

## The Impact of Training and Development on Employee Performance: Examining the Mediating Roles of Motivation and Career Development in Lebanese Banks

Ahmad EL Zein <sup>1</sup>, Marwan Azouri <sup>2</sup> and Jad Safi <sup>1</sup>

<sup>1</sup> Faculty of Business Administration and Economics, Department of Management and Marketing,  
Notre Dame University (NDU), Lebanon

<sup>2</sup> Faculty of Business Administration and Economics, Department of Management and Marketing,  
Notre Dame University (NDU), Lebanon

<sup>3</sup> Faculty of Business Administration and Economics, Department of Management and Marketing,  
Notre Dame University (NDU), Lebanon

*elzein.drahmad@gmail.com*

**Abstract.** This study investigates how training and development initiatives influence employee performance through employee motivation and career development in Lebanon's banking sector. Drawing on social exchange theory and learning organization principles, we hypothesize that training and development enhance performance both directly and indirectly through increased motivation and career development opportunities. Analysis of survey data from banking professionals using structural equation modeling reveals that both motivation and career development significantly mediate the relationship between training initiatives and employee performance. These findings advance our understanding of how training programs contribute to organizational effectiveness while providing practical implications for human resource management in the banking sector. The study contributes to the existing literature by examining these relationships in an emerging economy context and offering evidence-based recommendations for fostering employee development.

**Keywords:** Training and development, employee performance, Lebanese banks, employee motivation, career development

## **1. Introduction**

The banking sector faces significant HRM challenges due to its rapid transformation and the need to keep pace with technological advancements (Jyoti, 2017). As banks increasingly adopt digital technologies like AI and blockchain, there is a growing demand for employees with specialized skills. This has led to challenges in talent acquisition and management, as HR professionals must navigate the complexities of high-volume skill-based hiring and upskilling/reskilling existing employees (Kuknor & Kumar, 2024). Additionally, retaining younger talent, particularly millennials and Gen Z, remains a persistent issue, with many young professionals seeking diverse and inclusive work environments. Compliance with stringent regulatory requirements and managing a diverse workforce further complicate HRM in banking. To address these challenges, HR professionals must be proactive, creative, and committed to fostering a positive workplace culture that attracts and retains top talent. Training and development play a crucial role in this context, as continuous learning and skill enhancement are essential for employees to stay relevant and perform effectively in a rapidly evolving industry (Sharmila & Chinnathambi, 2024).

In the context of training and development in banks, several empirical gaps require further investigation. Many studies emphasize the positive impact of training programs on employee performance, yet there is limited research on the long-term sustainability of these benefits. Additionally, the effects of different training methods and their frequency on various performance metrics—such as job satisfaction, productivity, and innovation—are underexplored. Given these gaps, this study aims to investigate the long-term effects of training and development programs on employee performance in the banking sector, considering employee motivation and career development as mediators. The questions that will be addressed by the study are: (1) What are the effects of training and development on employee performance in banks? (2) How does employee motivation and career development mediate the relationship between training programs and employee performance? The objectives of this study are to (a) analyze the sustainability of training benefits over time, (b) compare the effectiveness of various training methods, (c) identify key factors that enhance or hinder the impact of training on employee performance, and (d) assess the mediating role of employee motivation and career development in this relationship.

## **2. Literature Review**

### **2.1. Training and Development**

Training and development fundamentally involve acquiring knowledge, skills, methodologies, and practices. They are essential components of human resource management, as they have the potential to enhance performance at individual, collegial, and organizational levels (Kuknor & Kumar, 2024). Organizations are increasingly focusing on organizational learning and collective development as a process of "increasing one's capacity to take action."

Organizational learning employs training and development as one of its numerous responses, focusing on acquiring knowledge, skills, techniques, and practices from a strategic perspective. Individuals who acquire, discern, and utilize these intellectual intangibles can transform them into an organizational resource, contributing to the overall training and development of the organization (Armstrong, 2006). Training and development refer to learning experiences intentionally designed to enhance personnel effectiveness in their current and future roles. Sims (2002) underscores the distinction between training and development: training addresses current employment, while development prepares employees for potential future positions.

From the employee's perspective, the primary objectives of learning are to acquire the necessary skills and knowledge to perform their job, advance their career, and secure promotions. Training and

development also support the personal and professional growth of employees by facilitating career transitions. Learning, whether through experience, self-directed study, or both, involves acquiring knowledge, skills, competencies, attitudes, and ideas (Kwon et al, 2024). Sharmila and Chinnathambi (2024) posit that learning is not primarily about acquiring information; rather, it is a process that improves capacity, enabling the production of previously unattainable results.

Training and development benefit both the organization and its employees. They contribute to increased profitability, more favorable attitudes toward profit orientation, enhanced job knowledge and skills at all levels of the organization, elevated workforce morale, and alignment of employees with organizational objectives (Al Karim, 2019). Additionally, training and development empower individual employees to make informed decisions, solve problems more effectively, encourage self-development and self-confidence, and manage stress, tension, frustration, and conflict. They also support personal objectives and enhance interaction skills.

Armstrong (2001) defines training as the formal and systematic modification of behavior through learning, resulting from education, instruction, development, and planned experience. Training provides personnel with the requisite knowledge, skills, and attitude to manage their employment responsibilities effectively. In contrast, staff development enhances an employee's ability to respond to future environmental demands. Sharmila and Chinnathambi (2024) regard training and development as a deliberate process aimed at altering attitudes, knowledge, or skill behavior through learning experiences to achieve effective performance in specific activities. Organizations offer diverse training programs to meet their requirements, including industry-specific training, managerial or supervisory training, interpersonal skills, compliance, sales, executive development, fundamental skills, new employee orientation, customer service, and quality, as well as IT and systems, processes, procedures, and business practices.

Farooq and Khan (2011) point out that training plays a complementary role in accelerating learning. It should be reserved for situations that warrant a more directed approach, rather than being viewed as a comprehensive solution for people development. He also observed that traditional training models tend to prioritize subject-specific knowledge over developing fundamental learning abilities.

Development is a long-term educational process that employs a systematic and organized procedure to impart conceptual and theoretical knowledge to managerial personnel for general purposes. Cole (2000) proposes a more comprehensive perspective on acquiring knowledge and skills through training, focusing on employees' potential rather than immediate abilities. Armstrong (2001) posits that individual development involves progression in careers with the assistance, encouragement, and supervision of their manager.

Training and development enhance workforce competence to establish a competitive edge and contribute to organizational success. Employers can address employees' needs through training and development, facilitating the development of competitive advantages and guaranteeing long-term employability (Al Karim, 2019). Development is a continuous process, consistent with the emphasis on lifelong learning.

When well-trained and developed employees are fully utilized, both the employing organization and the employees themselves benefit. Sharmila and Chinnathambi (2024) assert that for an organization to grow and endure in today's rapidly evolving and globally competitive environment, particularly in the technology sector, it is imperative to develop systems and programs that leverage individual and team efforts, creativity, and innovations. Consequently, organizations strive to adapt to new structures, cultures, and effective methods of performance management and employee motivation to manage rapid change and competition effectively.

## **2.2. Employee Motivation**

The term "motivation" comes from the Latin word "movere," which means "to move." Thus, it reflects a concept of progression, encouraging us to continue working and achieve our objectives (Korth, 2007).

Jeffrey S. Nevid, a professor of psychology, defines motivation as: "The term motivation refers to elements that activate, direct, and maintain goal-directed action. In other words, the 'whys' of conduct are the needs or desires that drive action and explain what we do. Motives are the 'whys' of behavior. The conduct we observe suggests there is motivation, even when we do not notice a reason" (Nevid, 2013).

Motivation can be defined in various ways, depending on different perspectives. According to the Merriam-Webster Dictionary from 1873, motivation is anything that inspires or drives someone. It can be an action or a process that provides a person with a purpose to do something in a specific manner, or it can explain recurring behaviors, demands, and desires (Elliot & Covington, 2001). Simply put, motivation explains the reasons behind a person's actions.

From an organizational perspective, motivation is defined as the sum of the processes that influence the arousal, direction, and maintenance of behaviors relevant to work settings. At work, employee motivation is crucial because it drives effort and action towards tasks. For example, an employee's desire to expend energy to achieve a shared objective or reward is considered effective motivation. Alwedyan (2021) notes that an employee is motivated when they exhibit high enthusiasm and interest in their job, as well as a strong determination to complete their assigned duties.

Alwedyan (2021) defines motivation as a set of psychological forces that determine the direction of a person's behavior in an organization, as well as their level of effort and persistence to achieve their goals. They identify three key components of motivation: direction, intensity, and persistence. Although these components are not interchangeable, they each play a critical role. Direction refers to a goal that compels a person to act in order to achieve it, which can be chosen consciously or unconsciously. Intensity measures the level of effort a person exerts to reach their goal, including the amount of energy, time, money, or other resources used. Persistence is the capacity to maintain motivation over time despite potential obstacles (Robbins and Judge, 2013).

When we say motivation is the most important factor in determining success, we are not exaggerating. A motivated person is more likely to put in extra effort to complete a task and achieve satisfactory outcomes. Achieving objectives not only fosters a sense of fulfillment and happiness among workers but also promotes a positive and optimistic attitude towards their work environment.

## **2.3. Career Development**

Development is defined as formal education, job experience, and relationships, as well as personality and ability assessments that aid employees in performing effectively in their current or future job and company (Mark & Nzulwa2018). Agrawala (2018) asserts that an individual's career choice is influenced by a variety of factors, including personal and cultural values, family background, and career expectations. This implies that to advance to a higher career level, individuals must prepare themselves by following the course established by their company.

Additionally, career development is a continuous formal endeavor that organizations undertake to enrich and develop their human resources to satisfy both the organization's and employees' requirements (Ivancevich, 2014). During the implementation of career development programs, individual career needs are adapted to organizational requirements. This is evident in the concept of career orientation, which is a self-concept of talents, abilities, motives, needs, attitudes, and values tailored to the organization's needs. Career development programs facilitate employee learning related

to competencies and provide company feedback on employee performance through employee development plans (Mark & Nzulwa2018). Additionally, they provide access for employees to attend training related to the company's planned business.

These competencies encompass the knowledge, skills, and conduct essential for effective employee performance. The process of becoming aware of the characteristics associated with a personal career and the series of phases that contribute to career fulfillment throughout life is calm and deliberate. As described by Durbin (2015:214), "from the standpoint of the organization, career development is the personnel activity that helps individuals plan their future career within the enterprise, in order to help the enterprise achieve and the employee achieve maximum self-development." Wright and Perrone (2018) suggest three essential components to career development: individual success, expected outcomes, and objectives. This is in line with the aforementioned understanding. The intention to engage in behavior to enhance anticipated future results, individual beliefs about their abilities in a specific environment, and the expected results impacting behavior are all components of individual success.

One of the incentives that motivates employees to remain with a company is the potential for advancement, and professional success is one way to achieve this. A career is a series of work-related activities and experiences that induce specific attitudes and behaviors in an individual. According to Wether and Davis (2018), career development results from the interaction between the institutional career management process and individual career planning. Bernardin and Russell (2014) assert that "career development is a formal, organized, and planned endeavor to achieve a balance between the requirements of the organizational workforce and the career aspirations of the individual." Career development results from the interaction between individual career planning and company management planning. The company's career development program is generally designed to cultivate and educate employees to satisfy the company's requirements for competent personnel. Consequently, to satisfy the aspirations of these employees, the organization implements career development initiatives that are both effective and efficient, ensuring that employees maintain high morale and productivity.

## **2.4. Employee Performance**

Sharmila and Chinnathambi (2024) define performance as a multidimensional concept, with its measurement varying based on different variables. Armstrong (2001) states that performance encompasses both behavior and outcomes, emphasizing the importance of considering both behavior (input) and outcomes (output) in performance management. Organizational performance is the result of the collaborative efforts of individuals and units within the company. While external factors can influence human behavior and personal attributes, organizations can control or influence all aspects affecting individual and unit performance through formal and informal methods. According to Mark and Nzulwa, (2018), communication, workplace culture, and management style are formal ways to express this influence.

Employee performance includes all elements directly or indirectly connected to workers' jobs. Performance encompasses both behavior and measurable outcomes. Behavior originates from the performer and converts performance from an abstract concept into tangible action. Behaviors are not only tools for achieving results but are also outcomes in their own right—the result of cognitive and physical effort applied to activities, which can be evaluated independently of the results (Mark & Nzulwa, 2018). Training within high-performance work systems is specifically synchronized and integrated with actual work tasks. Employees need training in group dynamics, interpersonal interactions, and systems thinking to enhance their understanding of the interconnections and mutual influences among all organizational components. Trainers play a crucial role in providing feedback on workers' performance and the financial viability of their firm.

## 2.5. The relationship between Training & development and employees' performance

Previous research has consistently shown a significant positive association between human resource management practices and organizational performance (Sharmila & Chinnathambi, 2024). Guest (1997) highlighted that training and development programs are critical elements of human resource management, significantly improving workers' knowledge, skills, and capabilities, thereby enhancing employee performance. This, in turn, leads to higher levels of organizational performance. Farooq and Aslam's (2011) study found a positive correlation between employee performance and training. This suggests that companies cannot achieve optimal returns without effectively utilizing their human resources, which is possible only by addressing employees' job-related needs promptly. Training and development are crucial for identifying areas where employees lack competence and enhancing their skills to ensure they can perform effectively and contribute to organizational goals.

Furthermore, Sultana's et al. (2012) research in Pakistan's telecom industry indicates that training programs account for fifty-one percent of the variance in employee performance, with an  $R^2$  value of .501 and a T-value of 8.58, emphasizing training as a strong predictor of employee success. Nayem and Uddin (2024) demonstrated that learning through training significantly improves company performance by enhancing employee performance, making it a vital component in achieving corporate objectives. Utilizing training programs to bridge performance gaps is an effective strategy to improve employee performance, as these programs are designed to address performance issues (Swart et al., 2005).

Swart et al. (2005) describe bridging the performance gap as conducting relevant training interventions to develop employees' skills and capabilities, thereby improving their performance. Training and development help organizations recognize underperforming employees and align their knowledge, skills, and attitudes with the company's requirements. Several factors can contribute to poor employee performance, such as lack of motivation, insufficient confidence, or conflicts between work and personal life. Organizations must consider these factors when selecting the most effective training and development interventions. Such interventions should resolve organizational issues, enhance employee motivation, and ensure employees meet performance expectations. High-quality training and development programs, as noted by Swart (2005), motivate employees and fulfill their needs, leading to exceptional performance.

Nayem and Uddin (2024) assert that effective training and development programs can transform employees' skills, enhancing their current job performance and preparing them for future roles, ultimately boosting overall business performance. Training and development enable employees to develop their skills, perform job tasks effectively, and achieve company goals competitively.

However, employee performance is also influenced by environmental factors, including corporate culture, organizational structure, job design, performance rating methods, internal politics, and group dynamics. An employee's performance may decline due to these obstacles, despite possessing the necessary knowledge, skills, or attitude. Wright and Geroy (2001) recommend addressing these factors to ensure successful training and development, positively impacting employee performance. Gilley and Maycunich (2000) noted that employees exhibit greater commitment to the company when they perceive organizational commitment towards them, leading to increased performance. Bartel (1994) found a positive correlation between effective training and development programs and employee productivity. Swart (2005) emphasizes that managers must identify and mitigate factors hindering the effectiveness of training and development programs to enhance employee performance.

Studying the gaps in the literature review, the study reaches the below model. The conceptual model outlines the relationships between the independent and dependent variables, with a focus on the mediators.

- Independent Variable IV: Training and development

- Dependent Variable **DV**: Employee Performance

- Mediating Variables:

**MV<sub>1</sub>**: Employee Motivation

**MV<sub>2</sub>**: Career Development

The study is divided in four primary hypotheses:

- Hypothesis 1 (**H1**): The impact of Training and development on employee motivation.
- Hypothesis 2 (**H2**): The impact of employee motivation on employee performance.
- Hypothesis 3 (**H3**): The impact of Training and development on career development.
- Hypothesis 4 (**H4**): The impact of career development on employee performance.

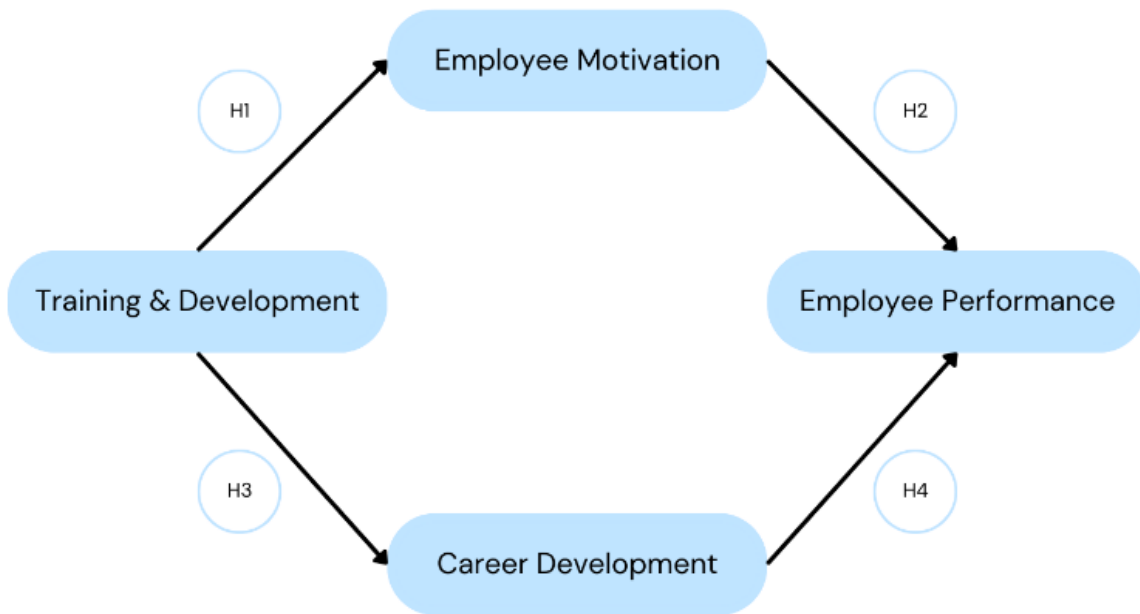


Fig.1: Conceptual Model

### 3. Procedures and Methodology

The deductive reasoning approach is employed, transitioning from general hypotheses to specific observations through the testing of data generated. For this study, a cross-sectional research design was adopted to scrutinize the influence of Training and Development (TD) on Employee Performance (EP). This design facilitates the collection of data at a singular point in time, thereby providing a comprehensive snapshot of the current variables under investigation.

The appropriate measuring instrument is a quantitative survey. A structured questionnaire, encompassing 22 questions, was devised. Subsequently, the data is subjected to statistical analysis via SPSS. The questionnaire is segmented into four sections, each containing 5-6 questions.

A mixed-method strategy is utilized, with the primary data collection tool being a structured questionnaire. Initially, a pilot test was administered; a draft copy of the survey was disseminated to 25 experts to elicit feedback and refine the questionnaire, constituting a qualitative method. Subsequently, the quantitative study involved distributing the revised questionnaire to bank

employees to capture their perspectives, experiences, and insights regarding the impact of training and development on employee performance.

### **3.1. Non Biased Sample:**

A stratified random sampling technique was employed to select participants, ensuring an appropriate representation of each subgroup within the population. The survey was distributed to a sample of 250 respondents, of whom 157 returned it. After data cleaning, 142 responses were deemed valid for analysis, ensuring diversity across banks. stratified random sampling helps to create a more balanced and precise representation of the population, thus reducing the risk of bias in the results.

The primary data collection tool was a structured questionnaire designed to gather quantitative data on the effect of training and development on employee performance. Data was collected through an online survey distributed via Google Forms.

Data collected through the structured questionnaire was entered into the SPSS tool for validation and reliability assessment. Additionally, the study evaluates the model's hypotheses, assesses the role of mediators, and investigates the direct and indirect effects of training and development on employee performance.

The study uses regression analysis and Analysis of Variance (ANOVA) to analyze the relationships in the conceptual model. Regression analysis examines the direct correlations between training and development (the independent variable), mediators (career development and employee motivation), and employee performance (the dependent variable). It assesses how changes in training and development predict variations in career development, employee motivation, and ultimately, employee performance. Regression analysis also supports mediation analysis, explaining the roles of career development and employee motivation in mitigating the impact of training and development on employee performance. Moreover, ANOVA investigates potential differences in responses across different respondent groups, providing insights into the overall impact of training and development on employee performance within various segments. These statistical techniques, supported by SPSS capabilities, ensure a comprehensive examination of both direct and mediated relationships, offering valuable insights into how training and development influence organizational dynamics.

This section explores the impact of training and development on employee performance, through career development and employee motivation. Leveraging statistical analyses conducted using SPSS, such as regression analysis and ANOVA. In this section, we will explain and interpret these findings, highlighting notable patterns and trends observed in the data, so should there be a spread and the perceptions are diverse. TD and EP are a bit negatively skewed so there is a high number of extreme responses affecting the distribution. DC and EM are more of a symmetrical distribution (peak near mean) which shows that the responses are not extreme.

The central limit theorem states that when we have a large number of data (we have 142 respondents) the distribution will have a normal distribution. Additionally, table 1 presents the descriptive statistics of the article. Descriptive statistics play a crucial role in an article as they provide a comprehensive summary of the data. They allow the reader to understand the general patterns and key features of the data without delving into complex calculations or interpretations. By presenting measures such as mean, median, mode, standard deviation, and range, descriptive statistics help to highlight the central tendency, variability, and distribution of the data. This, in turn, makes it easier for readers to grasp the overall trends and insights drawn from the research.



Table 1: Statistics of the Variables

Statistics		MeanTD	MeanEM	MeanCD	MeanEP
N	Valid	142	142	142	142
	Missing	0	0	0	0
Mean		3.7559	3.5070	3.1944	4.0153
Median		3.8333	3.6000	3.2000	4.0000
Mode		3.83	3.60	3.40	4.00
Std. Deviation		.76122	.95506	.90795	.68241
Skewness		-.518	-.374	-.174	-.501
Std. Error of Skewness		.203	.203	.203	.203
Kurtosis		.762	-.304	-.209	.035
Std. Error of Kurtosis		.404	.404	.404	.404
Range		4.00	4.00	4.00	3.17
Sum		533.33	498.00	453.60	570.17
Percentiles	25	3.3333	2.8000	2.6000	3.6667
	50	3.8333	3.6000	3.2000	4.0000
	75	4.1667	4.2000	3.8000	4.5417

Factor Analysis:

1. Training and Development (TD)

Table 2: KMO and Barlett Test TD

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		<b>.700</b>
Bartlett's Test of Sphericity	Approx. Chi-Square	236.256
	df	15
	Sig.	<b>.000</b>

The KMO measure of sampling adequacy is 0.700, indicating that the variables in the dataset are suitable for factor analysis ( $\geq 0.7$ ), at the limit which is not ideal.

Bartlett's test yields a significant result ( $p < 0.001$ ), suggesting significant correlations among variables, hence neglecting the null hypotheses.

2. Employee Motivation (EM)

Table 3: KMO and Barlett Test EM

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.813
Bartlett's Test of Sphericity	Approx. Chi-Square	361.135
	df	10
	Sig.	.000

The KMO measure is 0.813, indicating adequacy for factor analysis, with Bartlett's test also significant ( $p < 0.001$ ).

## 3. Career Development

Table 4: KMO and Barlett Test CD

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.829
Bartlett's Test of Sphericity	Approx. Chi-Square	243.580
	df	10
	Sig.	.000

The KMO measure is 0.829, suggesting suitability for factor analysis, with Bartlett's test significant ( $p < 0.001$ ).

## 4. Employee Performance (EP)

Table 5: KMO and Barlett Test TD Updated

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.782
Bartlett's Test of Sphericity	Approx. Chi-Square	340.827
	df	10
	Sig.	.000

The KMO measure is 0.782, indicating adequacy for factor analysis, and Bartlett's test is significant ( $p < 0.001$ ).

Reliability test:

TD:

Table 6: Cronbach's Alpha TD

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.737	.747	6

The reliability statistics for the variable indicate a Cronbach's alpha coefficient of 0.737, which suggests acceptable internal consistency reliability between TD1-TD6. This coefficient indicates the extent to which items within the variable correlate with each other. Typically, a Cronbach's alpha value above 0.7 is considered satisfactory, indicating that the items in the variable measure a consistent underlying hypothesis.

Additionally, the Cronbach's alpha based on standardized items is slightly higher at 0.747, indicating that standardizing the items did not significantly affect the reliability. With six items in the variable, this reliability analysis provides confidence in the internal consistency of the variable, suggesting that the items effectively measure the same hypothesis.

Table 7: Item Total Statistics TD

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
TD1	19.46	10.747	.459	.460	.710
TD2	18.62	12.691	.445	.401	.708
TD3	18.78	11.931	.538	.343	.684
TD4	18.84	11.981	.522	.405	.688
TD5	18.75	12.315	.429	.234	.711
TD6	19.52	11.046	.487	.484	.697

Cronbach's alpha if each item is deleted state the impact of removing each individual item on the overall reliability of the scale. The values range from 0.684 to 0.711, indicating the hypothetical reliability coefficient of the scale if each item is removed sequentially. Higher values suggest that removing the corresponding item would have a more detrimental effect on the overall reliability of the scale like TD5, indicating that the scale would experience the most significant decrease in reliability if this item were to be removed. In this case, the Cronbach's alpha values remain relatively stable across the items if compared to the initial Cronbach alpha 0.737. Also, item TD3 exhibits the lowest value 0.684, suggesting that its removal would have the least impact on the scale's reliability. Overall, this column sheds light on how much each factor contributes to the scale's overall reliability.

Reliability test for EM:

Table 8: Cronbach's Alpha EM

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.871	5

The reliability statistics for the variable indicate a Cronbach's alpha coefficient of 0.872, which suggests excellent internal consistency reliability. This coefficient indicates the extent to which items within the variable correlate with each other. A Cronbach's alpha value above 0.7 is generally considered acceptable, and a value above 0.8 is often regarded as very good. Therefore, a value of 0.872 indicates strong consistency among the items in the variable, enhancing confidence in its reliability. Additionally, the Cronbach's alpha based on standardized items is almost identical at 0.871, indicating that standardizing the items did not significantly affect the reliability.

Reliability test for CD:

Table 9: Cronbach's Alpha CD

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.826	.826	5

The reliability statistics for the variable reveal a Cronbach's alpha coefficient of 0.826, indicating good internal consistency reliability. This coefficient assesses the extent to which items within the variable are correlated with each other. A Cronbach's alpha value above 0.7 is typically considered acceptable, while values above 0.8 are generally regarded as good. Therefore, a value of 0.826 suggests strong consistency among the items in the variable. Additionally, the Cronbach's alpha based on standardized items is consistent at 0.826, indicating that standardizing the items did not significantly alter the reliability.

Reliability test for EP:

Table 10: Cronbach's Alpha EP

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.850	.848	5

The reliability statistics for the variable indicate a Cronbach's alpha coefficient of 0.850, which suggests strong internal consistency reliability. This coefficient evaluates the extent to which items within the variable correlate with each other. Typically, a Cronbach's alpha value above 0.7 is considered acceptable, and values above 0.8 are generally regarded as good. Therefore, a value of 0.850 indicates robust consistency among the items in the variable. Additionally, the Cronbach's alpha based on standardized items is consistent at 0.848, indicating that standardizing the items did not significantly affect the reliability.

⇒ All Cronbach alpha are  $>0.7$  so we accept them.

#### Linear Regression - Anova:

Regression analysis was conducted on four different models, each assessing the relationship between independent variable and a dependent variable. The first model explores the relationship between Employee Motivation (EM\_MEAN), which is the Dependent variable, and Training and Development (TD\_MEAN), the independent variable. The second model examines the association between Employee Motivation (EM\_MEAN) as independent variable and Employee Performance (EP\_MEAN) as dependent variable. The third model test the relation between Training & Development (TD\_MEAN) as independent variable and Career Development (CD\_MEAN) as dependent variable. The fourth model investigates the connection between Career Development (CD\_MEAN) as independent variable and Employee Performance (EP\_MEAN) as dependent variable.

Each model provides a summary of the regression results, including R-squared values, indicating the proportion of variance in the dependent variable explained by the predictor (independent) variable(s), and ANOVA tables, displaying the significance of the regression model and individual predictors.

Model 1:

a. Dependent Variable: EM\_MEAN

b. Independent Variable: TD\_MEAN

Table 11: Regression EM-TD

<b>Model Summary</b>									
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.553 <sup>a</sup>	.306	.301	.78369	.306	61.715	1	140 <sup>a</sup>	.000

Table 12: Anova EM-TD

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.903	1	37.903	61.715	.000 <sup>b</sup>
	Residual	85.983	140	.614		
	Total	123.886	141			

The regression analysis reveals that Training and Development (TD\_MEAN) accounts for a significant proportion of variance in Employee Motivation (EM\_MEAN), with an R-squared value of 0.306 indicating the extent of prediction. In other terms, changes in TD have a 30% of the variability in EM. The percentage is not high so the TD is not affecting much the employee motivation. R value is 0.306 which doesn't reflect a high connection between TD and EM. The F change of 61.715 is significant indicating that TD\_Mean should improve ES\_Mean

The ANOVA results show a significant regression model, suggesting that TD\_MEAN is a statistically significant predictor of EM\_MEAN. This implies that investments in training and development initiatives have a meaningful impact on employee motivation levels within the organization. The regression accounts for variability of the group (impact of TD on EM in MEAN).

The F static of 61.715 at a significance level of .000 reflect that the model is statistic is important. In addition, both tables have Sig. equals 0.000 which is true because the impact will not change between variables.

Model 2:

Table 13: Regression EP-EM

<b>Model Summary</b>									
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.543 <sup>a</sup>	.294	.289	.55303	.294	58.412	1	140 <sup>a</sup>	.000

Table 14: Anova EP-EM

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.865	1	17.865	58.412	.000 <sup>b</sup>
	Residual	42.818	140	.306		
	Total	60.683	141			

a. Dependent Variable: EP\_MEAN

b. Predictors: (Constant), EM\_MEAN

The R value of 0.543 suggests a moderate positive correlation between the predictor (EM\_MEAN) and the dependent variable (EP\_MEAN). This indicates that increases in employee motivation may be associated with improvements in employee performance, though not extremely strongly. The R Square value of 0.294 indicates that approximately 29.4% of the variability in employee performance (EP\_MEAN) can be explained by changes in employee motivation (EM\_MEAN). While this suggests a significant relationship, it also implies that other factors not included in the model contribute to employee performance. The Adjusted R Square value of 0.289 accounts for the number of predictors in the model and the sample size, providing a slightly more conservative estimate of the variance explained by the model. This value is close to the R Square value, suggesting that the model's generalization is reasonable. The Std. Error of the Estimate of 0.55303 represents the typical distance that observed values deviate from the regression line, indicating the model's prediction accuracy. The F Change statistic of 58.412 is highly significant ( $p < 0.001$ ), indicating that including EM\_MEAN significantly improves the model's ability to predict EP\_MEAN.

The regression row reflects the variability described by the model, with a sum of squares for regression of 17.865 and a mean square (model-explained variance) of 17.865. The residual row denotes the error or unexplained variability, with a residual sum of squares of 42.818 and a mean square of 0.306, indicating the variation not explained by the model. Overall, the total sum of squares of 60.683 represents all of the variability in EP\_MEAN. The F statistic of 58.412 and a significance level of  $<0.001$  clearly indicate that the model is statistically significant, implying that EM\_MEAN is a significant predictor of EP\_MEAN.

Model 3:

Table 15: Regression CD-TD

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.546 <sup>a</sup>	.298	.293	.74249	.298	59.367	1	140 <sup>a</sup>	.000

Table 16: Anova CD-TD

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.729	1	32.729	59.367	.000 <sup>b</sup>
	Residual	77.181	140	.551		
	Total	109.910	141			

a. Dependent Variable: CD\_MEAN

b. Predictors: (Constant), TD\_MEAN

The R Square value of 0.298 indicates that approximately 29.8% of the variability in career development (CD\_MEAN) can be explained by changes in training and development (TD\_MEAN). This suggests a significant relationship between the predictor and the dependent variable. The Adjusted R Square value of 0.293 provides a slightly more conservative estimate of the variance explained by the model, considering the number of predictors and the sample size. The F Change statistic of 59.367 is highly significant ( $p < 0.001$ ), indicating that including TD\_MEAN significantly improves the model's ability to predict CD\_MEAN.

In the ANOVA table, the regression row reflects the variability described by the model, with a sum of squares for regression of 32.729. This indicates the model-explained variance in CD\_MEAN. The residual row denotes the error or unexplained variability, with a residual sum of squares of 77.181, indicating the variation not explained by the model. The F statistic of 59.367 and a significance level of  $<0.001$  suggesting that TD\_MEAN is a significant predictor of CD\_MEAN.

Model 4:

Table 17: Regression EP-CD

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. Change
					R Square Change	F Change	df1	df2	
1	.502 <sup>a</sup>	.252	.247	.56940	.252	47.168	1	140 <sup>a</sup>	.000

Table 18: Anova EP-CD

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.293	1	15.293	47.168	.000 <sup>b</sup>
	Residual	45.390	140	.324		
	Total	60.683	141			

a. Dependent Variable: EP\_MEAN

b. Predictors: (Constant), CD\_MEAN

the R Square value of 0.252 suggests that approximately 25.2% of the variability in employee performance (EP\_MEAN) can be explained by changes in career development (CD\_MEAN). This indicates a moderate relationship between the predictor and the dependent variable. The Adjusted R Square value of 0.247 provides a slightly more conservative estimate of the variance explained by the model, considering the number of predictors and the sample size. The F Change statistic of 47.168 is highly significant ( $p < 0.001$ ), indicating that including CD\_MEAN significantly improves the model's ability to predict EP\_MEAN.

In the ANOVA table, the regression row reflects the variability described by the model, with a sum of squares for regression of 15.293, indicating the model-explained variance in EP\_MEAN. The residual row denotes the error or unexplained variability, with a residual sum of squares of 45.390, indicating the variation not explained by the model. The F statistic of 47.168 and a significance level of  $<0.001$  clearly indicate that the model is statistically significant, suggesting that CD\_MEAN is a significant predictor of EP\_MEAN, with minimal possibility of this finding being attributable to random variation.

The regression analyses collectively highlight the importance of different organizational factors in influencing employee performance. Employee Motivation (EM\_MEAN) significantly predicts Employee Performance (EP\_MEAN), suggesting that motivated employees tend to perform better. Similarly, Training and Development (TD\_MEAN) positively impacts Career Development (CD\_MEAN), indicating that investing in employee training contributes to their career growth. Furthermore, Career Development (CD\_MEAN) significantly predicts Employee Performance (EP\_MEAN), emphasizing the role of career advancement opportunities in enhancing employee productivity and effectiveness.

#### Discussion of the hypotheses

1. **Hypothesis 1:** The regression analysis reveals that investments in Training and Development have a meaningful impact on employee motivation levels within the organization.
2. **Hypothesis 2:** The favorable results regarding Training and Development (TD\_ and its impact on employee motivation indicate that the investment can lead to increase in motivation of employees.
3. **Hypothesis 3:** The regression analysis reveals a significant relationship between TD and Career Development.
4. **Hypothesis 4:** Given the significant impact of various organizational factors such as Training and Development and Career Development.

According to the analysis above from the Anova table and the results, we can conclude that p values are  $<0.05$ , which implies that the four hypotheses are significant and valid.

### 3.2. Conclusion of Findings

Overall, the data suggests a need for organizations to focus on enhancing employee motivation and career development initiatives to complement their already effective training programs, potentially leading to improved overall performance and satisfaction among employees.

The data suggests a need for further investigation into how training and development efforts correlate with employee motivation, career development, and ultimately, individual performance. Identifying any potential gaps or areas for improvement in these areas could lead to more effective training programs and ultimately better organizational performance.

The regression analysis highlights the critical role of training and development programs in influencing employee motivation. A positive relationship between TD\_MEAN and EM\_MEAN suggests that employees who perceive higher levels of training opportunities are more likely to feel motivated. This finding has implications for organizational management, highlighting the importance of investing in employee development to foster a motivated workforce. By prioritizing training initiatives and creating a supportive learning environment, organizations can enhance employee motivation, leading to improved job satisfaction, productivity, and overall organizational performance.

## 4. Conclusions and Recommendations

This study advances our understanding of how training and development initiatives influence employee performance in the banking sector through multiple pathways. Our findings demonstrate that both employee motivation and career development play crucial mediating roles in translating training investments into enhanced performance outcomes. The study makes several contributions: (1) it extends social exchange theory by showing how training creates reciprocal obligations through motivation and career development, (2) it provides empirical evidence from an emerging economy context, and (3) it offers practical insights for human resource management in banking organizations.



While limited by its cross-sectional design and single-source data, this research provides valuable direction for scholars and practitioners concerned with maximizing returns on training investments through enhanced understanding of mediating mechanisms.

The findings align closely with the hypotheses proposed, confirming the anticipated relationships between the variables under investigation.

- Hypothesis 1, which posited a positive relationship between Training and Development (TD) and Employee Motivation (EM), is supported by the analysis. The regression analysis demonstrates that TD significantly predicts EM, suggesting that investments in training and development initiatives contribute to higher levels of motivation among employees.
- Similarly, Hypothesis 2, which proposed a positive correlation between Employee Motivation (EM) and Employee Performance (EP), is validated by the results. The regression analysis indicates that EM significantly predicts EP, indicating that motivated employees tend to perform better in their roles.
- Hypothesis 3, which suggested a positive impact of Training and Development (TD) on Career Development (CD), is also supported by the findings. The regression analysis reveals a significant relationship between TD and CD, indicating that efforts to enhance employee skills and knowledge contribute to their career growth within the organization.
- Finally, Hypothesis 4, which proposed a positive association between Career Development (CD) and Employee Performance (EP), is confirmed by the analysis. The regression analysis demonstrates that CD significantly predicts EP, indicating that employees who have access to career development opportunities tend to perform better in their roles.

The methodology, including the research design, approach, and procedures, effectively guided the investigation and analysis of the relationships between the variables. The cross-sectional research design allowed for the collection of data at a specific point in time, providing valuable insights into the current state of the variables under investigation. Additionally, the sampling technique used in the study confirmed that the sample was representative of the population, enhancing the generalization of the findings.

- Overall, the findings of the current study contribute to the existing body of knowledge on employee performance and provide valuable insights for organizations seeking to enhance employee motivation, career development, and performance within their workforce.

#### **4.1. Managerial and Theoretical implications**

From a managerial standpoint, the study underscores the critical importance of investing in training and development programs to enhance employee performance. Organizations can achieve this by providing comprehensive training opportunities, fostering career development paths, and promoting employee motivation. By prioritizing these factors, managers can indirectly influence employee performance, leading to improved productivity, job satisfaction, and retention rates. Managers and HR can leverage the study's actionable insights to implement strategies that enhance employee performance.

From a theoretical perspective, the study contributes to the understanding of the intricate relationship between training and development, career development, employee motivation, and employee performance. It provides empirical evidence supporting the notion that investing in training and development programs positively impacts career development and employee motivation, subsequently influencing employee performance. This underscores the importance of considering mediating factors such as career development and employee motivation in the relationship between training and development and employee performance.

The practical implications highlight the potential for increased efficiency, further bolstering theoretical frameworks. This work ensures a foundation for ongoing training development by identifying its limitations and suggesting directions for future research.

#### **4.2. Recommendations**

Based on the analysis and results of our study, several recommendations emerge to enhance organizational practices and optimize employee performance. Firstly, investing in comprehensive training and development programs tailored to individual career paths can significantly boost employee motivation and career satisfaction. Organizations should prioritize continuous learning opportunities and skill development initiatives to empower employees and foster a culture of growth and advancement. Additionally, creating clear pathways for career progression and providing regular feedback and recognition can further enhance employee engagement and retention. Moreover, managers should actively promote a supportive work environment that values employee well-being and encourages open communication channels. By implementing these recommendations, organizations can cultivate a motivated and skilled workforce, ultimately driving improved performance outcomes and organizational success.

Also, it's evident that there are interrelations between training and development, employee motivation, career development, and employee performance. Positive perceptions of training and development are associated with higher employee performance ratings, highlighting the importance of effective training programs in enhancing individual performance. However, there are potential gaps in employee motivation and career development that need to be addressed to fully capitalize on the benefits of training initiatives. By focusing on improving employee motivation and providing many opportunities for career growth, organizations can foster a more engaged and productive workforce, ultimately leading to better performance outcomes. Additionally, identifying and addressing disparities in perception within each category can help tailor interventions and initiatives to better meet the diverse needs of employees, thereby maximizing their potential and contributing to overall organizational success.

A positive association between training and development effectiveness and employee performance suggests that investing in training initiatives may contribute to improved individual performance outcomes. However, there are areas for improvement in employee motivation and career development, as their mean ratings are slightly lower. So while there is a positive correlation between training effectiveness and individual performance, intriguing patterns emerge when examining relationships between categories. Higher levels of motivation could drive employees to seek out and capitalize on career development opportunities, while a lack of motivation might hinder engagement in such programs. Exploring these interconnections could unveil synergies that boost overall employee satisfaction and performance. The observed variability in responses across categories hints at nuanced perceptions and experiences among employees. Leveraging this variability, organizations could employ segmentation strategies to tailor interventions and support mechanisms based on employee profiles. For instance, employees who rate training highly but show lower motivation might benefit from targeted incentives or recognition programs to bolster engagement and morale. Similarly, those who perceive career development opportunities positively could serve as champions or mentors for peers seeking growth.

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