impact job performance. Building upon these findings, this study proposes the following hypotheses:

H4: Job satisfaction has a significant impact on job performance.

H5: Job satisfaction has a significant impact on organizational commitment.

2.4 Organizational Commitment

Becker (1960) introduced the concept of organizational commitment as a psychological phenomenon where employees, as they invest unilaterally in an organization, feel compelled to remain within it. Organizational commitment is defined as employees' emotional attachment to an institution, their identification with the company's values and goals, and their willingness to contribute to it (Robbins et al., 2014). It also involves the willingness to remain employed by the company after weighing the benefits of continued service against the opportunity costs of leaving (Woznyj et al., 2018). Manning and Curtis (2009) viewed organizational commitment as a sense of responsibility toward the organization, which typically changes with variations in factors such as individual traits, work environment, compensation, and leadership.

Meyer and Allen (1984) synthesized an analysis of organizational commitment and proposed a widely accepted three-dimensional model comprising affective commitment, normative commitment, and continuance commitment. Jaramillo et al. (2005) surveyed enterprise salespersons and found a significant positive correlation between employees' organizational commitment and job performance. Soomro and Shah (2019) explored the impact of organizational culture on organizational commitment and performance, revealing positive correlations between organizational commitment, employee satisfaction, and job performance. Building on these insights, this study posits the following hypothesis:

H6: Organizational commitment has a significant impact on job performance.

2.5 Distributive Justice

McFarlin and Sweeney (1992) suggest that distributive justice can more effectively predict "individual outcomes," primarily encompassing salary and performance satisfaction, i.e., job satisfaction. The research findings of Dailey and Kirk (1992) indicate a positive correlation between distributive justice and job satisfaction. Between distributive justice and procedural justice, Tremblay et al. (2000) assert that distributive justice is better suited to explain employees' salary satisfaction than procedural justice. This also underscores the substantial role of perceived organizational justice in influencing job satisfaction. Cohen-Charash and Spector (2001) also posit that the impact of distributive justice on job satisfaction surpasses that of procedural justice and interactional justice. Similarly, Colquitt (2001) argues that the most significant correlation exists between distributive justice and employee satisfaction, followed by procedural justice, informational justice, and interpersonal justice. Building on these findings, this study presents the following hypothesis:

H7: Distributive justice has a significant impact on job satisfaction.

2.6 Training

Organizational training and development for employees enable them to enhance their skills and create room for further advancement. Simultaneously, this also fosters a sense of trust, care, and support from the organization (Bulut & Culha, 2010). Companies provide employee training to impart the necessary knowledge and skills for their roles, enabling them to effectively perform their current tasks avoiding delays and errors due to knowledge gaps or inadequate skills (Bartlett, 2001). This positively influences employee job performance. Acton and Golden (2003) found that effective training contributes to the job satisfaction of knowledge workers, ensuring their stability. In investigating the impact mechanism of training on organizational commitment, Roehl and Swerdlow (1999) discovered that the competence attitude dimension positively influences emotional and normative commitment levels. Employees tend to identify more with the organization due to improved skills resulting from training. Bartlett and Kang (2004) also observed that employees tend to reciprocate organizations with increased effort and improved performance after receiving corporate training. Building on these insights, this study posits the following hypotheses:

H8: Training has a significant impact on job satisfaction.

H9: Training has a significant impact on organizational commitment.

2.7 Job performance

Borman and Motowidlo (1997) defined job performance as a comprehensive set of work behaviors related to job objectives, suggesting that job performance is a measurable concept. This viewpoint is also supported by Rotundo and Sackett (2002), who assert that job performance encompasses the ultimate outcomes of actions taken by individuals or organizations and is a multidimensional concept. Bernardin and Wiatrowski (2013) conceive job performance as the behaviors and outcomes employees exhibit in pursuit of organizational goals during specific periods. Campbell et al. (1993) introduced that job performance involves individual behavioral manifestations, representing controlled actions directed toward organizational objectives by the employees themselves. Salanova et al. (2005), in their study of hotel service quality, discovered that the level of employee engagement affects the quality of the organization's service atmosphere, further influencing employee job performance and customer loyalty. Rich et al. (2010) argue that higher levels of employee engagement enhance their sense of belonging to the organization, facilitating increased emotional involvement with colleagues in achieving organizational goals and consequently elevating overall organizational performance.

3. Research Methods and Materials

3.1 Research Framework

The conceptual framework of this study is built upon the foundational concepts derived from previous research frameworks and models. Gibbs and Ashill (2013) highlighted the strong and positive impact of job satisfaction and organizational commitment on job performance and intention to stay. Kim and Koo (2017) explored the influence of leader-member exchange (LMX) on employee engagement, subsequently affecting their creative behaviors and job performance. Crow et al. (2012) further supported and expanded upon previous research findings, demonstrating that organizational fairness significantly enhances employees' commitment. Job satisfaction is a crucial mediating variable in organizational fairness and commitment.

Moreover, Lee et al. (2006) provided evidence supporting the idea that organizations can enhance employees' affective commitment through their participation in training programs. Additionally, a significant correlation exists between training and job satisfaction, and both training and career development planning play essential roles in increasing job satisfaction and reducing employee turnover intentions. The proposed conceptual framework of this study is illustrated in Figure 1.

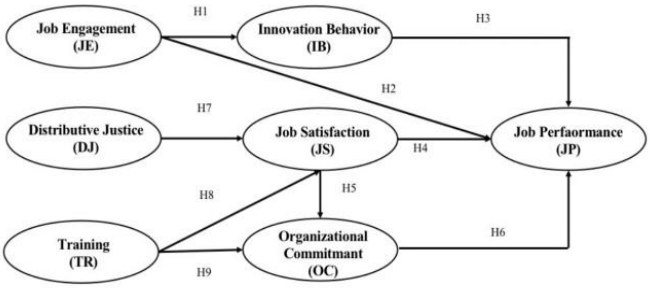

Figure 1: Conceptual Framework

H1: Job engagement has a significant impact on innovation behavior.
H2: Job engagement has a significant impact on job performance.
H3: Innovation behavior has a significant impact on job performance.
H4: Job satisfaction has a significant impact on job performance.
H5: Job satisfaction has a significant impact on organizational commitment.
H5: Job satisfaction has a significant impact on organizational commitment.
H6: Organizational commitment has a significant impact on job performance.
H7: Distributive justice has a significant impact on job satisfaction.
H8: Training has a significant impact on job satisfaction.
H9: Training has a significant impact on organizational commitment.

3.2 Research Methodology

According to Polonsky and Waller (2015), quantitative research methods generally go through four stages: identifying research objectives and questions, selecting data collection methods and instruments, conducting data analysis and interpretation of results, and finally, making conclusions and recommendations. This study focuses on employees from high-tech enterprises in Chengdu, China, as its research sample. Building on a comprehensive literature review and theoretical analysis, data is collected through random sampling and online questionnaire surveys. The collected questionnaire data is then empirically examined and analyzed using statistical methods and tools.

The principal data processing techniques encompass Item-Objective Consistency (IOC) and Cronbach's Alpha, reliability and validity analysis. The preliminary examination comprised was carried out utilizing the Index of Item-Objective Congruence (IOC) and pilot testing. A panel of three experts evaluated the IOC, and their assessments revealed that each item on the scale received a rating of 0.6 or

higher, indicating a satisfactory degree of congruence. Additionally, the pilot test (n=50) encompassed an assessment of the Cronbach's alpha coefficient for reliability, affirming robust internal consistency across all items. The computed values met or exceeded 0.7, consistent with the criteria outlined by Nunnally and Bernstein (1994).

3.3 Population and Sample Size

Based on Rawung (2013) findings, the target population refers to the full group of individuals for whom the measurement, research, or analysis is meant to be performed. The target population of this study comprises employees working in high-tech enterprises located in Chengdu, China. In order to collect representative data from employees in high-tech enterprises, the questionnaire was distributed within a specific geographical area, namely, within the Chengdu city boundaries. The distribution utilized a random sampling approach, ensuring that respondents were exclusively drawn from high-tech enterprises. A total of 560 questionnaires were distributed for this survey, resulting in the collection of 516 responses over three months. After excluding invalid responses, 500 valid questionnaires remained, yielding an effective response rate of 89.2%.

3.4 Sampling Technique

Balakrishnan et al. (2007) proposed that nonrandom sampling was a technique that selected elements based on the researcher's judgment of the entire population. The selection of appropriate sampling techniques is a key element in the research population, usability, and accessibility of information. Therefore, a judgmental sampling approach was utilized to select employees with over five-year work experience from the research and development (R&D), sales, and technology departments of three large high-tech enterprises in Chengdu. The stratified random sampling is shown in Table 1.

Table 1: Sample Units and Sample Size

Company Name	Population Size	Proportional Sample Size
Huawei Technologies Co., Ltd.	2177	297
Sichuan Xunyou Network Technology Co., Ltd	348	47
Dongfang Electric Corporation Limited (Chengdu headquarters)	1142	156
Total	**3667**	**500**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

The demographic profile of the targeted participants, consisting of 500 individuals, is summarized in Table 2. Among the respondents, 41.2% were male, while 58.8% were female. Regarding age groups, the largest segment in this research was the 26-34-year-old category, representing 59.4% of the respondents. The 35-45-year-old category accounted for 18.6%, the less than 25-year-old category for 15.6%, and the over 46-year-old category for 6.4%. Regarding educational background, most respondents held Bachelor's degrees at 78.8%. Master's degrees were held by 15.6% of respondents, while below Bachelor's degrees were held by 5.2% and Doctorate degrees were held by 0.4%.

Table 2: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Age	25 years old or less	78	15.6%
	26 -34 years old	297	59.4%
	35-45 years old	93	18.6%
	Above 46 years old	32	6.4%
Education	Below Bachelor's degree	26	5.2%
	Bachelor's degree	394	78.8%
	Master's degree	78	15.6%
	Doctorate's degree	2	0.4%
Profession	Education/Training/Research	55	11%
	IT/ Internet/ E-commerce	174	34.8%
	Manufacturing	134	26.8%
	Financial trade	60	12%
	The professional services	46	9.2%
	others	31	6.2%
Gender	Male	206	41.2%
	Female	294	58.8%

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

To assess the convergent validity of the variables, this study employed AMOS26 and conducted confirmatory factor analysis (CFA). Convergent validity is typically evaluated using latent variables' Average Variance Extracted (AVE). A value of 0.5 or higher indicates good convergent validity. Fornell and Larcker (1981) established three pivotal measurement benchmarks: factor loadings surpassing 0.5, composite reliability (CR) values greater than 0.7, and The Cronbach's Alpha values met or exceeded 0.7, consistent with the criteria outlined by Nunnally and Bernstein (1994).

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Job Engagement (JE)	Grobelna (2019)	9	0.895	0.581-0.786	0.472	0.895
Distributive Justice (DJ)	Carter et al. (2018)	5	0.837	0.591-0.734	0.465	0.837
Innovation Behavior (IB)	Zhang et al. (2016)	8	0.889	0.599-0.735	0.430	0.889
Training (TR)	Lapierre et al. (2016)	7	0.889	0.580-0.699	0.414	0.889
Job Satisfaction (JS)	Wang et al. (2018)	5	0.773	0..600-0.739	0.419	0.773
Organizational Commitment (OC)	Gao-Urhahn et al. (2016)	5	0.873	0.532-0.750	0.407	0.873
Job Performance (JP)	Yu et al. (2020)	4	0.811	0.625-0.756	0.478	0.811

Furthermore, model fit assessment in the CFA analysis was evaluated using indicators such as GFI, AGFI, NFI, CFI, TLI, IFI, and RMSEA.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 5.00 (Bentler & Bonett, 1980)	1.824
GFI	≥ 0.80 (Greenspoon & Saklofske, 1998)	0.878
AGFI	≥ 0.80 (Filippini et al., 1998)	0.862
CFI	≥ 0.90 (Arbuckle, 1995)	0.910
TLI	≥ 0.90 (Hair et al., 2006)	0.903
IFI	≥ 0.90 (Hair et al., 2006)	0.911
RMSEA	< 0.08 (Hu & Bentler, 1999)	0.041
Model Summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, CFI = comparative fit index, TLI = Tucker Lewis index, IFI = Incremental Fit Index and RMSEA = root mean square error of approximation

According to Fornell and Larcker (1981), the test for discriminant validity is typically conducted by comparing the square root of the average variance extracted (AVE) with the correlation coefficients. If the square root of AVE is greater than the correlation coefficients, it indicates satisfactory discriminant validity. For assessing discriminant validity, the square root of AVE was compared with the correlation coefficients between latent variables. If the correlation coefficient between two latent variables is lower than the square root of their respective AVE, it suggests good discriminant validity between them. In this study, all the extracted correlations exceeded the corresponding values, as presented in Table 5.

Table 5: Discriminant Validity

	JE	DJ	IB	TR	JS	OC	JP
JE	**0.687**						
DJ	0.25	**0.682**					
IB	0.316	0.354	**0.656**				
TR	0.295	0.183	0.353	**0.643**			
JS	0.092	0.168	0.136	0.206	**0.648**		
OC	0.31	0.225	0.157	0.291	0.242	**0.638**	
JP	0.257	0.156	0.251	0.327	0.205	0.284	**0.691**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

Structural Equation Modeling (SEM) is a widely utilized empirical research method in sociology, extensively employed for data analysis and model testing. In this study, SEM is used to assess the model fit of the structural model and the causal relationships among variables. The model is adjusted to ensure alignment if inconsistencies arise between the data and empirical evidence. According to Byrne (2010), structural models depict pathways or connections among latent variables, which can be both direct and indirect.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
CMIN/DF	< 5.00 (Bentler & Bonett, 1980)	1.818
GFI	≥ 0.80 (Greenspoon & Saklofske, 1998)	0.878
AGFI	≥ 0.80 (Filippini et al., 1998)	0.864
CFI	≥ 0.90 (Arbuckle, 1995)	0.910
TLI	≥ 0.90 (Hair et al., 2006)	0.904
IFI	≥ 0.90 (Hair et al., 2006)	0.911
RMSEA	< 0.08 (Hu & Bentler, 1999)	0.040
Model Summary		**In harmony with Empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, CFI = comparative fit index, TLI = Tucker Lewis index, IFI = Incremental Fit Index and RMSEA = root mean square error of approximation

4.4 Research Hypothesis Testing Result

The research model determines the significance of each variable through the standardized coeffeicinet path and t-value. The outcomes in Table 7 indicate that all nine hypotheses were supported, with a significance level of p = 0.05. Notably, the impact of job engagement on employee job performance yielded the highest result at 0.371, followed by training (β = 0.335), distributive justice (β = 0.234), and organizational commitment (β = 0.333). The model exhibited

the variance in employee job performance, as illustrated in Table 7.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: JE→IB	0.371	6.207*	Supported
H2: JE→JP	0.172	3.003*	Supported
H3: IB→JP	0.188	3.261*	Supported
H4: JS→JP	0.165	2.870*	Supported
H5: JS→OC	0.186	3.150*	Supported
H6: OC→JP	0.228	3.790*	Supported
H7: DJ→JS	0.150	2.620*	Supported
H8: TR→JS	0.234	3.941*	Supported
H9: TR→OC	0.335	5.240*	Supported

Note: * $p<0.05$
Source: Created by the author

The result from Table 7 can be refined that:

H1 demonstrated that employee engagement is one of the key driving factors for innovative behavior, revealing a standardized coefficient value of 0.371 in the structural path. Kwon and Kim (2019) confirmed a close correlation between employee organizational identification and organizational support, indicating that dedicated employees are more likely to generate novel ideas to meet challenges, thereby exhibiting innovative behavior. Regarding **H2**, the analysis results supported the hypothesis of a significant impact of work engagement on employee job performance, with a standardized coefficient value of 0.172. **H3** hypothesized that innovative behavior significantly affects job performance, and this received a standardized coefficient value of 0.188. Furthermore, employees displaying high work engagement suggest a strong acceptance of organizational management practices and task objectives, willingly striving to maximize personal value within the organization and thus fostering individual and organizational performance (Rich et al., 2010). The findings of this study support the previous literature's conclusion that work engagement has the greatest impact on job performance.

Moreover, **H4** verified a significant impact of job satisfaction on job performance. As for **H5**, with a coefficient value of 0.186, the results indicated a significant impact of job satisfaction on organizational commitment. Employee tenure, sense of belonging, and environmental pressure might interfere with job satisfaction. **H6** postulated that organizational commitment significantly affects job performance, obtaining a standardized coefficient of 0.228. Analysis of **H7** revealed that distributive justice significantly influences job satisfaction, with a coefficient of 0.150. Employees often perceive organizational justice by comparing themselves with colleagues, and those perceiving justice generally exhibit higher job satisfaction (Campbell & Finch, 2004). **H8** hypothesized a significant impact of training on job satisfaction, with a coefficient of 0.234. Lastly, the support of training on organizational commitment yielded a standardized coefficient value of 0.335, reinforcing the significant impact of **H9**. To substantiate this argument, Fletcher (2016) found that training, as an effective managerial and organizational aid, can significantly enhance employee job satisfaction and organizational commitment, reduce work anxiety, and motivate employees to improve job performance.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

Employee performance is one of the key indicator's enterprises pay utmost attention to, as it directly influences their development. This study focuses on employees in high-tech enterprises and primarily investigates the influencing factors of employee performance in Chengdu's high-tech enterprises. Building upon prior research, this study conducts a quantitative analysis of job performance, delving into the substantive impacts of work engagement, distributive fairness, training, innovative behavior, job satisfaction, and organizational commitment on employee performance. Employing specific sampling principles and methods, questionnaires were distributed to target employees from three large high-tech enterprises in Chengdu, encompassing research and development, sales, and technology departments. Confirmatory Factor Analysis (CFA) was employed to assess and validate the conceptual model's validity and reliability. Structural Equation Modeling (SEM) was utilized to test the conceptual model and research hypotheses. The outcomes of this study can assist high-tech enterprises in better comprehending the current status of employee performance and its influencing factors, designing performance management systems aligned with their distinctive characteristics, enhancing both job performance and overall organizational performance, maintaining elevated employee performance levels, and ultimately realizing strategic organizational objectives.

5.2 Recommendation

Researchers have found that organizational fairness is a crucial factor influencing employee performance in high-tech enterprises. It represents the comprehensive reflection of employees' labor input, personal values, and individual capabilities. Competitive compensation systems need to be provided by companies to ensure employees' basic needs are met, resources are allocated reasonably, employees' perception of fairness is enhanced, their sense of organizational identification and belongingness is

strengthened, and their dedication to work is promoted, ultimately achieving the goal of enhancing employee job performance. In high-tech enterprises, employees' skill levels are vital for sustainable development. Whether from the perspective of corporate development or individual employee growth, companies should actively engage in employee training, establish and refine training mechanisms, continually update employees' knowledge levels, and ensure their alignment with evolving business needs. Simultaneously, employee training programs also cater to employees' self-fulfillment needs, resulting in a win-win outcome for the company and its employees.

5.3 Limitation and Further Study

This study focused only on distributing questionnaires to several representative technology-oriented enterprises in Chengdu. The coverage of the sample in terms of region and size was limited, and the diversity of employee types needed to be increased. To establish the applicability of the research conclusions to employees across various regions and industries, future studies could expand the scope of sample selection, encompassing a broader range of industries for research subjects. This expansion would enhance the research findings' accuracy, persuasiveness, and generalizability. This study analyzed variables such as employee dedication and distributive fairness using cross-sectional data without considering time variables. Consequently, only the static relationships among variables were explored without effectively revealing the dynamic mechanisms between them. This limitation could be addressed in future research using case studies or longitudinal research methods to enhance the persuasiveness of causal relationships among variables.

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