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Determinants of Teachers' Job Performance: A Case of Zhanjiang University of Science and Technology, China

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Abstract

Purpose: The research examines how eight independent variables (organizational commitment, innovative work behavior, big five personality traits, job satisfaction) impact the dependent variable (Job Performance). Furthermore, the study seeks to identify significant differences between these variables. **Research design, data, and methodology:** The study utilized the Index of Item-Objective Congruence (IOC) to assess validity and conducted a pilot test for reliability using Cronbach's Alpha (n=30). Analysis was performed on 108 valid responses from teachers at Zhanjiang University of Science and Technology, employing multiple linear regression to confirm the significant relationships between variables. Subsequently, a group of 30 teachers underwent a 12-week Intervention Design Implementation (IDI). Post-IDI and pre-IDI quantitative results were then subjected to paired-sample t-tests for comparison. **Results:** The results show that organizational commitment, innovative work behavior, Big five personality traits, and job satisfaction all have significant effects on job performance, and all hypotheses are supported. The paired-sample t-test results revealed a significant difference in teachers' job performance between the post-IDI and pre-IDI stages. **Conclusions:** The key variables need to be emphasized and strengthened, to effectively improve the job performance of teachers in Zhanjiang University of Science and Technology, China.

Keywords : Organizational Commitment, Innovative Work Behaviour, Big Five Personality Traits, Job Satisfaction, Job Performance

JEL Classification Code: I23, J28, L2

1. Introduction

In the 21st century, talent is a paramount resource, and widespread access to higher education is integral to societal progress. Colleges and universities serve as nurturing grounds, playing a vital role in advancing higher education. College teachers, successors in this domain, bear responsibilities in fostering students, conducting research, engaging in social service, and preserving cultural heritage while promoting innovation. They embody higher education's essence, directly impacting talent cultivation (Kim et al., 2019). The quality and composition of college teachers are intricately linked to effective personnel training. A skilled and competent teaching faculty is imperative to cultivate innovative talents aligned with societal needs, making the enhancement of teachers' job performance a crucial mission in university teacher management research (Avalos, 2011).

Zhanjiang University of Science and Technology (ZUST) teachers are confronted with four key challenges requiring immediate enhancements in job performance. First, a reliance on a single teaching-focused evaluation index results in biased assessments, overlooking instructors' research and academic contributions. Second, an unscientific evaluation process relying solely on student or leadership feedback leads to subjective and inaccurate outcomes. Third, a lack of standardization, unclear methods, and delayed feedback cast doubt on the evaluation process's validity. Fourth, flaws in the incentive system hinder enthusiasm and creativity. Insufficient training and underutilization of

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evaluation outcomes further contribute to these challenges, necessitating comprehensive promote the improvement of teachers' job performance, to improve the teaching quality.

Evaluating teachers' job performance is vital for elevating instructional quality, fostering enthusiasm, and propelling progress in the educational system. This study specifically focuses on teachers from ZUST's colleges specializing in Accounting, Management, and Economics and Finance. A comprehensive exploration of factors influencing university teachers' job performance is crucial for enhancing teaching and research quality. This investigation plays a pivotal role in nurturing high-quality development for both teachers and institutions, contributing significantly to the overall enhancement of teaching standards and the advancement of academic excellence in colleges and universities.

2. Literature Review

2.1 Organizational Commitment (OC)

Organizational commitment is the degree to which an individual associates with and engages in their organization, and the extent to which they are hesitant to leave it (Greenberg & Baron, 2000). This commitment is shaped by diverse individual factors, such as age, organizational tenure, and both organizational and non-organizational elements. Meyer and Allen (1997) further characterize organizational commitment as encompassing employees' sentiments, willingness to invest effort, and the emotional connection they establish with the organization. Existing scholarly articles indicate a strong correlation between organizational commitment and job performance (Sungu et al., 2019). Organizational commitment refers to a stage where employees recognize a set of objectives and strive for superior performance (Mousa et al., 2021). As workers become more engaged and committed to their organization, job performance tends to be more secure. The level of organizational commitment directly influences job performance, with higher commitment leading to improved performance. Greater dedication and loyalty to the organization translate into enhanced job performance (Vuong et al., 2022). Thus, the following hypothesis is proposed:

H1: Organizational commitment has a significant impact on job performance.

2.2 Innovative Work Behavior (IWB)

Employees' innovative work behavior (also known as IWB) contributes to organizational innovation by introducing novel procedures, products, and services (Saether, 2019). Janssen (2000) provided a definition of innovative work behavior as encompassing various actions associated with generating ideas, supporting concepts, and executing ideas. These behaviors occur within the workplace, either individually or as part of a team or organization, with the objective of improving one's own job performance or the overall performance of the group or organization. Masood and Afsar (2017) described innovative work behavior as the integration and implementation of novel concepts, methods, processes, and products in one's work. This suggests that employees who introduce and apply innovative concepts contribute to increased efficiency, effectiveness, and competitiveness, ultimately fostering organization success. The generation of innovative ideas by employees is crucial for organizations to devise effective approaches and solutions that enhance job performance and ensure the long-term survival of the organizations (Tang et al., 2019). Vuong et al. (2022), Kim and Koo (2017) demonstrated that innovative work behavior positively influenced job performance. Consequently, the following hypothesis is presented:

H2: Innovative work behavior has a significant impact on job performance.

2.3 Big Five Personality Traits

The Big Five personality traits are widely recognized in the field of psychology. Although there was controversy regarding the specificity and quantity of factors encompassed in the field of personality, the categories proposed by Norman (1963) gained widespread popularity in the literature. These categories, namely extraversion, emotional stability, Agreeableness, conscientiousness, and culture, are subsequently known as "Norman's Big Five" or simply the "Big Five" (Barrick & Mount, 1991). Among the Big Five factors, the fifth factor has posed the greatest challenge in terms of identification and has been referred to as culture (Norman, 1963), intelligence (Borgatta, 1964), Intellect (Goldberg, 1990), and openness to experience (McCrae & Costa, 1985). However, Digman (1990) suggested that it is highly likely that all these labels are accurate, and he used the following terms to classify the taxonomy of personality: extraversion, emotional stability, Agreeableness, conscientiousness, and openness to experience. Barrick and Mount (1991) also adopted these names and definitions, which have been widely utilized in meta-analyses (Barrick et al., 2001). Due to its ability to significantly categorize personality traits and its extensive utilization in various literature sources, this taxonomy has been selected as a valuable tool for classifying personality traits in the present study.

Recent research indicates that the big five personality traits significantly influence job performance. All five

personality traits notably impact job performance, with Agreeableness being the most influential, closely followed by extraversion (Yang & Hwang, 2014). Bing and Lounsbury (2000) demonstrated that the Big Five personality traits significantly forecast an individual's job performance. Rothmann and Coetzer (2003) demonstrated that Emotional Stability, Extraversion, Openness to Experience, and Conscientiousness were correlated with job performance and creativity. Three personality dimensions, specifically Emotional Stability, Openness to Experience, and Agreeableness, collectively accounted for 28% of the participants' management performance variability. McManus and Kelly (1999) discovered that extraversion is crucial in predicting task performance.

In contrast, the remaining four dimensions of the Big Five personality traits are more closely associated with contextual performance. According to Salgado (1997), there is a positive correlation between emotional stability and job performance in most occupations. In a comprehensive meta-analysis, Hurtz and Donovan (2000) demonstrated a positive correlation between conscientiousness and job performance.

Additionally, extraversion was found to positively impact job performance due to its key attributes of sociability, assertiveness, and activity. According to Mount et al. (1998), Agreeableness has been identified as a significant predictor of job performance. This trait plays a crucial role in social interactions, as individuals with high levels of Agreeableness tend to have an easier time establishing interpersonal relationships and integrating into groups.

Moreover, individuals who exhibit a high level of openness to experience are characterized by their enthusiasm for engaging in new experiences and willingness to embrace fresh challenges. This trait has positively impacted job performance, encouraging individuals to adapt and grow professionally (Salgado, 1997). Based on the above literature discussion, the following hypotheses are proposed:

H3: Agreeableness has a significant impact on job performance.

H4: Conscientiousness has a significant impact on job performance.

H5: Extraversion has a significant impact on job performance.

H6: Emotional stability has a significant impact on job performance.

H7: Openness to experience has a significant impact on job performance.

2.4 Job Satisfaction (JS)

Evans (1997) describes job satisfaction as a mental state shaped by the perception of the extent to which work-related needs are met. Spector (1997) defined job satisfaction as the extent to which individuals experience positive feelings (satisfaction) or negative feelings (dissatisfaction) towards their job. Robbins (2009) defines job satisfaction as a compilation of an individual's emotions and attitudes toward work. Some scholars have argued that job satisfaction is related to job performance. Singh et al. (1994) discovered that job satisfaction was positively associated with job performance. The research indicated that employees who reported higher levels of job satisfaction displayed enhanced performance in their job-related duties. Harrison et al. (2006) confirmed that job satisfaction positively affects job performance, revealing a consistent positive correlation between the two. Higher job satisfaction equates to better job performance. Shore and Martin (1989) indicated a significant effect of job satisfaction on job performance. Riketta (2008) conducted a meta-analysis of panel studies and discovered that job satisfaction is more likely to impact job performance. Yen et al. (2020) also proved that job satisfaction significantly impacts performance. Hence, the below hypothesis is suggested:

H8: Job satisfaction has a significant impact on job performance.

2.5 Job Performance (JP)

Job performance refers to employees utilizing time, skills, and interactions with colleagues to fulfill tasks efficiently, effectively, and collaboratively (Hall & Goodale, 1986). Job performance refers to an employee's competence in effectively carrying out their assigned tasks and meeting their objectives within the specified timeframe while considering the requirements and expectations of their job role (Giao et al., 2020). According to Williams (2002), job performance refers to the results of an individual's work, highlighting the importance of achieving specific goals and emphasizing that its evaluation is mainly based on these outcomes. Borman and Motowidlo (1997) utilized task performance and contextual performance as categories to categorize job performance. According to Fisher et al. (1981), if job satisfaction influences job performance, it is essential to identify the factors that promote high job satisfaction, resulting in improved job performance. Khan and Razi (2011) pointed out that job performance entails the quantity and quality of work each employee generates, focusing on completing assigned tasks. Job performance is embodied as employees' self-efficacy to attain better job performance (Vuong et al., 2022).

3. Research Methods and Materials

3.1 Research Framework

Vuong et al. (2022) conducted the first previous research framework on the relationship between organizational commitment, innovative work behavior, and job performance. Yang and Hwang (2014) conducted the second previous research framework, which studied the relationship between Big Five personality traits and job performance. Yen et al. (2020) studied the third research framework, which determined the relationship between job satisfaction and job performance. Each of the three theoretical frameworks mentioned previously has endorsed and further refined the conceptual framework illustrated in Figure 1.

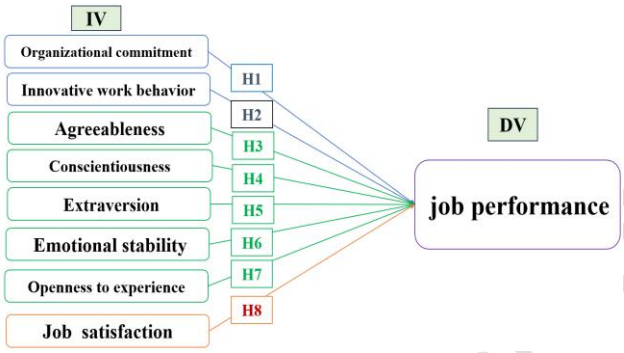

Figure 1: Conceptual Framework

H1: Organizational commitment has a significant impact on job performance.
H2: Innovative work behavior has a significant impact on job performance.
H3: Agreeableness has a significant impact on job performance.
H4: Conscientiousness has a significant impact on job performance.
H5: Extraversion has a significant impact on job performance.
H6: Emotional stability has a significant impact on job performance.
H7: Openness to experience has a significant impact on job performance.
H8: Job satisfaction has a significant impact on job performance.

3.2 Research Methodology

The research process involved four distinct stages. Initially, data for the proposed conceptual framework were collected by surveying the entire research population (n=120). Subsequently, all hypotheses were tested using multiple linear regression to determine their significance at a p-value threshold of < 0.05. Supported all hypotheses were retained. In the second stage, pre-IDI surveys were administered to the remaining population of 30 teachers within the supported hypotheses. The third stage introduced the Intervention Design Implementation (IDI), specifically implemented with 30 participants. In the final stage, 30 IDI participants completed a survey, generating data for a paired-sample t-test analysis comparing pre- and post-IDI results. This comprehensive process facilitated thoroughly examining the research's objectives and hypotheses. Top of Form

3.3 Research Population, Sample Size, and Sampling Procedures

3.3.1 Research Population

The researcher conducted a questionnaire survey with 120 teachers selected from ZUST. These teachers were affiliated with the College of Accounting, the College of Management, and the College of Economics and Finance. Specifically, there were 58, 72, and 108 existing teachers in these three colleges, respectively. For the survey, 50% of the respondents were selected, resulting in 120 teachers participating. Subsequently, the researcher carefully reviewed all responses and confirmed that 108 of them were valid.

3.3.2 Sample size

This study determined the sample size based on different stages of the research process. Initially, the Researcher randomly implemented a pilot survey of 30 teachers and verified reliability by pilot test. To ensure a more comprehensive analysis of the relationship between the independent and dependent variables, a larger sample size of 108 participants was selected for the Multiple Linear Regression testing. Moving on to the IDI stage, a sample of 30 teachers was recruited to participate in the implementation of the IDI intervention, providing sufficient data to observe the effects of the intervention and assess its effectiveness. In the subsequent post-IDI stage, the same cohort of 30 teachers functioned as respondents, facilitating a direct comparison of results obtained before and after the implementation of the IDI intervention. This multi-stage approach ensures a robust and thorough examination of the factors affecting teacher performance.

3.3.3 Sampling Procedures

The researcher implemented several sampling procedures in the study. Firstly, 30 teachers were randomly selected to fill out survey questionnaires and provide feedback for the pilot survey and test. Subsequently, 120 teachers from three different colleges were sampled through

printed survey questionnaires for the pre-survey. Following a thorough review, the researcher confirmed the validity of 108 responses. Lastly, for the Intervention Design Implementation (IDI), 30 voluntary teachers were randomly selected to participate in the IDI process.

3.4 Research Instruments

3.4.1 Design of Questionnaire

The researcher devised the survey questionnaire through a three-step process.

Step 1: Questionnaire sources were identified from three openly published articles (Vuong et al., 2022; Yang & Hwang, 2014; Yen et al., 2020).

Step 2: The survey questionnaires were adjusted and presented in the context of Chinese university teachers.

Step 3: The Implementation of IOC.

3.4.2 Components of Questionnaire

The survey questionnaire items were structured into two parts.

Part 1: Basic information Questions. Questions were included to gather basic information about the research population, covering gender, age, and work experience.

Part 2: Pre-survey Questions. Questions were formulated for the pre-survey to assess the present levels of IV and DV among 120 teachers from ZUST.

3.4.3 IOC Results

The study involved the participation of five independent experts, including two Thai professors and three Chinese professors, who were invited to administer the Index of Item-Objective Congruence (IOC). In this process, the independent evaluators assigned a score of +1 to items deemed congruent, 0 to questionable items, and -1 to incongruent. Given that all questionnaire items exceeded 0.67, the researcher decided to retain all of them.

3.4.4 Pilot survey and Pilot test results

The researcher conducted a pilot survey involving 30 randomly selected teachers, requesting them to complete a questionnaire and provide feedback. Subsequently, the researcher applied Cronbach's Alpha internal consistency reliability test, aiming for values equal to or exceeding 0.7, as suggested by Taber (2018). The table below illustrates the confirmed outcomes, indicating a high level of reliability for each construct (see Table 1).

Table 1: Pilot Test Result

Variables	No. of Items	Sources	Cronbach's Alpha	Strength of Association
Organizational Commitment (OC)	4	Meyer and Allen (1997)	0.890	Very Good
Innovative Work Behavior (IWB)	6	Masood and Afsar (2017)	0.796	Good
Agreeableness (A)	4	Norman (1963)	0.868	Very Good
Conscientiousness (C)	4	Rothmann and Coetzer (2003)	0.873	Very Good
Extraversion (E)	4	McManus and Kelly (1999)	0.883	Very Good
Emotional Stability (ES)	4	Mount et al. (1998)	0.902	Excellent
Openness to Experience (OE)	4	Salgado (1997)	0.871	Very Good
Job Satisfaction (JS)	6	Evans (1997)	0.814	Very Good
Job Performance (JP)	6	Hall and Goodale (1986)	0.845	Very Good

4. Results and Discussion

4.1 Results

4.1.1 Demographic Profile

The researcher presented the demographic profile of the entire research population (n=108), followed by a specific group of teachers (n=30) who participated in IDI, as depicted in Table 2.

Table 2: Demographic Profile

Entire Research Population (n=108)		Frequency	Percent
Gender	Male	65	60.2%
	Female	43	39.8%
Age	Below 30 years old	38	35.2%
	30-40 years old	25	23.1%
	40-50 years old	24	22.2%
	50 years old and above	21	19.4%
Faculties	College of Accounting	48	44.4%
	College of Management	31	28.7%
	College of Economics and Finance	29	26.9%

Entire Research Population (n=108)		Frequency	Percent
Work experience	Less than 5 years	34	31.5%
	5-10 years	28	25.9%
	10-15 years	25	23.1%
	More than 15 years	21	19.4%
Title	teaching assistant	32	29.6%
	Lecturer	28	25.9%
	associate professor	25	23.1%
	Professor	23	21.3%
Total		**108**	**100%**
IDI Participants (n=30)		**Frequency**	**Percent**
Gender	Male	10	33.3 %
	Female	20	66.7 %
Age	Below 30 years old	4	13.3 %
	30-40 years old	10	33.3 %
	40-50 years old	10	33.3 %
	50 years old and above	6	20.0 %
Faculties	College of Accounting	14	46.7 %
	College of Management	6	20.0 %
	College of Economics and Finance	10	33.3 %
Work experience	Less than 5 years	6	20.0 %
	5-10 years	10	33.3 %
	10-15 years	8	26.7 %
	More than 15 years	6	20.0 %
Title	teaching assistant	4	13.3 %
	Lecturer	14	46.7 %
	associate professor	10	33.3 %
	Professor	2	6.7 %
Total		**30**	**100%**

4.1.2 Results of multiple linear regression

The researcher performed Multiple Linear Regression (MLR) analysis on 108 survey questionnaire responses to determine the level of support for each hypothesis. The results revealed that the R-squared (R^2) value in the multiple linear regression model, which included eight independent variables, accounted for 97.2% of the variability observed in job performance. This indicates a strong relationship between the eight independent variables and the dependent variable, suggesting that the model has a high level of explanatory power.

Among the eight independent variables examined in this study, it was observed that job satisfaction significantly influenced job performance.

Furthermore, when evaluating the impact of the big five personality traits on job performance, it was found that agreeableness emerged as the most influential trait, surpassing all others. Following closely in impact was emotional stability, which ranked second among the personality traits influencing job performance. Identifying these key influencers can aid organizations and individuals in focusing on targeted interventions or strategies to enhance job satisfaction and leverage specific personality traits that positively contribute to job performance.

Table 3: The multiple linear regression of five independent variables on job performance

Variables	Standardized Coefficients Beta value	t-value	p-value	VIF	R^2
Organizational Commitment (OC)	0.089	2.41	0.018*	4.824	0.972
Innovative Work Behavior (IWB)	0.067	2.075	0.040*	3.756	
Agreeableness (A)	0.153	4.035	0.000**	5.127	
Conscientiousness (C)	0.106	2.992	0.003**	4.474	
Extraversion (E)	0.069	2.374	0.019*	3.022	
Emotional Stability (ES)	0.111	3.102	0.002**	4.585	
Openness to Experience (OE)	0.147	3.987	0.000**	4.812	
Job Satisfaction (JS)	0.333	7.988	0.000**	6.167	

Note: p-value <0.05*, p-value <0.001**

The multiple linear regression (MLR) analysis results supported all eight hypotheses, and the H1~H8 hypotheses were accepted. The findings indicate that organizational commitment, innovative work behavior, agreeableness, conscientiousness, extraversion, emotional stability, openness to experience, and job satisfaction positively impact job performance. Employees demonstrating higher levels in these aspects exhibit enhanced job performance. Thus, the research hypotheses underwent testing by utilizing results derived from multiple linear regression (MLR) analysis. Subsequently, IDI was carried out to investigate the hypotheses outlined below.

H9: There is a significant mean difference in organizational commitment between Pre-IDI and Post-IDI stages.

H10: There is a significant mean difference in innovative work behavior between the pre- and post-IDI stages.

H11: There is a significant mean difference in agreeableness between the Pre-IDI and Post-IDI stages.

H12: There is a significant mean difference in conscientiousness between the pre-and post-IDI stages.

H13: There is a significant mean difference in extraversion between the pre-IDI and post-IDI stages.

H14: There is a significant mean difference in emotional stability between Pre-IDI and Post-IDI stages.

H15: There is a significant mean difference in openness to experience between the pre- and post-IDI stages.

H16: There is a significant mean difference in job satisfaction between the pre-and post-IDI stages.

H17: There is a significant mean difference in job performance between pre- and post-IDI stages.

4.2 IDI Intervention Stage

The IDI intervention plan lasts for 12 weeks, facilitating a thorough execution of the intervention. The intricate planning of the IDI phase encompassed several elements, including the schedule, location, participants, intervention objectives, and the tools and specific activities to be implemented. The researchers described the four tasks of the IDI intervention, as shown in Table 4.

Table 4: Implementation time and tasks as IDI

NO.	Time and Duration	Implementation keywords
1	Week 1-3	Task 1-Five Personality Traits Intervention
2	Week 3-6	Task 2-Organizational Commitment Intervention
3	Week 7-9	Task 3-Innovative Work Behavior Intervention
4	Week 10-12	Task 4-Teachers' Job Satisfaction Intervention

4.3 Results Comparison between Pre-IDI and Post-IDI

The researcher conducted paired-sample t-test analyses on all nine variables to determine if there were any significant differences between the pre-IDI and post-IDI phases. The following tables present the results of the paired-sample t-test analyses for the nine variables.

Table 5 presents the findings of the paired-sample t-test analysis conducted to examine the pre-IDI and post-IDI comparisons as follows:

There was a significant increase in Organizational commitment between post-IDI stage (M=4.150, SD=1.020) and pre-IDI stage (M=2.917, SD=0.874), with a t-value of -4.731, P<0.05, and the mean value difference between the post-IDI and pre-IDI stages amounted to 1.233. Thus, H9 was supported.

Innovative work behavior significantly increased in the post-IDI stage (M=4.067, SD=0.930) compared to the pre-IDI stage (M=2.978, SD=0.860), with a t-value of -4.240, p<0.05, and a mean difference of 1.089. This significant difference lends strong support to hypothesis 10.

Table 5: Paired-Sample T-Test Results

Variables	Mean	SD	p-value
Organizational Commitment			
Pre-IDI	2.917	0.874	0.000
Post-IDI	4.150	1.020	
Innovative Work Behavior			
Pre-IDI	2.978	0.860	0.000
Post-IDI	4.067	0.930	
Agreeableness			
Pre-IDI	2.933	0.985	0.000
Post-IDI	4.525	0.539	
Conscientiousness			
Pre-IDI	2.983	0.991	0.000
Post-IDI	4.458	0.487	
Extraversion			
Pre-IDI	3.033	0.819	0.000
Post-IDI	4.133	0.700	
Emotional Stability			
Pre-IDI	2.983	0.777	0.000
Post-IDI	4.242	0.603	
Openness to Experience			
Pre-IDI	3.058	0.801	0.000
Post-IDI	4.267	0.704	
Job Satisfaction			
Pre-IDI	3.006	0.850	0.000
Post-IDI	4.428	0.517	
Job Performance			
Pre-IDI	2.989	0.771	0.000
Post-IDI	4.383	0.628	

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The Big Five personality traits increased significantly between the post-IDI and pre-IDI stages. Agreeableness markedly increased in the post-IDI stage (M=4.525, SD=0.539) compared to the pre-IDI stage (M=2.933, SD=0.985), with a p-value less than 0.05 indicates a significant mean difference of 1.592, providing strong support for Hypothesis 11.

There was a substantial increase in conscientiousness observed in the post-IDI stage (M=4.458, SD=0.487) compared to the pre-IDI stage (M=2.983, SD=0.991), $p<0.05$, and a mean difference of 1.475. These robust findings strongly support Hypothesis 12, indicating a significant positive change in conscientiousness between the pre-and post-IDI stages.

There is a significant increase in extraversion at the post-IDI stage (M=4.133, SD=0.700) than in the pre-IDI stage (M=3.033, SD=0.819), $p<0.05$, and a mean difference of 1.10. Consequently, the findings strongly support Hypothesis 13.

Emotional stability significantly increased at the post-IDI stage (M=4.242, SD=0.603) compared to the pre-IDI stage (M=2.983, SD=0.777), and the p-value is less than 0.05, indicating a substantial difference between the two stages. The mean difference amounts to 1.259, which provides compelling evidence favoring Hypothesis 14.

There is a significant increase in openness to experience at the post-IDI stage (M=4.267, SD=0.704) than the pre-IDI stage (M=3.058, SD=0.801), $p<0.05$, and the mean difference is 1.209. Therefore, the hypothesis 15 was supported.

There was a substantial increase in job satisfaction observed in the post-IDI stage (M=4.428, SD=0.517) compared to the pre-IDI stage (M=3.006, SD=0.850), with $p<0.05$, and a mean difference of 1.422. Consequently, these findings strongly support Hypothesis 16, indicating a significant positive change in job satisfaction between the pre-and post-IDI stages.

There is a significant increase in job performance at the post-IDI stage (M=4.383, SD=0.628) than in the pre-IDI stage (M=2.989, SD=0.771), $p<0.05$, and a mean difference of 1.394. Consequently, these findings strongly support Hypothesis 17, indicating a significant positive shift in job performance between the Pre-IDI and Post-IDI stages.

Based on the above-paired sample T-test results, the researchers concluded that all nine variables had significant average differences between the post-IDI and pre-IDI stages. These findings underscore the impactful changes brought about by the IDI intervention, highlighting its effectiveness in influencing the measured variables.

5. Conclusions, Recommendations and Limitations

5.1 Conclusions & Discussions

The study's main objective is to examine the critical factors influencing teachers' job performance, with a specific focus on organizational commitment, innovative work behavior, Big Five personality traits, and job satisfaction. The research employed a thorough design, inclusive data collection, and a robust methodology to derive meaningful conclusions.

The research design implemented rigorous measures such as the Index of Item-Objective Congruence (IOC) for validity and Cronbach's alpha in a pilot test to ensure the reliability of the measurement instruments. This meticulous approach greatly enhanced the research's credibility. Data were collected from 108 valid responses from teachers at ZUST and subjected to multiple linear regression analysis to confirm significant relationships between independent and dependent variables. Additionally, a 12-week Intervention Design Implementation (IDI) involving a selected group of 30 teachers was conducted, and post-ID data were collected and compared with pre-ID data using paired-sample t-tests.

The findings confirm that organizational commitment, innovative work behavior, Big Five personality traits, and job satisfaction significantly influence teachers' job performance. Specifically, teachers demonstrating higher levels of extraversion, agreeableness, and conscientiousness within the Big Five personality traits exhibit enhanced performance in their roles. A robust sense of organizational commitment and job satisfaction contributes positively to teachers' effectiveness. Furthermore, cultivating an environment that promotes innovative work behavior among teachers is associated with improved job performance. These findings underscore the multifaceted nature of factors contributing to teachers' job performance.

The results of the paired-sample t-test for comparison unveiled a notable difference in teachers' job performance between the post-ID and pre-ID stages. This indicates that the 12-week Intervention Design Implementation (IDI), encompassing four tasks, had a positive and statistically significant impact on enhancing teachers' job performance. These findings underscored the effectiveness of the IDI intervention in improving teachers' Big Five personality traits, organizational commitment, innovative work behavior, and job satisfaction. The verification of Hypotheses 9-17 further reinforces the conclusion that the IDI intervention is instrumental in positively influencing various aspects contributing to teachers' overall job performance.

In conclusion, this study has contributed by extensively investigating factors influencing teachers' job performance, successfully enhancing overall teaching effectiveness. Particularly in Zhanjiang, China, the research exhibits persuasive characteristics, excelling in methodology, comprehensive analysis, and practical applicability. Providing crucial insights into enhancing teachers' job performance, the findings contribute to increased teaching efficiency and offer practical intervention measures for cultivating essential teaching skills, thereby elevating overall teaching quality. This study holds profound implications for educational practices and policy formulations, offering

beneficial guidance for enhancing the overall efficiency of the education system.

5.2 Recommendations

With the fast-paced development of society and the economy, the significance of education in fostering talent has heightened. Teachers, being the fundamental resource in education, play a crucial role in determining the quality of education. Consequently, enhancing their job performance is imperative and time-sensitive. In light of this, the research findings propose four recommendations:

Firstly, it is imperative to design comprehensive professional development programs that integrate various factors influencing teachers' job performance, such as personality traits, organizational commitment, innovative work behavior, and job satisfaction. These programs should take a holistic approach, simultaneously addressing these factors to equip teachers with a diverse skill set. Incorporating workshops, seminars, and online courses covering relevant topics provides a well-rounded training experience, enhancing adaptability and effectiveness in the classroom.

Secondly, cultivating a supportive organizational culture is recommended to boost teachers' job performance further. Initiatives like mentorship programs, open communication channels for regular feedback, and forums for idea-sharing contribute to a collaborative environment. Recognizing and rewarding teachers' achievements through awards or incentives reinforces a positive culture that values and celebrates innovation. These measures create a conducive atmosphere that nurtures commitment and encourages innovative work behavior, ultimately optimizing teacher performance.

Thirdly, tailoring professional development plans to individual teachers based on their unique personality traits and strengths is essential for enhancing performance and job satisfaction. Recognizing and capitalizing on traits within the Big Five personality dimensions allows for targeted interventions to amplify each teacher's capabilities. This approach involves assessing strengths and weaknesses, creating personalized development plans, and providing ongoing support and resources.

Lastly, establishing continuous monitoring and feedback mechanisms is crucial due to the dynamic nature of the teaching environment. Regular assessments of job satisfaction, commitment levels, and innovative practices offer valuable insights for continuous improvement. Feedback loops enable timely interventions and adjustments in professional development strategies, ensuring a responsive and adaptive approach to supporting teachers in their ongoing efforts to enhance job performance.

In summary, incorporating the suggestions above into the study investigating the determinants of job performance among university teachers is paramount. It aims to maximize individual productivity, cultivate a favorable teaching atmosphere, and ultimately enhance the overall quality of education, demonstrating a proactive approach toward ongoing advancement and innovation in the academic realm. This endeavor holds significant value in promoting continuous improvement and excellence in teaching.

5.3 Limitations for Future Research

Although this study has valuable insights into the job performance of college teachers, it also highlights the limitations of the research. These limitations are the direction of future research.

Sample Size and Demographics: To enhance the generalizability of the findings, future studies should consider diverse samples from various professional backgrounds, schools, and locations. The current study focused on Humanities and Social Sciences teachers at ZUST, which limits the extent to which the findings can be applied to other contexts. By extending the research to different industries, countries, or contexts, researchers can assess the generality of the findings and provide a more comprehensive understanding of the intricate dynamics influencing job performance.

Comprehensive Analysis of Job Performance Determinants: Although the present study primarily examined the impact of organizational commitment, innovative work behavior, the Big Five personality traits, and job satisfaction on job performance, it is crucial to consider other potential factors such as emotional intelligence, burnout, and motivation. The research focused on eight specific independent variables, yet future investigations could broaden the scope to include additional independent variables and their potential interactions. This would provide a more holistic view of the factors influencing job performance. Investigating these additional factors within the context of personalized professional development plans would lead to a deeper understanding and offer valuable insights for tailored interventions.

Exploring Effective Intervention Designs: The present study utilized four specific interventions to improve teacher job performance. Future research should explore alternative intervention designs to comprehend how various strategies can positively affect teachers' job performance and contribute to overall teaching enhancement. This comprehensive analysis will facilitate the development of customized approaches for promoting continuous professional growth among teachers.

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