

PSYCHOLOGICAL EFFECTS OF QUALITY OF WORK LIFE ON JOB SATISFACTION, ORGANIZATIONAL COMMITMENT, AND JOB PERFORMANCE AMONG BANK EMPLOYEES IN VIETNAM

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Abstract: This study aims to examine the relationship between quality of work life, job satisfaction, organizational commitment, and job performance among employees working at commercial banks in Vietnam. Based on theories such as Social Exchange Theory, Maslow's Hierarchy of Needs, and Herzberg's Two-Factor Theory, the study has modeled and tested the connection between four dimensions of quality of work life, including safety and health needs, economic and family needs, esteem needs, and belongingness and self-actualization needs, along with the resulting variables. The quantitative research methodology was employed with 279 valid responses collected between January and March 2025, which were then processed and analyzed using SPSS 26 and SmartPLS 4.3 according to the PLS-SEM model. The results showed that the hypotheses were accepted at a high statistically significant level, and that the dimensions of quality of work life had a positive impact on job satisfaction, organizational commitment, and job performance. Economic and family needs have the strongest influence. At the same time, job satisfaction and organizational commitment play an important role in the relationship between quality of work and job performance, thereby reaffirming the core role of positive psychology in enhancing work performance. The research helps strengthen and expand existing theoretical models of work quality in Vietnam. Based on the study's findings, some implications are suggested to assist banks in enhancing employee satisfaction, commitment, and performance by improving the quality of work both materially and mentally.

Keywords: job satisfaction, organizational commitment, job performance, bankers, emerging economy

1. INTRODUCTION

In Vietnam's competitive banking industry today, job performance has become a crucial factor for the competitiveness and sustainable growth of commercial banks. However, to sustain and improve performance, banks need to focus not only on professional skills but also on ensuring employees' job satisfaction, which greatly affects their morale, motivation, and commitment to the organization [1]. Recently, the concept of quality of work life (QWL) has been viewed as an important mediating factor that links employee job satisfaction with their performance.

In Vietnam, the banking industry faces significant pressure from the digital transformation, increasing workload, and shifting career expectations among young employees. Many local studies have only looked at individual factors that influence bankers' job satisfaction or performance, such as salary, work environment, leadership style, or personality traits [3]. However, there have been few comprehensive studies exploring the mediating role of QWL in the relationship between job satisfaction and performance, especially in the context of rapid technological and cultural changes following the COVID-19 pandemic.

Many studies worldwide have examined how QWL influences the link between job satisfaction and job performance, but no agreement has been reached. Some researchers believe that job satisfaction directly enhances job performance [2], while others highlight QWL's mediating role through factors such as work-life balance, well-being, development opportunities, and fairness in organizations [7]. Therefore, testing and expanding this theoretical model in Vietnam is essential to strengthen the academic foundation and provide empirical evidence for the banking industry.

More importantly, understanding the role of quality of work life in enhancing the satisfaction and work efficiency of bank employees not only helps HR managers develop appropriate welfare policies but also assists banks in cultivating high-quality human resources, maintaining employee stability, and fostering long-term commitment. The purpose of the study was to explore the job satisfaction and job performance of bankers in Vietnam under the influence of quality of work life. The results contribute to filling theoretical gaps, providing new empirical evidence, and offering management implications aligned with the current development of Vietnam's banking industry.

2. LITERATURE REVIEW

2.1. Related concepts

2.1.1. Quality of work life

According to Walton [9], QWL is connected to the well-being employees experience and is closely related to job satisfaction as well as facets of family and social life. The core of QWL in the workplace is the value of employee and highlights significant changes through improvements to the socio-technical system, both physically and mentally, in the working environment. The design and periodic adjustment of working methods, hierarchical structures, and workflows enable employees to participate in decision-making processes [10]. Meanwhile, Lau and May [11] define QWL as favorable conditions supported by the business environment that boost employee satisfaction by offering stable jobs, chances for personal growth, and higher income. In essence, QWL refers to the positive conditions and environment at work that promote and enhance employee satisfaction by providing economic benefits, stability, good working conditions, organizational relationships, and personal values.

According to Sirgy et al. [12], QWL consists of two primary categories of employee needs: low-level needs and high-level needs:

- The lower-order needs include aspects such as (1) health and safety needs, which involve being protected against illness and injury both inside and outside the workplace, along with improved health; and (2) economic and family needs, which relate to wage payment, guaranteed work, and other family-related needs.
- The higher-order needs include the following aspects: (1) Belonging needs related to a sociable work environment and having time to relax after work; (2) Esteem needs inside and outside the organization; (3) Self-actualization describes the true competence of employees and encourages performance at work; (4) Knowledge needs related to training activities to improve work results and professional skills; (5) Aesthetic needs related to creativity at work, personal creativity, and overall aesthetics.

The QWL needs of Sirgy et al. [12] are widely accepted and used in the studies of Koonmee et al. [13] and Nguyen and Nguyen [14]. However, Lee et al. [15] inherited and streamlined Sirgy's QWL model, developing a scale of four core components: (1) Safety and health needs, (2) Economic and family needs, (3) Esteem needs, and (4) Belonging and self-actualization needs. This shortening helps to reflect in a concise yet comprehensive way the important aspects of QWL, which is more relevant to the modern context where the boundaries between work and personal life are increasingly blurred.

More importantly, in Vietnam's banking industry, the working environment is characterized by high work intensity, high target pressure, and rapid changes due to digital transformation, which often lead employees to face occupational stress and challenges in balancing their personal lives. Therefore, the scale used by Lee et al. [15], focused on safety-health, economic stability, love relations, and self-actualization, is considered appropriate to accurately reflect the psychological realities and working conditions of bank employees. Additionally, the study by Phan and Bui [16] in Vietnam shows that the model of Lee et al. [15] has high reliability and good adaptability within the Vietnamese culture and working environment. Consequently, this study adopts and applies the four-component scale developed by Lee et al. [15] to measure the QWL among bankers.

2.1.2. Job satisfaction

Locke [17] argues that job satisfaction is an employee's cheerful, relaxed attitude toward a current job, or that it is positive feedback based on their experiences with previous work. Job satisfaction is a variable related to positive attitudes and emotions that arise from different aspects of the work process [19]. Additionally, Nguyen and Uong [3] define job satisfaction as a positive psychological state of employees when their needs and desires are met during the working process or when some specific aspects of the work are satisfied.

2.1.3. Organizational commitment

Organizational commitment is the strength of employee and organizational unity, demonstrated by employees participating more enthusiastically and actively in the organization's affairs [20]. Engaged employees tend to be satisfied with their work and aim to stay with the organization long-term, voluntarily contributing to its success and development. Allen and Meyer [21] also recognize that commitment to the organization consists of three components: affective commitment, continuance commitment, and normative commitment. In this study, organizational commitment is defined as a psychological state rooted in the emotional connection employees have with the organization [22].

2.1.4. Job performance

Studies by Armstrong [24] and Ali et al. [25] argue that job performance is the ability of employees to complete one or more tasks assigned by an organization or business at a given time and adhere to specific standards. Nguyen et al. [26] define job performance as the process of completing tasks assigned by enterprises to employees, with work performance being evaluated based on specific regulatory standards initially set for the job. These standards may include the level of completion of assigned work targets or assessments by colleagues, leaders, and employees themselves. In this study, job performance is a comparison between the results of employees completing the work assigned by the business to the standards set for that job and is measured through evaluations by the employee, colleagues, superiors, or customers.

2.2. Underlying theories: The research model is based on three main foundational theories, including Maslow's Hierarchy of Needs Theory, Social Exchange Theory (SET), and Herzberg's Two-Factor Theory, to explain how QWL impacts job satisfaction, organizational commitment, and job performance of bankers.

First of all, Maslow's Theory of Needs [27] states that human beings have five basic levels of needs, from physiological and safety needs to esteem and self-actualization needs. Based on this theory, Sirgy et al. [12] and later Lee et al. [15] developed the concept of QWL as a construct that captures the extent to which work satisfies lower-level needs (such as safety and economic-family needs) and higher-order needs (like esteem and self-actualization). When these needs are fulfilled, employees tend to feel more satisfied and motivated at work.

Next, the Social Exchange Theory (SET) developed by Blau [28] provides the foundation for explaining the relationship between QWL, job satisfaction, and organizational commitment. According to this theory, when employees feel that the organization cares about and responds well to their professional and personal needs (such as a safe working environment, fair pay, and development opportunities), they will respond with commitment, loyalty, and increased effort at work.

Finally, Herzberg's [29] two-factor theory reinforces the relationship between QWL and job satisfaction by stating that hygiene factors such as safety, compensation, and working conditions, along with "motivators" like recognition, opportunities for development, and self-improvement, strongly influence the employee's overall satisfaction. In the banking industry, which is known for high occupational pressures and risks, addressing both of these factors simultaneously boosts employee morale, performance, and long-term commitment.

The study model is shown in Figure 1 below:

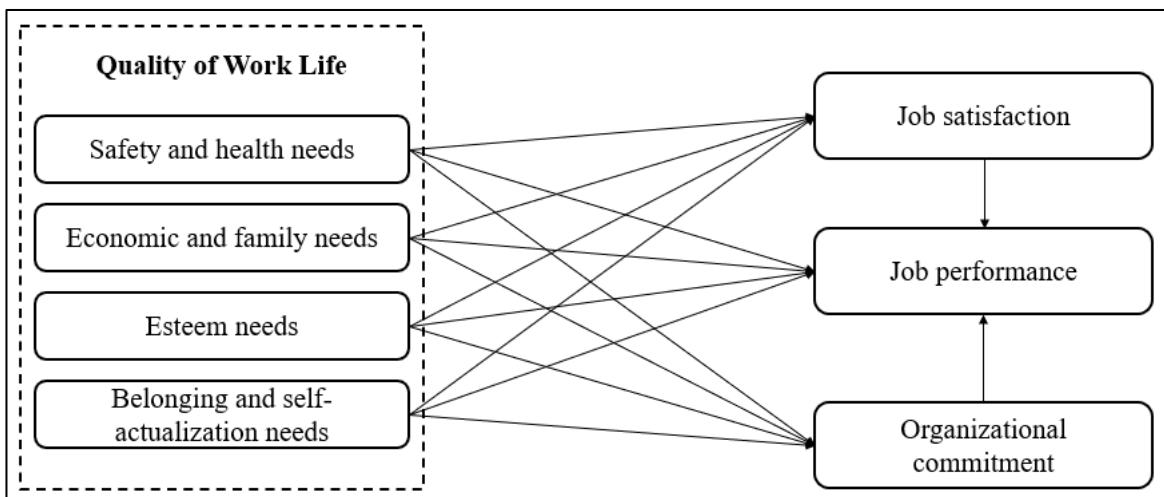


Figure 1: Research model

Source: Proposed by the author

2.3. Research Hypotheses

2.3.1. The relationship between quality of work life and job satisfaction

Most previous studies suggested that QWL has a direct and positive effect on employee job satisfaction in organizations and businesses. These results indicate that as QWL improves, employee job satisfaction increases correspondingly [30]. Through empirical investigation, Sirgy et al. [12] affirmed the positive relationship between QWL and job satisfaction, emphasizing that QWL is a key factor in shaping employee job satisfaction. When QWL is improved, organizations gain an advantage in attracting and retaining employees, especially talented ones. The study by Muftah and Lafi [31] also found that employee job satisfaction significantly decreases if their needs in QWL dimensions are not adequately met. Additionally, Tabassum [32], based on Walton's [33] model of QWL components, demonstrated that QWL has a positive and statistically significant effect on employee job satisfaction, with QWL dimensions directly influencing their perceived satisfaction. These findings are confirmed by subsequent research from Lee et al. [15], Phan and Bui [16], and Rubel et al. [8], which all agree that higher QWL levels increase the likelihood of employees achieving job satisfaction. Based on the above arguments, the research hypotheses are proposed as follows:

H1_a: Safety and health needs have a positive effect on job satisfaction.

H1_b: Economic and family needs have a positive effect on job satisfaction.

H1_c: Esteem needs have a positive effect on job satisfaction.

H1_d: Belonging and self-actualization needs have a positive effect on job satisfaction.

2.3.2. The relationship between quality of work life and job performance

According to Walton [33], QWL has a significant impact on employees' attitudes and work behaviors. Good QWL helps employees feel happy and interested in their work, making them more willing to face and overcome challenges to complete their tasks. Conversely, when QWL is lacking, employees are more likely to become depressed and lose motivation, which can reduce productivity and job performance. Following this perspective, Hanlon and Gladstein [34] emphasized that to achieve good work performance, organizations should focus on creating a high-quality work environment that meets both the professional and personal needs of employees. This idea is supported by empirical studies from Heskett et al. [35] and Lau [36], which showed that QWL is a key factor in improving employee performance. Similarly, Janes and Wisnom [37], Nayeri et al. [38], and Almalki et al. [39] confirmed a positive and meaningful relationship between QWL and job performance, suggesting that a

work environment that addresses employees' needs will help them concentrate their full capacity and enthusiasm to complete tasks more effectively. Based on the above arguments, the research hypotheses are proposed as follows:

H2_a: Safety and health needs have a positive effect on job performance.
H2_b: Economic and family needs have a positive effect on job performance.

H2_c: Esteem needs have a positive effect on job performance.

H2_d: Belonging and self-actualization needs have a positive effect on job performance.

2.3.3. The relationship between quality of work life and organizational commitment

Many earlier studies have concentrated on exploring the relationship between QWL and work-related factors, with Louis [40] discovering a strong link between QWL and employee organizational commitment. Likewise, Koonmee et al. [13] demonstrated that QWL directly impacts job satisfaction, organizational commitment, and cooperative spirit at work. Notably, QWL had the most significant influence on commitment to the organization, which aligns with the findings of Huang et al. [41], showing that QWL is a key factor in shaping and sustaining employee commitment to the organization. According to Daud [42], the dimensions of QWL directly affect the level of employee engagement, although the strength of each factor varies. Therefore, organizations should focus on developing and enhancing elements of QWL to foster a positive work environment and encourage employees to maintain long-term commitment to the organization. In Vietnam, Bui [43] also confirmed the strong correlation between QWL and organizational commitment, highlighting that aspects like working conditions, income, career development opportunities, and organizational fairness play vital roles in promoting employee loyalty and dedication. Based on the above arguments, the research hypotheses are proposed as follows:

H3_a: Safety and health needs have a positive effect on organizational commitment.
H3_b: Economic and family needs have a positive effect on organizational commitment.
H3_c: Esteem needs have a positive effect on organizational commitment.

H3_d: Belonging and self-actualization needs have a positive effect on organizational commitment.

2.3.4. The relationship between job satisfaction and job performance

Many studies have confirmed that employee psychological factors significantly influence job performance, with job satisfaction playing a key role. According to Macdonald and MacIntyre [44] and Alahmadi [45], employees who feel satisfied with their jobs tend to perform better, display a positive attitude, and contribute more to the organization. Empirical evidence from Ramachari and Ramakrishnan [46] shows that job satisfaction acts as an intermediary between QWL and job performance; that is, when employees work in an environment with high QWL, they feel more satisfied and consequently achieve better job performance. This finding aligns with the results of Katebi et al. [47], which indicate that job satisfaction is a direct determinant of employee performance and productivity. In Vietnam, Phan and Bui [16] examined this relationship and confirmed that job satisfaction has a positive and statistically significant correlation with job performance. This means that organizations aiming to improve employee performance should focus on developing policies, conditions, and working environments that enhance job satisfaction. In other words, high work performance can only be achieved when employees genuinely feel satisfied and committed to their work. Based on the above arguments, the research hypothesis is proposed as follows:

H4: Job satisfaction has a positive effect on job performance.

2.3.5. The relationship between organizational commitment and job performance

Previous studies have demonstrated that job performance is greatly affected by the level of organizational commitment. According to Mowday et al. [48], Allen and Meyer [21], and Hackett et al. [49], employees with high levels of organizational commitment often show increased responsibility, effort, and productivity, which in turn results in better job performance. Conversely, a lack of commitment can cause employees to be less productive and more likely to leave the organization. Herscovitch and Meyer [50] argue that fostering a strong commitment between employees and the organization leads to more positive work outcomes, as committed employees tend to be loyal, dedicated, and actively contribute to the organization's development. This perspective is supported by studies from Shaw et al. [51] and Tolentino [52], where the authors confirmed that a high level of organizational commitment is a key factor in improving both performance and the quality of employee work. Recently, research by Beigi and Lajevardi [53] empirically tested this relationship and found that commitment to the organization has a positive and significant impact on employee performance. Employees who feel committed and aligned with the organization's goals and values tend to be more productive, engaged, and willing to take on larger workloads. Based on the above arguments, the pharmaceutical research hypothesis is proposed as follows:

H5: Organizational commitment has a positive effect on job performance.

3. METHODOLOGY

3.1. Measurement scales

The questionnaire consists of two parts: part 1 provides respondents' information, and part 2 contains the content of the scales used in the research model shown in Figure 1. This study employs a five-point Likert scale (Level 1 - Strongly Disagree to Level 5 - Strongly Agree). The initial scale is adapted from previous studies, as detailed in Table 1 below.

Table 1: Preliminary measurement scales

Scales	Sign	No.	Source
Safety and health needs	SHN	4	Lee et al. [15], Phan and Bui [16]
Economic and family needs	EFN	3	
Esteem needs	EN	6	
Belonging and self-actualization needs	BSAN	6	
Job satisfaction	JS	1	
Organizational commitment	OC	6	
Job performance	JP	4	Nguyen et al. [26]

Source: Compiled by the authors

The authors used the Delphi method as recommended by Hsu and Sandford [54] to ensure that the proposed study model and preliminary scale align with practice and meet the research objectives. This process involves focus group discussions with middle leaders and employees working at commercial banks in Hanoi, where 70% of Vietnam's commercial bank headquarters are located, to gather feedback on the suitability, clarity, and completeness of the per-scale items in the study model, as well as the observed variables in the preliminary scale. Additionally, the authors conducted in-depth interviews with several experts and senior leaders from commercial banks to examine the relationships among the model's scales and to test their logic and practicality. The opinions were synthesized, analyzed, and discussed through multiple rounds to reach the highest possible consensus among experts on the model structure and scale content.

The results show that the proposed research model and the relationships between the variables are suitable for the actual operational context of commercial banks in Vietnam. The preliminary scale meets the research objectives and accurately reflects the characteristics of the banking industry environment. Finally, the authors recalibrated the language and rearranged the order of the observed variables to ensure conciseness, clarity, and understandability, reducing confusion for survey participants in the next phase of quantitative research.

3.2. Data collection

The survey questionnaire is designed and embedded as a Google Form link to make it easier for respondents and facilitate quick, efficient data collection. The survey link is sent to staff working regularly at commercial banks in Hanoi through personal email lists and internal messaging groups on online platforms. Data collection was conducted over three months, from January 2025 to March 2025, to ensure enough data was gathered and it was representative of the overall study.

Regarding sample size, the study followed two common guidelines. First, based on Hair et al. [55], the minimum observation ratio should be 10:1, meaning at least ten observations per measurement variable when conducting an exploratory factor analysis (EFA). Second, the study used the inverse square root formula from Kock and Hadaya [56] to determine the minimum sample size needed to detect statistically significant path coefficients (greater than 0.1) at a 95% confidence level. Using these two criteria, the authors distributed 350 questionnaires to meet the required number of valid samples for analysis. After excluding invalid or incomplete responses, the study collected 279 valid responses, resulting in a response rate of 79.7%, which is appropriate for quantitative research using the SEM model.

Of the 279 respondents, females made up 59.9%, while males accounted for only 40.1%. Regarding age, respondents aged 25-35 years represented the largest group at 55.6%. Respondents aged 36-45 years numbered 54, which is 19.4%. Those under 25 years old comprised 18.6%, and respondents over 45 years old represented 6.4%. In terms of education, 73.8% of respondents hold a university degree, while 26.2% have postgraduate qualifications. Concerning seniority, those with less than 1 year of work experience accounted for 12.2%, 1 to 3 years for 31.5%, 4 to 6 years for 27.2%, and over 6 years for 29.1%. Regarding job positions, transaction employee made up 33.0%, credit employee 31.5%, support or back-office employee 19.4%, and managers/team leaders 16.1%. In terms of income, 44.4% of respondents earn between 15-20 million VND per month, 39.1% earn from 21-35 million VND, and 16.5% earn over 35 million VND.

3.3. Data analysis

Following Churchill [57], the study first performed a preliminary analysis using SPSS 26 software to assess the reliability, internal consistency, and completeness of the scale before conducting further analyses. The study then employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) method with SmartPLS 4.3 software to test the research hypotheses and evaluate the influence between variables in the proposed model through two stages: the measurement model and the structural model.

4. RESULTS

4.1. The results of scale test

Table 2 shows the results of the 2nd reliability test and exploratory factor analysis of the scales as follows:

Table 2: The 2nd results of Cronbach's Alpha and EFA

Scales	No.	Cronbach's Alpha	Smallest loadings	Eigenvalue	Total variance extracted
SHN	4	0.881	0.779	8.529	21.576

EFN	3	0.903	0.793	6.153	45.121
EN	5	0.898	0.768	3.627	59.882
BSAN	5	0.895	0.771	2.371	63.748
JS	1	0.876	0.802	1.866	72.953
OC	5	0.892	0.764	1.405	79.395
JP	3	0.883	0.786	1.185	82.648
KMO = 0.763, Approx. Chi-square = 8216.354, df = 516, Sig. = 0.000					

Source: Analysis results from SPSS26

After removing an observed variable from three scales, including Esteem needs, Belonging and Self-actualization needs, and Organizational commitment, which Cronbach's Alpha if Item Deleted is greater than Cronbach's Alpha total, and the Corrected Item-Total Correlation is less than 0.3. The results of the second analysis showed that the scales had a Cronbach's Alpha coefficient greater than 0.7 and greater than Cronbach's Alpha if an Item was deleted. Additionally, the Corrected Item-Total Correlation is greater than 0.3, so the scale satisfies the requirements recommended by Hair et al. [55].

The EFA results also show that the smallest factor loadings of the observed variables are greater than 0.7, so no observed variables are excluded from the scale, and the observed variables are of good quality. Additionally, at an Eigenvalue coefficient greater than 1 and a total variable correlation coefficient greater than 50%, 7 factors were extracted. They explained 82.648% of the variation in the data collected, and the observed variables in the scale of each factor were not eliminated, and there was no change from the original position. Simultaneously, a KMO coefficient greater than 0.5 and a Sig of Bartlett's test less than 0.05 confirmed that the observed variables were closely correlated within the same factor. Thus, the scale after analysis is perfectly consistent and ensures rigor when performing PLS-SEM analyses.

4.2. Measurement model

The results in Table 3 show that the Cronbach's Alpha coefficient and the composite reliability (CR) are both greater than 0.7, confirming the internal consistency of the scale. Additionally, an Average Variance Extracted (AVE) greater than 0.5 indicates that the scales meet convergent validity standards [58]. Furthermore, the external factor loadings of the observed variables being greater than 0.7 demonstrate that the quality of the observed variables is acceptable, and no observed variables are excluded from the scale. Therefore, the scales are appropriate for further analysis.

Table 3: The results of reliability and convergent value

Scales	Reliability		Covergent value AVE	Smallest outer loadings	Fornell - Larcker
	Cronbach's Alpha	CR			
SHN	0.882	0.919	0.742	0.769	0.861**
EFN	0.905	0.932	0.773	0.789	0.879**
EN	0.896	0.923	0.719	0.757	0.848**
BSAN	0.898	0.928	0.723	0.766	0.850**
JS	-	-	-	1.000	1.000
OC	0.893	0.920	0.752	0.762	0.867**
JP	0.884	0.912	0.758	0.795	0.870**

Notes: CR = Composite Reliability, AVE = Average Variance Extracted

** significant at $p < 0.01$

Source: Analysis results from SmartPLS 4.3

After analyzing the discriminant value based on the Fornell-Larcker criterion, it was found that the same pairs of factors showed the highest correlation coefficients compared to different factor pairs, or that the square root of the AVE coefficient exceeded the corresponding coefficients of the factors in the same column with a statistical significance level of less than 0.01 in the value table. At the same time, the correlation coefficients between the same pairs of factors and those between different pairs in the differential values table are all lower than the composite confidence coefficient, reaffirming that the factors in the scale meet the distinguishing criteria set by Fornell and Larcker [59]. However, Hair et al. [58] highlighted that further evaluation of discriminant validity between factors should consider the HTMT criteria of Henseler et al. [60].

Table 4: HTMT

	SHN	EFN	EN	BSAN	JS	OC	JP
SHN							
EFN	0.694**						
EN	0.701***	0.563***					
BSAN	0.625***	0.458**	0.359**				
JS	0.482**	0.615***	0.247***	0.726**			
OC	0.535**	0.732***	0.661***	0.325***	0.483***		
JP	0.389**	0.708**	0.571**	0.559***	0.357***	0.506***	

Notes: ***significant at $p < 0.001$, **significant at $p < 0.01$

Source: Analysis results from SmartPLS 4.3

The results in Table 4 show that the correlation coefficient between different pairs of factors in the discriminant value table is less than 0.85 with a statistical significance level below 0.01. This finding aligns perfectly with the criteria established by Henseler et al. [60] and Hair et al. [58]. Therefore, the scales achieve a discriminant validity.

4.3. Structural model

Table 5: VIF and f^2

Hypotheses	VIF	Conclusion	f^2	Conclusion
H1 _a	2.044	No multicollinearity	0.389	Large
H1 _b	1.789	No multicollinearity	0.462	Large
H1 _c	2.625	No multicollinearity	0.402	Large
H1 _d	1.852	No multicollinearity	0.412	Large
H2 _a	2.741	No multicollinearity	0.364	Large
H2 _b	2.384	No multicollinearity	0.451	Large
H2 _c	1.596	No multicollinearity	0.392	Large
H2 _d	1.612	No multicollinearity	0.428	Large
H3 _a	1.325	No multicollinearity	0.369	Large
H3 _b	2.458	No multicollinearity	0.448	Large
H3 _c	2.183	No multicollinearity	0.381	Large
H3 _d	2.506	No multicollinearity	0.415	Large
H4	1.813	No multicollinearity	0.543	Large
H5	1.957	No multicollinearity	0.529	Large

Source: Analysis results from SmartPLS 4.3

The results in Table 5 show that the VIF is less than 3, indicating no homogeneity or correlation among the independent factors, meaning the model does not exhibit multi-collinearity [58]. Additionally, an f^2 greater than 0.35 demonstrates that the independent factors have a significant impact on the dependent variable [58]. This confirms the existence of a relationship between the independent and dependent variables in the research model.

Table 6: R^2 and Q^2

Constructs	R^2	Adjusted R^2	Q^2
JS	0.815	0.801	0.632
OC	0.778	0.753	0.589
JP	0.796	0.788	0.617
SRMR = 0.076			

Source: Analysis results from SmartPLS 4.3

The results in Table 6 show that the adjusted R^2 coefficients of the dependent variables range from 0.753 to 0.801, indicating a good level of interpretation because the closer the adjusted R^2 is to 1, the higher the explanation power [58]. Independent factors explained 80.1%, 75.3%, and 78.8% of the variation in the dependent factors. Additionally, Q^2 values of 0.632, 0.589, and 0.617 for the dependent factors demonstrated a high level of accuracy of the overall structural model [58]. Finally, an SRMR of less than 0.8 confirmed the relevance of the structural model to the market data [60].

According to Hair et al. [58], the study needs to apply the non-parametric Bootstrapping technique with a sample size of 279, repeated 5000 times, at a statistical significance level of 95% to ensure the reliability of the structural model and enhance the overall research findings, as well as consider accepting or rejecting the proposed research hypotheses and evaluating the degree of impact of independent variables on dependent variables in the research model.

Table 7: Results of the hypothesis test

Hypotheses	Direct effects	β	SD	t-statistic	Conclusion
H1 _a	SHN → JS	0.379	0.072	4.246**	Accepted
H1 _b	EFN → JS	0.463	0.064	5.292***	Accepted
H1 _c	EN → JS	0.335	0.068	3.865**	Accepted
H1 _d	BSAN → JS	0.326	0.075	3.294***	Accepted
H2 _a	SHN → JP	0.344	0.071	4.882**	Accepted
H2 _b	EFN → JP	0.370	0.066	2.683**	Accepted
H2 _c	EN → JP	0.308	0.075	6.228***	Accepted
H2 _d	BSAN → JP	0.271	0.073	2.539***	Accepted
H3 _a	SHN → OC	0.331	0.069	5.869**	Accepted
H3 _b	EFN → OC	0.382	0.071	6.507**	Accepted
H3 _c	EN → OC	0.297	0.073	4.084**	Accepted

H3 _d	BSAN → OC	0.304	0.060	3.926**	Accepted
H4	JS → JP	0.517	0.075	6.293***	Accepted
H5	OC → JP	0.502	0.078	4.568**	Accepted

Notes: * significant at $p < 0.05$, ** significant at $p < 0.01$, *** significant at $p < 0.001$

SHN = Safety and health needs, EFN = Economic and family needs, EN = Esteem needs, BSAN = Belonging and self-actualization needs, JS = Job satisfaction, OC = Organizational commitment, JP = Job performance

Source: Analysis results from SmartPLS 4.3

The results in Table 7 indicate a direct and positive relationship between independent and dependent variables at a statistically significant level of 99%. Therefore, the proposed research hypotheses are supported, and the estimates in the model are reliable, aligning with the standards recommended by Hair et al. [58]. The findings reveal that lower-order needs (safety and health needs, as well as economic and family needs) have a stronger influence than higher-order needs (Esteem needs and Belonging and self-actualization needs) on job satisfaction, job performance, and organizational commitment. Additionally, the study also found that job satisfaction and organizational commitment positively influence job performance.

Table 8: Mediating effects

Indirect effects	β	SD	t	Conclusion
SHN → JS → JP	0.275	0.025	2.749**	Accepted
EFN → JS → JP	0.263	0.032	3.357**	Accepted
EN → JS → JP	0.108	0.029	4.135***	Accepted
BSAN → JS → JP	0.136	0.028	3.706***	Accepted
SHN → OC → JP	0.258	0.030	3.481**	Accepted
EFN → OC → JP	0.231	0.024	2.258**	Accepted
EN → OC → JP	0.127	0.026	4.688***	Accepted
BSAN → OC → JP	0.144	0.027	2.384***	Accepted

Notes: ** significant at $p < 0.01$, *** significant at $p < 0.001$

SHN = Safety and health needs, EFN = Economic and family needs, EN = Esteem needs, BSAN = Belonging and self-actualization needs, JS = Job satisfaction, OC = Organizational commitment, JP = Job performance

Source: Analysis results from SmartPLS 4.3

The results in Table 8 indicate that indirect relationships have a positive coefficient with 99% statistical significance. These findings show that job satisfaction and organizational commitment serve as intermediary factors in the link between quality of work life aspects and job performance.

5. DISCUSSION AND IMPLICATIONS

5.1. Discussion

First of all, the components of QWL include safety and health needs (SHN), economic and family needs (EFN), esteem needs (EN), and belonging and self-actualization needs (BSAN), which have a positive effect on job satisfaction (JS), organizational commitment (OC), and job performance (JP). Among these, economic and family needs (EFN) showed the strongest impact on both JS ($\beta = 0.463$) and OC ($\beta = 0.382$), indicating that compensation, benefits, and work-life balance are key factors that help bankers feel more satisfied and committed to the organization. This finding aligns with the conclusions of Lee et al. [15] and Phan and Bui [16], which suggest that material factors and occupational stability play a crucial role in a high-pressure work environment such as the banking industry.

Additionally, job satisfaction (JS) has the strongest and most significant influence on job performance (JP), with $\beta = 0.517$, $p < 0.05$, highlighting JS's key role in enhancing job performance. This supports the findings of Ramachari and Ramakrishnan [46] and Katebi et al. [47], which show that employees who are satisfied with their jobs tend to be more active, proactive, and productive.

Similarly, organizational commitment (OC) also had a significant effect on job performance ($\beta = 0.502$, $p < 0.05$), indicating that when employees feel connected to the organization's values and goals, they are more likely to put in extra effort to contribute to overall success. This finding aligns with studies by Mowday et al. [48] and Herscovitch and Meyer [50].

Notably, the results of the indirect impact analysis show that JS and OC serve as important mediators in the relationship between QWL and JP. Indirect effects with β values ranged from 0.108 to 0.275 (via JS) and 0.127 to 0.258 (via OC), illustrating that QWL not only has a direct influence but also an indirect influence on work performance through increased organizational satisfaction and commitment. This finding supports the theoretical model based on Social Exchange Theory, which suggests that employees respond to organizational support and attention with higher work performance.

5.2. Implications

The results of this research have made a significant academic contribution by strengthening and expanding the foundational theories related to Maslow's Hierarchy of Needs, Social Exchange Theory (SET), and Herzberg's Two-Factor Theory [29] within the context of the Vietnamese banking industry. Additionally, the study helps fill gaps in Vietnam's academic literature by analyzing the comprehensive relationship among QWL, JS, OC, and JP in a unified model, rather than treating them separately as many previous studies have done. Successfully validating this model provides a reliable empirical framework for future research in human resource management and organizational behavior, especially in the financial banking services industry.

Practically, the study's findings offer valuable insights for managers of Vietnamese commercial banks to identify the factors influencing employee job performance. Based on these results, several implications are suggested as follows:

First, banks need to enhance QWL by improving compensation, benefits, and work-life balance policies. Economic and family needs have the greatest influence on both satisfaction and commitment, making it crucial to develop a competitive pay structure, flexible working hours, and support for employees with family responsibilities.

Second, banks should prioritize safety and health needs by creating a secure work environment, easing pressure, and supporting employees' mental health. In the banking industry, known for its high work demands and occupational risks, caring for health and safety can reduce stress and boost productivity.

Third, esteem needs, belonging, and self-actualization needs also positively influence job satisfaction, organizational commitment, and job performance. Therefore, banks should establish a system to recognize achievements, offer clear opportunities for promotion and career growth, and promote internal commitment activities, encourage teamwork, and share organizational values.

Fourth, the study results indicate that job satisfaction and organizational commitment are two key mediating factors that influence job performance. Therefore, managers should focus on maintaining high satisfaction levels through effective internal communication, empowerment, and fostering a positive corporate culture that encourages employees to feel proud and dedicated to the organization.

Finally, to improve long-term job performance, commercial banks should focus on the sustainable development of human resources by balancing material well-being and spiritual values. This approach fosters a happy workplace where employees feel respected, develop, and make meaningful contributions to the organization.

6. CONCLUSION AND LIMITATIONS

The study's results offer important empirical evidence confirming that QWL positively influences job satisfaction, organizational commitment, and job performance among bankers at Vietnamese commercial banks. The study successfully achieved its goal of developing, testing, and validating the relationship model among QWL, job satisfaction, organizational commitment, and job performance, thereby making meaningful contributions to both the theory and practice of human resource management in the commercial banking sector.

Although the research has produced scientifically and practically valid results, certain limitations still exist. First, the scope of the study is limited to surveys conducted at commercial banks in Hanoi, so it does not fully represent the characteristics of the banking workforce nationwide. Future studies could expand the survey to other regions or types of banks (e.g., state-owned, foreign, or digital banks) to improve generalizability. Second, this study uses a cross-sectional survey method, which can only measure relationships between variables at a specific point in time and does not show how these relationships change over time. Therefore, future research could adopt a longitudinal design to observe fluctuations in QWL, job satisfaction, and performance over a longer period, especially in the context of digital transformation in banking. Finally, although this study focuses on the four elements of QWL modeled by Lee (2015), future studies can include additional aspects such as work-life balance, organizational justice, or an innovation-supportive culture to broaden the model's scope.

7. Declarations

7.1. Author Contributions

Nam Danh Nguyen wrote the main manuscript text including conceptualization, methodology, data preparation and analysis. Lan Ngoc Thi Uong contributed to data collection and editing. All authors read and agreed to the published version of the manuscript.

7.2. Data Availability Statement

The corresponding author can readily provide the datasets created and analyzed for this work. Therefore, inquiries regarding the data that is available in this paper should be directed to the corresponding author.

7.3. Funding

This research did not receive any specific grant from funding agencies or from others.

7.4. Institutional Review Board Statement

Not applicable.

7.5. Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

7.6. Conflicts of Interest

No potential conflict of interest between the authors.

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