Evaluating the Influence of Herzberg's Two-Factor Theory on Employee Performance: A Case Study of ACLEDA Bank Plc. and Its Subsidiaries

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ABSTRACT

Motivation plays an important role in the workplace; however, there has been limited research on this topic within the banking sector in Cambodia. Therefore, this study aims to determine the impact of the Herzberg's two-factor theory on employee performance by focusing on a case study at ACLEDA Bank Plc. and its subsidiaries, adopting the two-factor theory, namely the Motivation Factor and the Hygiene Factor. To fulfil the research objective, the study designed a survey questionnaire to collect data from 331 participants via a digital platform. By using structural equation modeling (SEM), the study found that work itself and responsibility, recognition, achievement, interpersonal relationship, salary, policy and administration, supervision, and working conditions have significantly and positively influenced job performance, while advancement and possibility of growth do not have a significant influence.

Keywords: *Two-Factor Theory, Employee Performance, CFA, SEM*

1.   Introduction

The banking industry provides a significant source of funding for contemporary trade and commerce, acting as its lifeblood (IMF, n.d.). The idea of efficiency is becoming more crucial for both financial and non-financial entities, including banks, due to the growing phenomenon of globalization (Drăgan, 2012). The success and expansion of banks are largely determined by their competitive marketing strategy, and as a result, bank operations have been significantly modified and modernized in the era of globalization.

In a digital and economic society, banking operations have continuously improved their services at both front and back ends (Bowyer, 2023). At the back end, banks continuously develop their digital platforms to ensure their smooth and efficient operation (Olutimehin et al., 2021); moreover, banks must ensure that their front office employees provide the best quality service to their customers as well (Sriyam, 2010). Employee performance is a cornerstone of organizational success, directly influencing productivity, service quality, and overall competitiveness (Harter et al., 2002). In modern business, understanding the drivers behind employee motivation and satisfaction is crucial for fostering a high-performing workforce (Nohria et al., 2008). Among the various theoretical frameworks attempting to explain workplace motivation, Frederick Herzberg's Two-Factor Theory, also known as the Motivation-Hygiene Theory, stands out as a foundational concept. Proposed in 1959, this theory states that job satisfaction and dissatisfaction are not opposite ends of the same continuum, but rather stem from two distinct sets of factors: motivators and hygiene factors (Yusoff et al., 2013).

Motivators, such as achievement, recognition, the work itself, responsibility, and advancement, are intrinsic to the job and, when present, lead to positive satisfaction and increased performance (Koncar et al., 2022). Conversely, hygiene factors – including company policy, supervision, relationship with supervisors, working conditions, salary, and job security – are extrinsic to the job (Koncar et al., 2022). While their absence can cause dissatisfaction, their presence only prevents dissatisfaction and does not necessarily lead to motivation or higher performance (Dwivedi et al., 2024).

The banking sector, characterized by intense competition, rapid technological advancements, and a strong emphasis on customer service, heavily relies on the efficiency and dedication of its employees (Nkoana & Matjie, 2024). In such an environment, understanding how motivational and hygiene factors influence employee performance becomes critical for strategic human resource management within in the banking sector in Cambodia. ACLEDA Bank Plc., founded by Khmer entrepreneurs in January 1993 as a national NGO for micro and small enterprises' development and credit, was licensed by the National Bank of Cambodia as a Specialized Bank on October 07, 2000. On December 01, 2003, ACLEDA Bank, once again, was licensed by the National Bank of Cambodia as a Commercial Bank to enable it to provide full banking services aligned with customer and market needs, and it was renamed ACLEDA Bank Plc. (ACLEDABank, n.d.-a).

ACLEDA Bank Plc. is the first bank in Cambodia to be assigned ratings by the top international ratings agencies (S&P Global, 2024) and was nominated as a World Economic Forum Global Growth Companies 2014 candidate, and became a member of the World Economic Forum. ACLEDA Bank Plc. has four subsidiaries, namely ACLEDA Bank Lao Ltd, ACLEDA Securities Plc., ACLEDA MFI Myanmar Co., Ltd., and ACLEDA University of Business Co., Ltd. ACLEDA Bank has established the largest branch network in all provinces and towns in Cambodia and expanded its operations abroad to include Laos (37 branches) and Myanmar (17 branches).

ACLEDA Bank Plc. employs 12,143 staff in 265 branches in all provinces and towns in the Kingdom of Cambodia (ACLEDABank, n.d.-b). Additionally, ACLEDA Bank Plc has become one of the leading and most trusted providers of financial services in Cambodia even if the country is still in a developing stage of economic growth (ACLEDA Bank, 2025a). ACLEDA Bank Plc. focuses on both internal customers and external customers (ACLEDA Bank, 2025b). Therefore, motivation does play an important role in a profitable organization in less-developed contexts such as Cambodia, particularly within ACLEDA Bank Plc.

While Frederick Herzberg's Two-Factor Theory provides a widely recognized framework for understanding employee motivation and satisfaction, its specific application and impact on employee performance within the Cambodian banking sector, particularly at ACLEDA Bank Plc. and its subsidiaries, remain underexplored. Despite the critical role of employee performance in the success of financial institutions, there is limited empirical evidence regarding how motivational and hygiene factors are implemented. Likewise, the influence of these factors on the performance of employees in the banking sector remains a question in Cambodia. This gap in knowledge hinders the development of targeted human resource strategies aimed at optimizing employee output and overall organizational effectiveness at ACLEDA Bank Plc. and its subsidiaries. Therefore, investigating the impact of motivational and hygiene factors on employee performance within ACLEDA Bank Plc. and its subsidiaries can provide valuable insights into effective talent management strategies in the financial industry.

In response to the above issue, the study aims to determine the impact of the Herzberg's Two-Factor theory founded by Frederick Herzberg, namely motivation and hygiene factors, on employee performance by using ACLEDA Bank Plc. and its subsidiaries as the case.

This study contributes significantly to various stakeholders, particularly ACLEDA Bank Plc. and its subsidiaries. By empirically analyzing the impact of Herzberg's Two-Factor Theory on employee performance, the findings provide actionable insights for human resource management to refine existing policies and develop new strategies. Specifically, it helps identify which motivational and hygiene factors are most influential, enabling the bank to optimize employee satisfaction, engagement, and ultimately, performance. Furthermore, this research contributes to the broader academic understanding of motivation theories within the Cambodian banking context, offering valuable data for future studies on organizational behavior and human capital development in emerging economies.

2.   Literature Review

Definitions of job performance

Performance is defined as a set of behaviors that contribute to organizational goal accomplishment and achievement (Motowidlo & Kell, 2003). Performance is the outcome produced by a job or profession in a specific amount of time based on its functions or indicators. Performance is critical because it indicates how well an individual can fulfill the responsibilities assigned to them. According to Rinny et al. (2020), performance is defined as the capacity of personnel to fulfil specific tasks within a period. Som et al. (2024) stated that work performance is defined as behaviors directed toward the mission or purposes of the organization or the products and services that are generated from those behaviors (Hughes et al., 2021). Employee performance is known as an organization's greatest asset, which is essential to its success (Armstrong, 2006). People need to engage with one another for an organization to function successfully (Jalagat, 2016). Thus, motivation plays an important role in boosting employee performance.

Two-factor Theory

Frederick Herzberg's two-factor theory, also known as the Motivator-Hygiene theory, proposes that there are two independent sets of factors that influence job satisfaction and job performance. The distinction between hygiene and motivation factors is the central idea of this theory. According to Hilmi et al. (2016), satisfaction depends on motivators, while dissatisfaction is the result of hygiene factors. Thus, motivators are related to the intrinsic aspects of the job, while hygiene factors are extrinsic to the job (Hilmi et al., 2016).

Motivation Factor

According to Kotni and Karumuri (2018), motivation factors are satisfiers. They are inherent to the work itself and address an individual's need for growth and psychological fulfillment. Motivation factors relate to the self-actualization needs of employees, focusing on recognition, the work itself, responsibility, and advancement as well as growth opportunities. Hilmi et al. (2016) explained that humans strive for continuous self-improvement, a need that can only be satisfied by altering the content of work to provide challenges and opportunities. Motivation factors are those elements that actively lead to engagement and strong efforts in task accomplishment (Serra, 2019). Motivational factors also positively impact job performance (Raziq & Maulabakhsh, 2015).

Hygiene Factor

According to Kotni and Karumuri (2018), hygiene factors are dissatisfiers if they are absent or inadequate at the workplace. These extrinsic factors are related to the job context, namely to the relationships with supervisors and peers, salary, policy and administration, supervision, and working conditions (Hilmi et al., 2016). Hygiene factors are influenced by the surrounding environment or the facilities to support their task; therefore, they move employees from job dissatisfaction to no job dissatisfaction (Raziq & Maulabakhsh, 2015). Hygiene factors have been found to negatively impact job performance in the university setting but positively impact job performance in industry (Raziq & Maulabakhsh, 2015).

Hypothesis Development

Advancement & possibility growth

Career advancement refers to the process by which an individual progresses in their professional life, typically involving movement to higher positions of authority, increased responsibilities, enhanced skill sets, and often, higher compensation (Greco & Kraimer, 2020). Moreover, possibility of growth refers to the availability and perception of opportunities for an individual to develop new skills, acquire knowledge and expand their capabilities professionally within an organization (Herrity, 2025). The path to career advancement and employee growth affects future rewards for both individuals and the organization (Kudaibergenov et al., 2024). Career advancement and professional growth actively lead to engagement and strong efforts in task accomplishment (Serra, 2019). Hence,

the study proposes the following hypothesis.

H1: Advancement and possibility of growth significantly impact on job performance.

Work itself & Responsibility

Work itself refers to the intrinsic aspects of the job tasks that make the work engaging, challenging, and meaningful (Alshmemri et al., 2017). When employees find their work interesting, feel that it utilizes their skills, and understand its significance to the larger organizational goals or society, it acts as a powerful motivator (Alshmemri et al., 2017). Furthermore, responsibility as a motivational factor encompasses the autonomy, control, and accountability an individual has over their work and decisions (Kudaibergenov et al., 2024). The nature of work such as work itself & responsibility significantly influences job performance; (Kudaibergenov et al., 2024). Work goals and responsibilities are achieved at a high level of performance (Yukl, 2013). Therefore, the study proposes the following hypothesis.

H2: Work itself & responsibilities significantly impact job performance.

Recognition & Achievement

Recognition refers to the acknowledgment and appreciation of an individual's efforts, contributions, and accomplishments by their superiors, peers, or the organization (Spinify, n.d.). In addition, achievement refers to the sense of accomplishment and successful completion of challenging tasks, projects, or goals (Kudaibergenov et al., 2024). Recognition increases productivity (Spinify, n.d.) and a motivation factor such as achievement has a direct and positive impact on employee performance (Kudaibergenov et al., 2024). Thus, the study proposes the following hypothesis.

H3: Recognition and achievement significantly impact on job performance.

Interpersonal Relationship

One of the most essential elements of human relationships, interpersonal relationships are a significant component of any organization (Rockmann & Bartel, 2024). An interpersonal relationship can be defined as a strong, deep, or close association or acquaintance between two or more people. These relationships are formed through repeated interactions and

communication, leading to the development of emotional bonds, mutual understanding, and shared expectations (Rockmann & Bartel, 2024). Interpersonal relationships form the foundation of organizational behavior (Rockmann & Bartel, 2024). Motivational factor, such as positive social connections, has a direct and positive impact on employee performance (Kudaibergenov et al., 2024). Furthermore, interpersonal relationship has been found to have an impact on job performance (Ekowati & Rachmawati, 2025). Therefore, the study proposes the following hypothesis.

H4: Interpersonal relationship significantly impacts job performance.

Salary

In order to guide employees toward accomplishing goals, reward systems such as salary play a critical role in an organization (Boadi et al., 2025). Employees believe that additional benefits like salary and recognition are crucial for boosting their motivation and job satisfaction (Asaari et al., 2019). A well-structured financial reward system enhances job satisfaction and job performance (Boadi et al., 2025). Salary has been found to have a significant impact on job performance (Chrissy et al., 2022). Hence, the study proposes the following hypothesis.

H5: Salary significantly impacts job performance.

Policies and administration

Policies and administration refer to the overall framework of rules, procedures, regulations, and management practices that govern an organization (Alshmemri et al., 2017). Implementing human-centered organizational policies can help to achieve all of the organization's goals, and organizational policy has always been a given in every organization (Toytok & Acar, 2021). The relationship between policies, administration, and job performance is complicated and has various aspects. Well-designed policies help to reduce uncertainty and prevent operational confusion. Furthermore, they offer clear direction, set expectations for behavior, and outline procedures for addressing issues, helping to create accountability. However, the absence of these elements, by logical extension, would lead to the opposite: uncertainty, confusion, lack of accountability, and poor performance (Narayanan, 2025). Therefore, the study proposes the sixth hypothesis as follow.

H6: Policies & administration significantly impact job performance.

Supervision

Supervision in the workplace refers to the process of overseeing, guiding, supporting, and managing the performance, conduct, and development of employees to ensure that tasks, projects, and responsibilities are completed according to established standards and organizational objectives (Nickerson, 2025). According to Alshmemri et al. (2017), "Supervision includes the supervisor's willingness to delegate responsibility or to teach, fairness and job knowledge" (p.14). Effective supervision plays an important role in boosting and supporting their performance (Hannang & Qamaruddin, 2020). Hence, the study proposed the seventh hypothesis as follow.

H7: Supervision significantly impacts job performance.

Working Condition

Working conditions refer to the comprehensive environment and circumstances under which employees perform their jobs (Nickerson, 2025). According to Alshmemri et al. (2017), "working conditions may include the amount of work, space, ventilation, tools, temperature and safety" (p.14). Moreover, a physical environment such as atmosphere, noisy sound, workspace decoration, and design can also influence employee comfort and their ability to concentrate on their work (Nickerson, 2025). A positive work environment can motivate employees to achieve higher levels of performance, driving innovation and productivity (Basit et al., 2018). Thus, the study proposes the last hypothesis as follow.

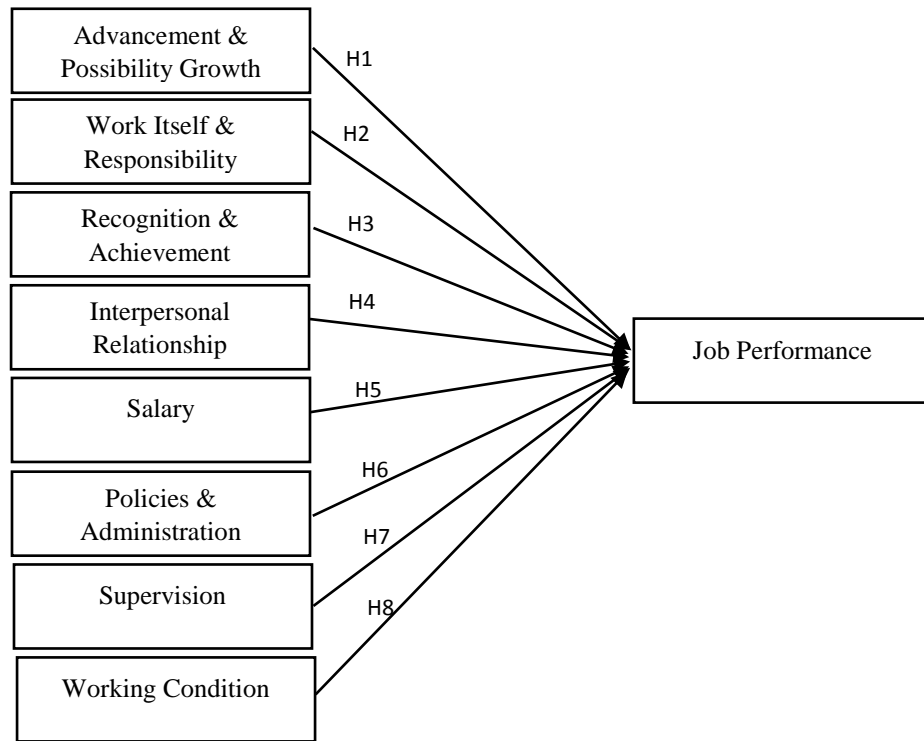H8: Working conditions significantly impact job performance.

Figure 1: Conceptual model

Based on the hypothesis development, the study proposes the above conceptual model by adopting Herzberg's Two-Factor Theory to determine its impacts on job performance.

3. Method

Research design

The study employed a quantitative research approach and a correlational research design to determine the relationship between the independent variables and the dependent variable (Creswell & Creswell, 2017). A structured survey questionnaire, which is suitable for a quantitative study (Sekaran & Bougie, 2016), was used to collect data from the target respondents.

Target Population and Sampling Design

The target respondents in this study were employees ranging from top management to staff

level at ACLEDA Bank Plc and ACLEDA Securities Plc. as well as faculty members and staff at ACLEDA University of Business in Phnom Penh city.

Sample size and Sampling Procedure

Norng (2022) also suggested using 40 cases per independent variable for running multiple regression analysis. Moreover, Hair et al. (2010) stated that the sample size should be at least 10 times the number of indicators for a single latent variable in running Covariance-Based Structural Equation Modeling (CB-SEM). Therefore, a total sample size of 331 was appropriate in this study since there were 33 latent variables.

Likewise, the study employed stratified random sampling to ensure proportional and representative coverage of the diverse organizational structure. As suggested by Hair et al. (2010), the population was divided into specific, non-overlapping subgroups based on certain characteristics, namely ACLEDA University of Business, ACLEDA Bank Headquarters, ACLEDA Bank Branches, and ACLEDA Securities Plc. Within each stratum, the sample size was determined, and simple random sampling was used to select the participants (Schindler, 2019).

Research tools

The study designed a survey questionnaire using Microsoft Forms, divided into three sections. The first section collected respondents' demographic information. The second section focused on the measurement items for eight proposed independent variables, adopted from Motivation and Hygiene factors and Job Performance as the dependent variable. The independent variables assessed were Advancement & Possibility of Growth (4 items), Work Itself & Responsibility (4 items), Recognition & Achievement (3 items), Interpersonal Relationships (4 items), Salary (3 items), Policy & Administration (4 items), Supervision (4 items), and Work Conditions (4 items). The dependent variable was Job Performance (4 items). All measurement items were evaluated by respondents using a five-point Likert scale, ranging from "1 = Strongly Disagree" to "5 = Strongly Agree." In the third section, an open-ended question was used to seek recommendations from respondents on organizational productivity.

Data collection

In order to collect the data, the study obtained an employee list from the Human Resource

Division of ACLEDA Bank Plc. The survey was designed using Microsoft Forms. Consistent with the stratified random sampling design, the study individually distributed the survey link via official internal channels to the randomly selected respondents from the management, staff, and lecturing staff of ACLEDA Bank Plc. and its subsidiaries.

Data analysis method

The obtained data were coded in IBM SPSS 26 for analysis. The study performed descriptive statistics for demographic factors, level of agreement on respondents' perceptions, Pearson Correlation Matrix for variable associations, and Cronbach's alpha for reliability. The main hypotheses were tested using covariance-based structural equation modeling (CB-SEM), performed in IBM SPSS AMOS 26. CB-SEM was chosen for its strength in theory confirmation and testing the hypothesized causal relationships among latent constructs (Hair et al., 2010). The structural equation modeling (SEM) process involved two steps. First, confirmatory factor analysis (CFA) to assess model fit, reliability, and validity of the measurement model. Secondly, structural model assessment was used to test the hypothesized paths and evaluate the structural model fit using indices such as the Chi-square/Degrees of Freedom ratio (CMIN/DF), Root Mean Square Error of Approximation (RMSEA), and Comparative Fit Index (CFI).

4. Results and Discussion

Demographics information

The study collected data from 342 respondents; however, only 331 responses were deemed valid after data screening. According to Table 3, most of respondents were female, approximately 52%. Their age range extended from 18 to 50 years old, with the highest proportion falling between 26–33 years old (30%), followed by those between 34–41 years old (29.91%). Regarding educational qualifications, most of them hold bachelor's degree (59.82%) and master's degree (38.37%). Regarding the respondents' workstations, the largest group (57%) was from ACLEDA University of Business, followed 25% from ACLEDA Bank Headquarters, while ACLEDA Bank branches and ACLEDA Securities Plc contributed 13% and 5%, respectively. Additionally, most respondents had 6-10 years of working experience (37.76%), while approximately 35% had 1–5 years of experience.

Table 1: Demographic information of the respondents

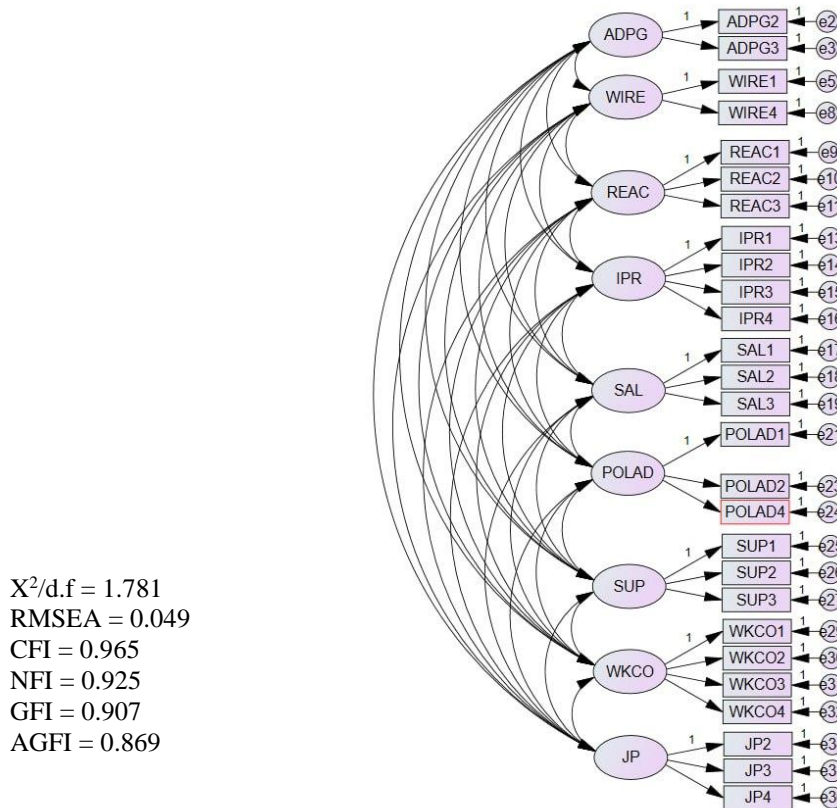| Variables	Categories (N=331)	Frequency	Percentage
Gender	Female	173	52.27%
	Male	158	47.73%
Age	18-25 years old	76	22.96%
	26-23 years old	101	30.51%
	34-41 years old	99	29.91%
	42-49 years old	50	15.11%
	Over or equal 50 years old	5	1.51%
Qualification	Doctoral degree	3	0.91%
	Master's Degree	127	38.37%
	Bachelor's Degree	198	59.82%
	Associate's Degree	3	0.91%
Work Station	ACLEDA Bank Head Quarter	84	25.38%
	ACLEDA Bank Branch	42	12.69%
	ACLEDA Securities Plc.	17	5.14%
	ACLEDA University of Business	188	56.80%
Experience	1-5 Years	116	35.05%
	6-10 Years	125	37.76%
	11-15 Years	60	18.13%
	16-20 Years	25	7.55%
	Over 21 Years	5	1.51%

Hypothesized model

In order to analyse the efficacy of measurement models where the number of factors and their direct relationships were specified, the study verified the fitness of the proposed Model after the confirmatory factor analysis (CFA). Phou et al. (2024) cited the fitness index criteria as shown in the following table.

Table 2: Fitness Index Criteria adopted (Schermelleh-Engel et al., 2003)

Fit Measure	Good Fit	Acceptable Fit
CMIN/DF (X^2/df)	$0 \leq X^2 / df \leq 2$	$2 < X2 \leq 3$
RMSEA	$0 \leq RMSEA \leq 0.05$	$0.05 < RMSEA \leq 0.08$
NFI	$0.95 \leq NFI \leq 1.00$	$0.90 \leq NFI < 0.95$
CFI	$0.97 \leq CFI \leq 1.00$	$0.95 \leq CFI < 0.97$
GFI	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI < 0.95$
AGFI	$0.90 \leq AGFI \leq 1.00$	$0.85 \leq AGFI < 0.90$

Note: CMIN/DF (X2/df) = Chi-square of degree freedom, RMSEA = root mean squared error of approximation, NFI = norm fit index, CFI = comparative fit index, GFI = goodness-of fit index, AGFI = adjusted goodness-of-fit index

The result of Chi-square to degree freedom ratio (X2/d.f) = 1.781 < 2 was regarded as good fit; root mean square error of approximation (RMSEA) = 0.049 < 0.50 was regarded as good fit; comparative fit index (CFI) = 0.965 < 0.97 was regarded as acceptable fit. Furthermore, the goodness-of-fit index (GFI) = 0.907 > 0.90 was regarded as an acceptable fit, and the adjusted goodness-of-fit index (AGFI) = 0.869 > 0.85 was regarded as an acceptable fit.

X^2/d.f = 1.781
RMSEA = 0.049
CFI = 0.965
NFI = 0.925
GFI = 0.907
AGFI = 0.869

Factor loadings

According to the following table, the study found that the factor loadings of all items are highly adequate since Hair et al. (2006) suggested factor loadings should go beyond 0.5.. The standardized regression weights range from 0.731 (WIRE4) to 0.869 (SUP3).

On the other hand, during CFA, there are several items were dropped. Two items (ADPG1 and ADPG4) of Advancement & possibility growth, two items (WIRE2 and WIRE3) of work itself & responsibilities, one item (POLAD3) of policy & administration and one item (JP1) of job performance were dropped in order to get model fitness.

Table 3: Factor Loadings, AVE, CR and Cronbach alpha

Variables	Items	Factor loadings	Loading Squared	Variance extracted (AVE)	Construct reliabilities (CR)	Cronbach alpha
Advancement & possibility growth	ADPG2	0.807	0.651	0.796	0.775	0.797
	ADPG3	0.785	0.616			
Work Itself & Responsibility	WIRE1	0.695	0.64	0.73	0.695	0.794
	WIRE4	0.805	0.649			
Recognition & Achievement	REAC1	0.724	0.524	0.782	0.825	0.823
	REAC2	0.798	0.636			
	REAC3	0.823	0.677			
Interpersonal Relationship	IPR1	0.804	0.646	0.837	0.903	0.902
	IPR2	0.822	0.675			
	IPR3	0.912	0.831			
	IPR4	0.809	0.654			
Salary	SAL1	0.849	0.72	0.842	0.88	0.887
	SAL2	0.852	0.725			
	SAL3	0.827	0.683			
Policy & Administration	POLAD1	0.813	0.66	0.797	0.839	0.874
	POLAD2	0.784	0.614			
	POLAD4	0.794	0.63			

(To be continued)

Table 3: Factor Loadings, AVE, CR and Cronbach alpha (continued)

Variables	Items	Factor loadings	Loading Squared	Variance extracted (AVE)	Construct reliabilities (CR)	Cronbach alpha
Supervision	SUP1	0.909	0.826			
	SUP2	0.822	0.675	0.869	0.902	0.882
	SUP3	0.875	0.765			
Working condition	WKCO1	0.785	0.616			
	WKCO2	0.838	0.702	0.784	0.864	0.857
	WKCO3	0.807	0.651			
	WKCO4	0.703	0.494			
Job Performance	JP2	0.852	0.725904			
	JP3	0.837	0.700569	0.825	0.865	0.813
	JP4	0.786	0.617796			

Convergent validity and composite reliability

Table 3 shows the average variance extracted (AVE) exceeded the cut-off score 0.5 as cited in Phou et al. (2024). The AVE for advancement & possibility growth (ADPG), Work itself & responsibility (WIRE), Recognition & Achievement (REAC), Interpersonal relationship (IPR), Salary (SAL), Supervision (SUP), Working Condition (WKCO), and Job Performance (JP) are 0.796, 0.730, 0.782, 0.837, 0.842, 0.797, 0.869, 0.784, and 0.825, respectively.

Moreover, the Cronbach alpha of all variables ranges from 0.794 for work itself & responsibility to 0.902 for interpersonal relationship which are higher than 0.7, as suggested by (Hair et al., 2010). Moreover, the composite reliability (CR) values ranged from 0.775 for advancement & possibility growth to 0.903 for interpersonal relationship, all of which exceeded 0.7, as suggested by (Hair et al., 2010); however, the CR for work itself & responsibility was 0.695, which is still considered acceptable as cited in Phou et al. (2024).

Discriminant validity of constructs

Discriminant validity is a measure of how well a construct can be dem distinguished from other constructs and assesses whether the constructs are duplicates of one another (Henseler et al., 2015). Phou et al. (2024) cited that the comparison between AVE and shared inter-

construct correlations (SIC) was very sensitive and recommended using a heterotrait-monotrait (HTMT) ratio, performed by (Voorhees et al., 2016). The following figure demonstrates the formula to calculate the Heterotrait-Monotrait ratio (HTMT), adopted from Collier (2020).

$$\text{HTMT}_{ij} = \frac{1}{K_i K_j} \sum_{g=1}^{K_i} \sum_{h=1}^{K_j} r_{ig,jh} \div \left(\frac{2}{K_i(K_i-1)} \sum_{g=1}^{K_i-1} \sum_{h=g+1}^{K_i} r_{ig,ih} \quad \frac{2}{K_j(K_j-1)} \sum_{g=1}^{K_j-1} \sum_{h=g+1}^{K_j} r_{jg,jh} \right)^{\frac{1}{2}}$$

Figure 2: HTMT Ratio adopted from Collier (2020)

The following table illustrates the best and good result of Heterotrait-Monotrait ratio (HTMT) ranging from the lowest value of 0.417 between the constructs ADPG and SUP to the highest value of 0.859 between the constructs ADPG and WIRE. These values of HTMT met the best criteria which is lower 0.85, as suggested by Henseler et al. (2015) and good criteria which is lower than 0.90, as cited in Phou et al. (2024).

Table 4: HTMT Ratio

Variables	ADPG	WIRE	REAC	IPR	SAL	POLAD	SUP	WKCO	JP
ADPG									
WIRE	0.859								
REAC	0.548	0.785							
IPR	0.582	0.696	0.787						
SAL	0.440	0.592	0.600	0.650					
POLAD	0.548	0.705	0.541	0.636	0.811				
SUP	0.417	0.535	0.522	0.557	0.653	0.825			
WKCO	0.444	0.550	0.435	0.501	0.656	0.778	0.785		
JP	0.432	0.545	0.503	0.457	0.562	0.677	0.660	0.736	

Structural Equation Modeling (SEM)

The following table shows the result of path analysis of the study. According to Table 5, the result showed that work itself & responsibility (WIRE), recognition & achievement (REAC), interpersonal relationship (IPR), salary (SAL), policy & administration (POLAD), supervision (SUP), and working condition (WKCO) had a significant effect on Job Performance. The results demonstrated the standardized regression weight of WIRE (β=0.208) at the significance level of (*p*-value=0.009), standardized regression weight of

REAC (β=0.329) at the significance level of (*p*-value=0.002), standardized regression weight of IPR (β=-0.299) at the significance level of (*p*-value=0.023). Furthermore, the standardized regression weight of SAL (β=0.149) was signficant at (*p*-value=0.046), while the standardized regression weight of POLAD (β=0.17) was signficant at (*p*-value=0.014). Moreover, the results showed that the standardized regression weights of SUP (β =0.267) and WKCO (β=0.561) had the strongest significant effects on job performanance (*p*-value= *0.000).*

However, advancement & possibility of growth (ADPG) was not statistically significant since its significance level (*p*-value=0.0121) was greater than 0.05. This indicates that the seven independent variables – work itself & responsibilities (WIRE), recognition & achievement (REAC), interpersonal relationship (IPR), Salary (SAL), policy & administration (POLAD), supervision (SUP), working condition (WKCO) – have a significant impact on employees' job performance while advancement & possibility of growth (ADPG) was rejected.

Table 5: Result of Structural Equation Modeling (SEM)

IV	Path	DV	Unstandardized	Standardized (β)	S.E.	C.R.	P-value
			Coefficient				
ADPG	→	JP	0.099	0.092	0.064	1.551	0.121
WIRE	→	JP	0.271	0.208	0.104	2.603	0.009**
REAC	→	JP	0.306	0.329	0.097	3.161	0.002**
IPR	→	JP	-0.298	-0.299	0.131	-2.28	0.023*
SAL	→	JP	0.129	0.149	0.065	1.995	0.046*
POLAD	→	JP	0.125	0.17	0.051	2.464	0.014*
SUP	→	JP	0.191	0.267	0.047	4.032	0.000***
WKCO	→	JP	0.502	0.561	0.059	8.532	0.000***

*Note: *, **, ***, indicate statistically significant at *p < 0.05 (medium level). **p < 0.01 (strong level) and ***p < 0.001 (very strong level).*

Discussion

Hypothesis 1 is rejected since the *p*-value = 0.121 > 0.05. Hence, advancement & possibility of growth (ADPG) does not significantly impact job performance. The result contradicts the

study of Kudaibergenov et al. (2024) and Serra (2019). Advancement & possibility of growth may not be the predictor of job performance at ACLEDA Bank Plc. and its subsidiaries since the employees do not expect the advancement or growth in an organization with an ethical working culture. According to Clark (2020), the culture of ACLEDA Bank plc. focuses on capacity building and professional development; that is, learning, teaching, and sharing. Clark (2020) emphasizes that "ACLEDA staff were refining values and modeling them into a culture that valued personal and corporate integrity, honesty, and transparency" (p.128).

Hypothesis 2 is supported since the *p*-value = 0.009 < 0.05. The work itself & responsibility (WIRE) significantly impacts around 20% (β = 0.208) of job performance. This result is in line with the studies of Kudaibergenov et al. (2024) and Yukl (2013). This means that the employees at all levels at ACLEDA Bank Plc. and its subsidiaries are committed to their job and responsibility as Clark (2020) noted in "the annual report on the meaningful indicators of responsibility toward staff, management, and the community" (p.128).

Hypothesis 3 is also supported because the *p*-value = 0.002 < 0.05. The recognition & achievement factor, which has the second highest impact, significantly affects around 33% (β = 0.329) of job performance. This finding is backed by the study of Kudaibergenov et al. (2024). In this sense, praising or rewarding employee for doing good work and accomplishing tasks on time makes employees feel satisfied and work harder to produce higher-quality work. This can also be observed in practice at ACLEDA Bank Plc. as Clark (2020) quoted "*We are employees, but also owners of the bank*" (p.131). The Bank also offered stock ownership to the staff as a reward for their hard work (Clark, 2020). The emphasis on the recognition & achievement helps ACLEDA Bank Plc. perform well, with annual profit after tax USD 166.674 million (2021), USD 181.815 million (2022), and 148.018 million (2023), as shown in the annual report 2023 (ACLEDA Bank, 2024).

Hypothesis 4 is supported as the *p*-value = 0.023 < 0.05. Interpersonal relationship (IPR) has significantly negative effect around 29.9% (β = -0.299) on job performance. This means that the closer the relationship, the lower the performance. This finding is in line with Ekowati and Rachmawati (2025), yet it contradicts Kudaibergenov et al. (2024), who emphasized the positive and direct effect of social connection on employee performance. When a worker has good relationship with a peer and superior, it leads to have a good communication and productivity might be increasing rapidly. However, if the relationship becomes too close, this factor might create breakdowns in trust, credibility, or emotional stability. According to

Clark (2020), ACLEDA practices a "zero tolerance for corruption policy, enforced through a strict code of ethics that governs personal behavior, relationships with colleagues, customers, and regulators."

Hypothesis 5 is also supported since the *p*-value = 0.046 < 0.05. The result reveals that salary significantly affects 14.9% ($\beta = 0.149$) of job performance. This finding is consistent with the studies of Boadi et al. (2025) and Chrissy et al. (2022). In this sense, the bank employees are more likely to perform their tasks well when they are well-paid. If such motivation under hygiene factors is absent or inadequate, the employees are more likely to become dissatisfied (Kotni & Karumuri, 2018); as a result, they do not perform their tasks well.

Hypothesis 6 is also supported since the *p*-value = 0.014 < 0.05. The finding shows that policy & administration significantly impacts around 17% ($\beta = 0.17$) on job performance. The finding is in line with (Narayanan, 2025). This means that clear human resource policies, operating manuals, and procedures at ACLEDA Bank Plc. enable staff to carry out their task well, helping them minimize risks and ensure fair and consistent treatment.

Hypothesis 7 is additionally supported since the and *p*-value = 0.000 < 0.05. The result reveals that supervision, which has the third highest effect, significantly impacts around 26.70% ($\beta = 0.267$) on job performance. The finding is supported by Hannang and Qamaruddin (2020). Supervision plays an important role in enhancing job performance and keeping organizations such as ACLEDA Bank Plc. continuously improving. Employees with high productively always benefit from good supervision. For instance, the incentive system at ACLEDA Bank Plc. is revised "to tie year-end bonuses to return-on-equity and portfolio quality at the branch level" (p.164), which serves as a supervisory mechanism to guide staff behavior and performance (Clark, 2020).

Lastly, hypothesis 8 is also supported since *p*-value = 0.000 < 0.05. The study found that working condition, which has the strongest effect, significantly impacts 56.10% ($\beta = 0.561$) on job performance. This result is in line with (Basit et al., 2018). In this sense, employees are more likely to stay with the company that provides a good working condition, leading to increase productivity and higher quality work (Chandrasekar, 2011). Good working conditions also help maintain a stable workforce.

5.   Conclusion

Finally, the study found that Two-Factor Theory, namely Motivation and Hygiene Factors, significantly impacts job performance at ACLEDA Bank and its subsidiaries. For Motivation Factors, work itself & responsibility and recognition & achievement have a positive and significant effect on job performance, yet interpersonal relationship has a negative and significant effect on job performance. Nonetheless, advancement & possibility of growth does not influence job performance. For Hygiene Factors, salary, policy & administration, supervision, and working condition have a positive and significant impact on job performance. The study also reveals that working condition is the strongest predictor, followed by recognition & achievement, supervision, work itself & responsibility, policy & administration, and salary, respectively.

Implications of the study

Theoretical implication

This empirical analysis offers valuable data for future academic studies on motivation theories, organizational behavior, and human capital development in the banking sector in less-developed economies. With little research on the adoption of motivation and hygiene factors in banking sector, the findings of this study offer novelty in the research field. For instance, the study found that advancement & possibility of growth did not significantly influence job performance, despite being a motivator in Herzberg's original theory; furthermore, interpersonal relationship has a negative impact on job performance which has never been found previously. This suggests that the relative importance of motivation factors may vary depending on the organizational culture and national context.

Managerial implications

The findings provide actionable insights for the human resource management at ACLEDA Bank Plc. and its subsidiaries to refine existing policies and develop new strategies. By identifying the most influential motivational and hygiene factors, the bank can strategically allocate resources and focus efforts to optimize employee satisfaction, engagement, and ultimately, performance.

Research limitation and further research

The study was conducted at ACLEDA Bank Plc and its subsidiary in Phnom Penh City only, excluding branches at the provinces and oversea subsidiaries in Laos and Myanmar. Furthermore, the study only employed a quantitative method by running motivation and hygiene factors as the direct predictors of job performance.

Therefore, future studies should aim to collect a wider sample size to mitigate potential bias and better reflect the entire employee population of ACLEDA Bank Plc. and its subsidiaries in Cambodia, Laos, and Myanmar. Moreover, future research can also examine job satisfaction as the moderator or mediator between motivation and hygiene factors and job performance. Otherwise, a mixed method approach is also highly recommended for future studies.

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Sokha Norng was born in 1979 in Kampong Cham Province and he earned his PhD in Business Administration in 2022 from Beltei International University. He graduated with an MBA in General Management from Assumption University, Thailand in 2011 and graduated with a Bed. In TEFL from IFL in 2004. Dr. Norng's field of research falls into business, marketing, leadership and education technology. His main focus is on consumers' attitudes and behavior in product/service purchase by utilizing the technology adoption theory. He was an Assistant Professor and is currently the Director of the Graduate School and the Chief of the Center for Research & Innovation at ACLEDA University of Business. From 2004 to 2015, he held two academic positions at two other universities in Cambodia. He has been teaching at the higher education level for nearly 20 years in the relevant disciplines.

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