

## **CHAPTER 4**

### **ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter discusses the data analysis findings from the previous chapter (Chapter Four), as well as the assumptions and conceptual framework presented in Chapter Two. This chapter begins with a brief overview of the study, which aims to highlight the mediating role of organizational culture in the relationship between leadership frameworks and job satisfaction in the Palestinian police.

This chapter focuses on the thesis's key points further, supported by a discussion of the practical effects of the leadership frameworks. Finally, this chapter analyses the limits of the study as well as prospective research areas. A study summary concludes the chapter.

#### **4.2 Data Analysis Overview**

The data analysis procedure is considered an important part of any research. The researcher used two statistical software to analyze the collected data from respondents in this research. On the one hand, SPSS version 26.0 was utilized for data entry, coding, screening, and describing the data in addition to testing the normality of the study variables. The descriptive statistics of the studied variables include means, standard deviations, skewness, and kurtosis for continuous variables while counts and percentages were used to describe categorical variables. Furthermore, this software was used to report the coefficient of internal reliability Cronbach's alpha for each dimension of the study instrument. On the other hand, AMOS software version 26.0 tests the

research hypotheses based on Structural Equation Modelling (SEM). Accordingly, this software was used to conduct confirmatory factor analysis (CFA) as well as path analysis to assess the reliability and validity of each construct, test hypotheses, and study model, which incorporates latent and observed variables (Hair et al., 2017; Thurasamy et al., 2018).

### 4.3 Response Rate

Indeed, every researcher is targeted to achieve the highest possible response rate as much as he/she can during the process of distributing the questionnaire to collect the data. In the current thesis, the researcher approaches 400 potential participants from the Palestinian police personnel in the West Bank in total. However, the number of the returned questionnaire was 369 but after reviewing them, there were 13 questionnaires deemed not valid for analysis due to incomplete responses to the questionnaire's items. The researcher believed that leaving about 10% of the questionnaire's items not answered by the respondents may generate major problems for studied constructs. (Abu-Qasim, 2017). Therefore, a total of 356 respondents answered the questionnaire completely forming a response rate of 89.0%. Table 4.1 illustrates the distributed questionnaire to the study participants.

**Table 4.1:** Details of the Distributed Questionnaires

	Number	%
Distributed questionnaires	400	100.0%
Returned questionnaires	369	92.2%
Unreturned questionnaires	31	7.8%
Valid questionnaires for final analysis	356	89.0%
Not valid questionnaires for final analysis	13	3.2%

#### 4.4 Descriptive Statistics of the Demographic Variables

Table 4.2 shows the descriptive statistics of the demographic and job characteristics of the participants of this study. Of the total 356 participants, there were 298 (83.7%) males, and 58 (16.3%) females. The majority of respondents had more than 10 years of experience ( $n = 254$ , 71.3%) while 64 (18.0%) and 38 (10.7%) had 5 to 10 years and less than 5 years of experience, respectively. More than one-half of respondents work in the middle region of the West Bank ( $n = 196$ , 55.1%) while less than one-third of them work in the northern region of the West Bank ( $n = 103$ , 28.9%), and 16% of the work in the southern region of the West Bank ( $n = 75$ ). The majority of respondents had Bachelor's degree or lower ( $n = 307$ , 86.2%) while 46 participants had Masters' educational level (12.9%) and very few had a doctorate degree ( $n = 3$ , 0.8%).

In terms of Police rank, 1.7% ( $n = 6$ ) were brigadiers, 4.8% ( $n = 17$ ) were colonels, and 47 (13.2%) were lieutenant colonels. There were 50 (14.0%) majors, 16.3% ( $n = 58$ ) captains, 17.7% ( $n = 63$ ) first lieutenants, and 25 (7.0%) second lieutenants. In addition, there were 26 (7.3%) first assistants, 11 (3.1%) second assistants, 19 (5.3%) first sergeants, 15 (4.2%) sergeants, 12 (3.4%) corporals, and 7 (2.0%) conscripts.

To conclude from these descriptive statistics, it can be seen that the Police ranks indicate a future structural defect due to the increase in the number of officers as a result of periodic promotion according to the Police system. Therefore, without the application of an appropriate retirement law and opening the door for conscription, this will lead to a functional imbalance because it is very possible that the nature of the task performed by a police officer does not correspond to his Police rank. Moreover, the current study showed that females in the Palestinian police are less represented as compared to their male counterparts. This is owing to a lack of Police training for females in comparison to males, as well as the fact that the requirements of police work in general, as well as

the nature of police profession, indicate to male superiority over females. Furthermore, the presence of specialized departments, such as the Central Guard Department and the Department of Maintaining Order in Ramallah, which is located in the central West Bank, explains the West Bank's high percentage of police officers as compared to the southern or northern West Bank. Ramallah, on the other hand, is now regarded the political capital since it houses numerous ministries, as well as the economic capital, necessitating a 24-hour security presence. In addition, it is clear from these data that the majority of police officers have extensive professional experience, indicating a significant improvement in performance and the quality of service offered to citizens. Also, the researcher concludes that there is a desire among many police officers for self-development by obtaining higher educational certificates, which will lead to improved performance and work quality through an increase in the number of experts and researchers who will put their experience and knowledge at the service of the police institution.

**Table 4.2:** Bolman and Deal's Four Frame Model for Reframing Organizations

Variable	Categories	Count, n	Percentage, %
Gender	Male	298	83.7
	Female	58	16.3
Years of Experience	Less than 5 years	38	10.7
	5 – 10 years	64	18.0
	More than 10 years	254	71.3
Place of work	North of West Bank	103	28.9
	Middle of West Bank	196	55.1
	South of West Bank	75	16.0
Educational Level	Bachelor or less	307	86.2
	Masters	46	12.9
	Doctorate (Ph.D.)	3	0.8

**Table 4.2,** continued

Variable	Categories	Count, n	Percentage, %
Police rank	Brigadier	6	1.7

Colonel	17	4.8
Lieutenant Colonel	47	13.2
Major	50	14.0
Captain	58	16.3
First Lieutenant	63	17.7
Second Lieutenant	25	7.0
First Assistant	26	7.3
Second Assistant	11	3.1
First Sergeant	19	5.3
Sergeant	15	4.2
Corporal	12	3.4
Conscript	7	2.0

#### 4.5 Preliminary Data Analysis

This section will highlight and illustrate the internal consistency reliability as measured by Cronbach's alpha and normality assumptions of each construct in addition to correlations, and multicollinearity between all variables measured in this study.

##### 4.5.1 Internal Consistency Reliability (Cronbach's Alpha)

The internal consistency reliability is assessed by the coefficient of Cronbach's alpha for each construct and is shown in Table 4.3. The results revealed that Cronbach's alpha of the independent variable of leadership framework was 0.955 showing higher internal consistency of this construct. The sub-scales of leadership framework (i.e., structural, human, political, and symbolic) had internal consistency coefficients that ranged from 0.841 to 0.923 to showing higher internal consistency reliability as well.

As for the dependent variable of the job satisfaction construct, Cronbach's alpha was 0.915, which indicated higher internal consistency. Furthermore, the Cronbach's alpha for wages, moral incentives, and material incentives dimensions were 0.896

0.929, and 0.936, respectively indicating higher internal consistency of these dimensions as well.

The results also showed that the mediating variable of the organizational culture construct showed higher internal consistency reliability as the value of Cronbach's alpha was 0.926. Moreover, the dimension of this construct also showed higher internal consistency reliability whereby the Cronbach's alphas of involvement, consistency, adaption, and mission dimensions were 0.757, 0.877, 0.875, and 0.700, respectively.

To sum up, it can be seen that the items of the study instrument showed a high and reliable internal consistency measure, which is in line with the rule of thumb regarding scale reliabilities that recommended that showed that a value of Cronbach's alpha greater than 0.70 is considered acceptable (Nunnally, 1978; Oluwatayo, 2012).

**Table 4.3:** Cronbach's Alphas Reliability Coefficients for Each Construct

No	Study variables	Number of phrases	Cronbach's alpha coefficient
1	Structural Framework	4	0.895
2	Human Framework	6	0.923
3	Political Framework	5	0.864
4	Symbolic Framework	4	0.841
	Leadership frameworks in all its dimensions	19	0.955
5	Involvement	4	0.757
6	Consistency	5	0.877
7	Adaptation	5	0.875
8	Mission	5	0.696
	Organizational culture in all its dimensions	19	0.926
9	Moral Incentives	9	0.929
10	Material Incentives	12	0.936
11	Wages	8	0.896
	Job Satisfaction in all its dimensions	29	0.915
	<b>Total</b>	<b>67</b>	

#### 4.5.2 Normality Assumption

At every step of data analysis, it is important to assess the normality assumption of the studied variables. That is, the variables being studied must be normally

distributed, which is the fundamental assumption of the multivariate analysis. The sample size of the current study is 356 which is greater than 200 indicating that any departure from normality could not affect the results. However, a sample size of less than 50 or 30 participants could affect the results if the data variables deviate from the normal distribution (Hair et al., 2010). Therefore, this study utilized a large sample size and thus the effect of the non-normality of the data was reduced.

Before modelling our structural model and implementing SEM, the current study needs to evaluate the normality assumption of all variables measuring the constructs because the SEM is based on utilizing the parametric statistical modelling approach. Various studies demonstrated that showing the values of skewness for all variables not deviated from a normal distribution (Awang et al., 2018; Mohamad et al., 2019; Mohamad, 2022; Yusuf et al., 2017). Therefore, skewness values between -2.0 and 2.0 are considered normally distributed for samples of size less than 200 while skewness values between -3.0 and 3.0 are tolerable as normally distributed for sample sizes larger than 200. The skewness value in this study ranges from -1.44 to 0.174 which is permissible as meeting the assumption of normality. Furthermore, values of kurtosis must be ranged from -10 to +10 as suggested by Kline (2011) or from -7 to +7 as suggested by Hair et al. (2010) and Byrne (2010) to ensure the normality assumption of the variable. However, Tabachnick and Fidell (2013) state that deviation from the normality of Skewness and Kurtosis often do not make a substantive difference in the analysis when the sample size is more than 200. Table 4.4 shows the estimates of skewness and kurtosis of the studies variables in each construct, which showed that the normality assumption is not violated. Furthermore, the sample size of this study is 356, which is greater than 200, and thus normality assumption is not violated (Tabachnick and Fidell, 2013).

**Table 4.4:** Assessment of Normality for All Measured Variables

Study variables	Skewness	Kurtosis
Structural Framework	-1.438	2.905
Human Framework	-.796	-.009
Political Framework	-.780	.597
Symbolic Framework	-1.128	1.517
Involvement	-1.112	2.549
Consistency	-.974	.845
Adaptation	-.974	.695
Mission	-1.137	2.508
Moral Incentives	-1.442	3.321
Material Incentives	-1.602	3.960
Wages	0.174	-0.843

#### 4.5.3 Correlation and Multicollinearity

Multicollinearity refers to the case when two or more variables have almost similar observations and thus lead to high bivariate correlations between them and hence redundant variables. In other words, it occurs when two predictors are dependent (Awang, 2015; Tarka, 2018). According to Hair et al. (2010), it is vital to ensure that the explanatory variables are not highly correlated. Therefore, the presence of high correlations among independent variables will lead to inconsistent and unreliable results. Therefore, it is important to assess the significance of multicollinearity between independent variables to ensure that this problem is not existed before conducting SEM. A correlation between two independent variables that do not exceed 0.90 indicates that this problem does not exist, otherwise, if it is higher than 0.90 the two predictors are considered redundant (Awang, 2015). The current study assessed the multicollinearity problem using the correlation matrix between independent variables as shown in Table 4.5. The results showed that none of the variables are highly correlated as the bivariate correlations did not exceed 0.90. Therefore, the multicollinearity problem did not exist.

**Table 4.5:** Bivariate Correlation Matrix between Independent and Latent Variables, and Mean and deviation

Variables	Mean	SD	1	2	3	4	5	6	7	8
<b>Structural</b>	3.41	0.75	1							
<b>Human</b>	3.47	0.85	0.651	1						
<b>Political</b>	3.39	0.79	0.594	0.709	1					
<b>Symbolic</b>	3.44	0.68	0.576	0.668	0.756	1				
<b>Involvement</b>	3.78	0.64	0.444	0.459	0.482	0.533	1			
<b>Consistency</b>	3.93	0.79	0.577	0.695	0.751	0.730	0.606	1		
<b>Adoption</b>	3.24	0.66	0.579	0.730	0.746	0.681	0.527	0.784	1	
<b>Mission</b>	3.59	0.78	0.496	0.525	0.540	0.535	0.564	0.607	0.638	1

Note: 1 – Structural, 2 – human, 3 – political, 4 – symbolic, 5 – involvement, 6 – consistency, 7 – adoption, 8 – mission

#### 4.6 Exploratory Factor Analysis

This thesis aims to assess the relationship between dependent and independent variables as well as examine the mediating effect of organizational culture on the relationship between leadership framework and job satisfaction. Therefore, exploratory factor analysis (EFA) is employed to assess the relationships between the study variables. Indeed, EFA is used to investigate patterns underlying a data set. Per se, EFA can explain how various items and constructs correlate to each another and thus develop new theories. By using EFA, the investigator can determine the questionnaire items or questions that did not practically belong to the proposed construction and that should be eliminated from the questionnaire. Accordingly, the direct and indirect effects, correlations, loading, and the significance of the relationship between variables significance of variables are all explained in detail. Hence, EFA was performed to evaluate the construct validity using the extraction method of principal component factor and oblique rotation (Knekta et al., 2019).

At the initial step before conducting EFA, Kaiser-Meyer-Olkin Test (KMO) and Bartlett's Test were performed. Accordingly, the KMO test is used to examine the sampling adequacy and sufficiency and whether there are sufficient items that can form and predict each factor in the questionnaire. The values KMO test ranged from less than 1 and more than 0 such that values that are closer to 1 are considered as accurate for an

acceptable factor analysis accuracy. According to Kaiser (1974), the minimum acceptable value of the KMO test is 0.50, while values ranging from 0.70 to 0.89 are considered acceptable, and a value greater than 0.90 is considered outstanding and better. On the other hand, Bartlett's test is used to assess whether the measured items under each factor are highly correlated. A value of less than 0.05 is considered a significant indication of highly correlated items underlying each factor (Hair et al., 2010; Kline, 1994; Tabachnick & Fidell, 2007; Osborne et al., 2014).

Table 4.6 shows the results of the KMO and Bartlett's test of the total items of the study instrument. The results showed that the value of KMO is 0.929, which is higher than the cutoff point of 0.50 indicating a higher degree of adequacy of the items that measure the study factors. Bartlett's test of the underlying data of this study was less than 0.05 showing that the variables are sufficient enough correlated to achieve reasonable factor analysis results.

**Table 4.6:** Kaiser-Meyer-Olkin and Bartlett's Tests

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.929
Bartlett's Test of Approx. Chi-Square		19518.301
Sphericity Df		2211
Sphericity Sig.		.000

Therefore, an EFA plays a significant role in the current thesis to investigate the interrelationship among the items of leadership framework, organizational culture, and job satisfaction that are used to extract the group of items that have acceptable normal disparities to justify their grouping together as one factor. This process includes dimension reduction and compressing of items into a smaller set to form the factors of leadership framework (structural, human, political, and symbolic), organizational culture (involvement, consistency, adaption, and mission), and job satisfaction (moral,

material, and wages) with minimum damage of information and fed the seeds of the basics of SEMs (Hair et al., 2010).

The current thesis employs EFA using factor component analysis (FCA) with the Varimax rotation method on the items of the constructs of leadership framework, organizational culture, and job satisfaction. It is used to explore the interrelationships between a set of items and classify each item to which factor it belongs. The number of factors was assessed using the eigenvalues and then the Varimax rotation to evaluate the loading patterns of each item into each factor. Besides the KMO and Bartlett's tests were used to assess the sampling adequacy of data to conduct principal component analysis (Hair et al., 2017).

Hair et al. (2010) proposed specific guidelines to assess what must be referred to when conducting factor analysis. First, the eigenvalue must be greater than 1 to identify the number of factors. Second, the item factor loadings must be higher than 0.50 to ensure practical significance. Chan et al. (2007) suggested a cutoff point of 0.30 such that the factor loading less than 0.30 must be removed from the analysis. Third, there were no items that have cross-loading of higher than 0.50. Finally, any item that has a factor loading of lower than 0.50 must be removed from the analysis and each factor must contain at least three items. The next subsections provide a detailed explanation of EFA for each construct, leadership framework, organizational culture, and job satisfaction.

#### **4.6.1 Exploratory Factor Analysis of the Leadership Framework**

The leadership framework consists of four dimensions defined as a structural framework, human framework, political framework, and symbolic framework. This

section will show the results of the EFA of each dimension followed by EFA for the leadership framework variable.

The results of KMO for each dimension, namely structural, human, political, and symbolic, showed high sampling adequacy as the value of the KMO exceeded the cutoff value of 0.50 as indicated in Table 4.7. Furthermore, Bartlett's test was statistically significant since the p-value was lower than 0.05. These results showed reasonable scannable justifications for the use of EFA.

Furthermore, the principal EFA results displayed in Table 4.7 showed evidence of the presence of only one factor that had an eigenvalue larger than 1. As for the structural framework dimension, the factor explained 76.2% of the total variance in this dimension. The human framework dimension also explained 72.4% of the total variance in this variable. The political framework and symbolic framework variables also explained 65.1% and 67.9% of the total variance in them. Therefore, we conclude that the findings revealed that there is only one component with an eigenvalue higher than 1 and explained more than 50% of the total variance. The findings also showed that the factor loading in each dimension was greater than 0.50 as well as there were more than three items in each dimension as indicated in Table 4.7.

**Table 4.7:** Summary of the Exploratory Factor Analysis of Each Dimension of the Leadership Framework

No.	Items	Factor			
		Component			
Variable: Leadership Framework		1	2	3	4
<b>Structural framework</b>					
LFQ1	The Palestinian Police leaders attaches great importance to good planning and clear timelines	.903			
LFQ2	The police leaders have an exceptional interest in the details of the work mechanisms implemented in the police institution	.862			

LFQ3	Police leaders seek to develop and implement clear collaborative policies at the internal level, institutions, and other ministries	.865
LFQ4	Police leaders use logical analysis and careful thinking to achieve the strategic goals of the police organization	.861
<b>Human framework</b>		
LFQ5	The police leadership shows a high sensitivity to the needs of workers and strives to meet them	.834
LFQ6	The police leadership is showing great support and concern for the workers	.859
LFQ7	The police leadership is distinguished by good listening to the members and accepting their input and observations	.823
LFQ8	Police leadership supports good business and motivates employees	.863
LFQ9	The police leadership is constantly striving to respond to the requirements of the workers	.830
LFQ10	Police leadership builds trust among employees through open and collaborative relationships	.846
<b>Political framework</b>		
LFQ11	The police leadership is characterized by sensitivity and professional skill of a high level	.806
LFQ12	The police leadership is distinguished by the ability to negotiate and savvy to obtain the needs that flow into the development of the organization	.830
LFQ13	The police leadership is distinguished by its ability to end and eliminate organizational dysfunction	.853
LFQ14	The police leadership is distinguished in its ability to confront internal conflicts that would weaken the institution	.858
LFQ15	Police leaders have the advantage of having the support of those with influence and authority who are outside the police establishment	.674

Table 4.7, continued

No.	Items	Factor			
		Component			
Variable: Leadership Framework		1	2	3	4
<b>Symbolic framework</b>					
LFQ16	Police leaders have an influential and strong personality				.806
LFQ17	Police leaders have the ability and foresight to learn beyond current realities to create good opportunities for employees of the organization				.807

LFQ18	Police leaders have a strong sense of preserving and enforcing the mission of the institution					.873
LFQ19	Police leadership is characterized by maintaining organizational values and aspirations that lead to achieving the goals of the organization and its employees					.808
Eigenvalue		3.047	4.343	3.256	2.719	
Percentage of Variance (%)		76.2	72.4	65.1	67.9	
KMO Measure of Sampling Adequacy		0.833	0.898	0.861	0.777	
Approximate Chi-Square		841.5	1523.4	814.2	592.4	
<i>p</i> -value		0.000	0.000	0.000	0.000	

For robustness check, EFA was also performed for all items of the leadership framework variable and showed that the KMO value was 0.950 and the *p*-value for Bartlett's was less than 0.05. Furthermore, the results confirmed that there are four components with eigenvalues greater than 1 and explained 72.4% of the total variance. Table 4.8 summarizes the results of the EFA of the leadership framework variable. That is, human, structural, political, and symbolic frameworks explained 55.8%, 6.7%, 5.8%, and 4.1%, respectively of the total explained variance in leadership framework. This elucidates that the four dimensions measured the same construct of leadership framework and thus will be maintained in the CFA.

**Table 4.8:** Results Summary of the Exploratory Factor Analysis for Leadership Framework

No.	Items	Factor			
		Component			
Variable: Leadership Framework		1	2	3	4
<b>Structural framework</b>					
LFQ1	The Palestinian Police leaders attaches great importance to good planning and clear timelines		.792		
LFQ2	The police leaders have an exceptional interest in the details of the work mechanisms implemented in the police institution		.798		
LFQ3	Police leaders seek to develop and implement clear collaborative policies at the internal level, institutions, and other ministries		.778		

LFQ4	Police leaders use logical analysis and careful thinking to achieve the strategic goals of the police organization	.667
<b>Human framework</b>		
LFQ5	The police leadership shows a high sensitivity to the needs of workers and strives to meet them	.658
LFQ6	The police leadership is showing great support and concern for the workers	.704
LFQ7	The police leadership is distinguished by good listening to the members and accepting their input and observations	.727
LFQ8	Police leadership supports good business and motivates employees	.776
LFQ9	The police leadership is constantly striving to respond to the requirements of the workers	.810
LFQ10	Police leadership builds trust among employees through open and collaborative relationships	.702
<b>Political framework</b>		
LFQ11	The police leadership is characterized by sensitivity and professional skill of a high level	.576
LFQ12	The police leadership is distinguished by the ability to negotiate and savvy to obtain the needs that flow into the development of the organization	.599
LFQ13	The police leadership is distinguished by its ability to end and eliminate organizational dysfunction	.644

Table 4.8, continued

No.	Items	Factor			
		Component			
Variable: Leadership Framework		1	2	3	4
LFQ14	The police leadership is distinguished in its ability to confront internal conflicts that would weaken the institution			.671	
LFQ15	Police leaders have the advantage of having the support of those with influence and authority who are outside the police establishment			.649	
<b>Symbolic framework</b>					
LFQ16	Police leaders have an influential and strong personality				0.777

LFQ17	Police leaders have the ability and foresight to learn beyond current realities to create good opportunities for employees of the organization				0.678
LFQ18	Police leaders have a strong sense of preserving and enforcing the mission of the institution				0.627
LFQ19	Police leadership is characterized by maintaining organizational values and aspirations that lead to achieving the goals of the organization and its employees				0.625
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Eigenvalue		10.599	1.267	1.106	1.07
Percentage of explained variance (%)		55.8	6.7	5.8	4.1
Percentage of Total Variance Explained (%)				72.4	
KMO Measure of Sampling Adequacy				0.950	
Approximate Chi-Square				5015.025	
<i>p</i> -value				0.000	
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#### 4.6.2 Exploratory Factor Analysis for Organizational Culture

The organizational culture includes four dimensions that are involvement, consistency, adaption, and mission variables. The results of the EFA for each dimension as well as for the organizational culture are shown below.

Table 4.9 presents the results of the EFA for each dimension. The KMO values for each dimension were higher than the cutoff value of 0.50 showing sampling adequacy for factor analysis. Furthermore, Bartlett's test significance values were all less than 0.05 and thus showed adequacy for conducting factor analysis. The principal component factor analysis results showed that each dimension had only one factor or component with an eigenvalue that exceeds one whereby the total explained variance was all greater than 50.0%. Moreover, the findings revealed that none of the items had a factor loading lower than 0.50. It is important to note that the mission dimension showed item no. 37 is removed since it has a factor loading of 0.406 which is less than 0.50. Therefore, the mission dimension had 4 items, which explained 57.6% after the removal of that item.

**Table 4.9:** Summary of the Exploratory Factor Analysis of Each Dimension of the Organizational Culture

No.	Items	Factor			
		Component			
Variable: Organizational Culture		1	2	3	4
<b>Involvement</b>					
OCQ20	I make decisions based on the availability of the best information.	.645			
OCQ21	I feel that I can make a positive impact in the work I do.	.823			
OCQ22	I work with my colleagues as a team.	.793			
OCQ23	I feel good about constantly improving my skills from the police force.	.783			
<b>Consistency</b>					
OCQ24	Leaders' practices align with the decisions they make.		.829		
OCQ25	There are clear values that govern the work of the police force.		.766		
OcQ26	The leaders work to find solutions commensurate with the differences that occur between members of the apparatus		.824		
OcQ27	The police institution has the ability to find consensus when problems arise at work.		.858		
OcQ28	Work-related actions are carried out in easy-to-implement ways.		.819		
<b>Adaption</b>					
OCQ29	The way things are done is very flexible and easy to change.			.808	
OCQ30	New and improved ways to do work are continually adopted.			.836	

**Table 4.9,** continued

No.	Items	Factor			
		Component			
Variable: Organizational Culture		1	2	3	4
OCQ31	In the police institution, failure is an opportunity to improve and develop work mechanisms			.823	
OCQ32	Innovation and risk taking are encouraged and rewarded			.844	
OCQ33	All employees of the police force are fully aware of the mechanisms of work in the police force.			.786	

<b>Mission</b>					
OCQ34	The police force has missions that serve the community.				.707
OCQ35	The objectives of the policing institution are set in accordance with the urgent needs of citizens.				.873
OCQ36	The objectives of the police force are clear				.824
OCQ37	The objectives of the police force are specific.	Removed	(.406)		
OCQ38	By improving performance, the police force seeks to bridge the gap between it and society by gaining public satisfaction.				.602
Eigenvalue		2.337	3.359	3.360	2.303
Percentage of Variance (%)		58.4	67.2	67.2	57.6
KMO Measure of Sampling Adequacy		0.760	0.859	0.866	0.708
Approximate Chi-Square		350.3	872.6	855.9	381.0
p-value		0.000	0.000	0.000	0.000

The findings of EFA of all items underlying the organizational culture were shown in Table 4.10. It seems that the KMO value was 0.936 and the p-value of Bartlett's test was less than 0.05 showing the adequacy of sampling and thus the factor analysis can be conducted. Furthermore, the percentage of the total variance explained was 58.3% with all components that had eigenvalues higher than 1. The factor loading was all more than 0.50 except item no. 37, which had been removed, and then we report the results from EFA. Hence, the results were confirmed with the individual EFA findings. Therefore, the four dimensions are elucidating the underlying construct of organizational culture and all of them will be utilized in the CFA.

**Table 4.10:** Results Summary of the Exploratory Factor Analysis for Organizational Culture

No.	Items	Factor			
		Component			
Variable: Organizational Culture		1	2	3	4
<b>Involvement</b>					
OCQ20	I make decisions based on the availability of the best information.				.566

OCQ21	I feel that I can make a positive impact in the work I do.	.543
OCQ22	I work with my colleagues as a team.	.539
OCQ23	I feel good about constantly improving my skills from the police force.	.634
<b>Consistency</b>		
OCQ24	Leaders' practices align with the decisions they make.	.779
OCQ25	There are clear values that govern the work of the police force.	.690
OCQ26	The leaders work to find solutions commensurate with the differences that occur between members of the apparatus	.754
OCQ27	The police institution has the ability to find consensus when problems arise at work.	.763
OCQ28	Work-related actions are carried out in easy-to-implement ways.	.758
<b>Adaption</b>		
OCQ29	The way things are done is very flexible and easy to change.	.740
OCQ30	New and improved ways to do work are continually adopted.	.779
OCQ31	In the police institution, failure is an opportunity to improve and develop work mechanisms	.754
OCQ32	Innovation and risk taking are encouraged and rewarded	.750
OCQ33	All employees of the police force are fully aware of the mechanisms of work in the police force.	.686

**Table 4.10**, continued

No.	Items	Factor			
		Component			
Variable: Organizational Culture		1	2	3	4
<b>Mission</b>					
OCQ34	The police force has missions that serve the community.				.501
OCQ35	The objectives of the policing institution are set in accordance with the urgent needs of citizens.				.718
OCQ36	The objectives of the police force are clear				.670

OCQ37					Removed (.352)
OCQ38	The objectives of the police force are specific. By improving performance, the police force seeks to bridge the gap between it and society by gaining public satisfaction.				Removed (.489)
Eigenvalue		8.439	1.543	1.08	1.05
Percentage of Variance (%)		46.3	8.6	6.0	4.9
Percentage of Total Variance Explained (%)				65.7	
KMO Measure of Sampling Adequacy				0.936	
Approximate Chi-Square				3418.6	
p-value				0.000	

#### 4.6.3 Exploratory Factor Analysis for Job Satisfaction

The job satisfaction construct comprises three dimensions that are moral incentives, material incentives, and wage incentives. This section illustrates the results of the EFA for each dimension as well as for the job satisfaction construct.

Table 4.11 exhibits the results of EFA for each dimension separately. As for moral incentives, the KMO value was 0.918 which is higher than 0.50 and the p-value of Bartlett's test was less than 0.05 indicating strong evidence for sampling adequacy and thus for factor analysis suitability. The findings also showed that there is only one component of this dimension with an eigenvalue greater than 1 and explained 64.5% of the total variance. The factor loadings of all items under this dimension were all more than 0.50 to ensure internal reliability. The results of the material incentive dimension showed that the KMO was 0.927, which is higher than 0.50 and Bartlett's test was statistically significant since the p-value is less than 0.05, which gives strong evidence of sampling adequacy to carry out factor analysis. There is only one component with an eigenvalue higher than 1, which explained 59.0% of the total variance. None of the items had a factor loading less than 0.50 showing evidence of internal reliability. Similarly, the KMO was 0.902 which is higher than 0.50, and a significant Bartlett's (p-

value  $< 0.05$ ) of the wage's variable showed the adequacy of sampling and thus the factor analysis can be conducted. The results also showed that only one component was extracted with an eigenvalue larger than 1 and had explained 62.0% of the variance. The factor loading of almost all items greater than 0.50 indicates strong evidence of the internal reliability of this dimension. However, item no. 67 (JSQ67) had a factor loading of 0.141 and was removed from the analysis because of low factor loading.

**Table 4.11:** Summary of the Exploratory Factor Analysis of Each Dimension of the Job Satisfaction

No.	Items	Factor		
		Component		
Variable: Job Satisfaction		1	2	3
<b>Moral incentives</b>				
JSQ39	As a police officer, I am looking forward to receiving honors and badges for your outstanding work	.779		
JSQ40	As a police officer, I am looking forward to receiving a letter of thanks and appreciation for your outstanding work	.524		
JSQ41	As an officer in the police force, you are looking forward to receiving the Excellence Award.	.875		
JSQ42	am looking forward as an officer in the police force to get an exceptional promotion	.510		
JSQ43	I am looking forward as an officer in the police force to get the honoring ceremony	.847		
JSQ44	I am looking forward as an officer in the police force to get the candidacy for the training courses	.790		
JSQ45	I am looking forward as an officer in the police force to get the nomination for senior leadership positions	.780		

**Table 4.11,** continued

No.	Items	Factor		
		Component		
Variable: Job Satisfaction		1	2	3
JSQ46	I am looking forward as an officer in the police force to attend conferences for the police force to gain experience and knowledge.	.573		
JSQ47	As an officer in the police force, I am looking for authorization from higher authorities to carry out tasks	.810		

**Table 4.11, continued**

No.	Items	Factor		
		Component		
Variable: Job Satisfaction		1	2	3
<b>Material incentives</b>				
JSQ48	As a police officer, you are looking for rewards for work assignments.		.526	
JSQ49	As an officer in the police force, you are looking for specialty bonus grants.		.501	
JSQ50	As a police officer, you are looking for a housing allowance.		.508	
JSQ51	As a police officer, you are looking for a transportation allowance.		.819	
JSQ52	As a police officer, you are looking for annual bonus payable.		.872	
JSQ53	As an officer in the police force, you are looking for an exceptional salary award.		.786	
JSQ54	As an officer in the police, she looks forward to taking care and improving the work environment.		.836	
JSQ55	As a police officer, you look forward to getting the health services you need		.825	
JSQ56	As a police officer, you are looking to build a police club		.773	
JSQ57	As a police officer, you are looking to get rewarding compensation upon retirement.		.805	
JSQ58	As a police officer, you are looking forward to a provident fund that gives loans at soft facilities.		.520	
JSQ59	As a police officer, she aspires to implement the early retirement law within fair privileges		.690	
<b>Wages incentives</b>				
JSQ60	My salary from the police institution is commensurate with my professional experience.		.884	
JSQ61	The salary I get from the police institution is sufficient and meets my needs		.893	
JSQ62	I feel that my monthly salary is commensurate with the effort I put into my work		.907	
JSQ63	The wage I get is enough to make me do my job to the fullest		.879	
JSQ64	There is a similarity to the salary of the unified cadre that works in the police force		.515	
JSQ65	There are incentive wages in the police establishment that encourage me to do more to get it		.781	
JSQ66	My wage increases as my performance increases		.770	

**Table 4.11, continued**

No.	Items	Factor		
		Component		
Variable: Job Satisfaction		1	2	3
JSQ67	Irregular salary payment date affects my social and professional status	Removed (0.118)		
	Eigenvalue	5.802	7.082	4.947
	Percentage of Variance (%)	64.5	59.0	70.7
	KMO Measure of Sampling Adequacy	0.918	0.927	0.902
	Approximate Chi-Square	2257.5	3192.6	2054.6
	<i>p</i> -value	0.000	0.000	0.000

To ensure that the items are adequately loaded in each dimension, we performed EFA for the total construct of job satisfaction of all its items regardless of their component and the results were shown in Table 4.12. It is found that the estimated KMO value exceeded the cutoff value of 0.50 (KMO = 0.928) and Bartlett's test was statistically significant since the *p*-value was less than 0.05. Furthermore, the findings showed that there were three components of this construct with eigenvalues higher than 1 and explained 70.0% of the total variance. The first component contained 5 items (JSQ39, JSQ40, JSQ41, JSQ43, JSQ44, JSQ45, JSQ 47) with factor loading exceeding 0.50, which formed the moral incentive dimension. The second component contained 8 items with a factor loading higher than 0.50 and formed the material incentives dimension (JSQ51, JSQ52, JSQ53, JSQ54, JSQ55, JSQ56, JSQ57, JSQ59). Finally, the third component had 6 items with factor loading greater than 0.50 (JSQ60, JSQ61, JSQ62, JSQ63, JSQ65, JSQ66) and two items with factor loading less than 0.50 (JSQ64, JSQ67) that is removed from the analysis. The last component formed the dimension of wage incentives. Accordingly, the first factor explained 38.9% of the total variance while the second and third factors explained 18.7% and 12.9% of the variance, respectively. These results confirmed the findings from the separate EFA for each

dimension explained above. Therefore, the three factors assessed the same construct of job satisfaction and will be used for CFA.

**Table 4.12:** Results of the Exploratory Factor Analysis for Job Satisfaction

No.	Items	Factor		
		Component		
Variable: Job Satisfaction		1	2	3
<b>Moral incentives</b>				
JSQ39	As a police officer, I am looking forward to receiving honors and badges for your outstanding work	.677		
JSQ40	As a police officer, I am looking forward to receiving a letter of thanks and appreciation for your outstanding work	Removed (.427)		
JSQ41	As an officer in the police force, you are looking forward to receiving the Excellence Award.	.760		
JSQ42	am looking forward as an officer in the police force to get an exceptional promotion	Removed (.368)		
JSQ43	I am looking forward as an officer in the police force to get the honoring ceremony	.770		
JSQ44	I am looking forward as an officer in the police force to get the candidacy for the training courses	.714		
JSQ45	I am looking forward as an officer in the police force to get the nomination for senior leadership positions	.716		
JSQ46	I am looking forward as an officer in the police force to attending conferences for the police force to gain experience and knowledge.	Removed (.416)		
JSQ47	As an officer in the police force, I am looking for authorization from higher authorities to carry out tasks	.717		
<b>Material incentives</b>				
JSQ48	As a police officer, you are looking for rewards for work assignments.	Removed (.427)		
JSQ49	As an officer in the police force, you are looking for specialty bonus grants.	Removed (.364)		
JSQ50	As a police officer, you are looking for a housing allowance.	Removed (.486)		
JSQ51	As a police officer, you are looking for a transportation allowance.	.746		

**Table 4.12,** continued

No.	Items	Factor
Variable: Job Satisfaction		Component

	1	2	3
JSQ52 As a police officer, you are looking for annual bonus payable.		.798	
JSQ53 As an officer in the police force, you are looking for an exceptional salary award.		.713	
JSQ54 As an officer in the police, she looks forward to taking care and improving the work environment.		.763	
JSQ55 As a police officer, you look forward to getting the health services you need		.736	
JSQ56 As a police officer, you are looking to build a police club		.723	
JSQ57 As a police officer, you are looking to get rewarding compensation upon retirement.		.721	
JSQ58 As a police officer, you are looking forward to a provident fund that gives loans at soft facilities.		Removed (.465)	
JSQ59 As a police officer, she aspires to implement the early retirement law within fair privileges		.595	
<b>Wages</b>			
JSQ60 My salary from the police institution is commensurate with my professional experience.			.870
JSQ61 The salary I get from the police institution is sufficient and meets my needs			.888
JSQ62 I feel that my monthly salary is commensurate with the effort I put into my work			.898
JSQ63 The wage I get is enough to make me do my job to the fullest			.879
JSQ64 There is a similarity to the salary of the unified cadre that works in the police force			Removed (.436)
JSQ65 There are incentive wages in the police establishment that encourage me to do more to get it			.778
JSQ66 My wage increases as my performance increases			.765
JSQ67 Irregular salary payment date affects my social and professional status		Removed (0.174)	
Eigenvalue	10.888	5.109	2.224
Percentage of Variance (%)	38.9	18.7	12.9
Percentage of Total Variance Explained (%)		70.0	
KMO Measure of Sampling Adequacy		0.928	
Approximate Chi-Square		8223.1	
p-value		0.000	

#### 4.7 The Confirmatory Factor Analysis (CFA) of All Latent Construct

This section is devoted to explaining the results of the CFA of all constructs used in this study. The approach entails a procedure that should be carried out first to validate all measurements of the latent model, validity, and reliability of the measured constructs. Such a CFA procedure ensures that the measured constructs passed the construct validity, convergent validity, and discriminant validity (Asnawi et al., 2019; Rahlina et al., 2019). Accordingly, indicator reliability was assessed using factor loading (i.e., standardized regression weights), construct reliability was assessed using composite reliability (CR) and Cronbach's alpha, and construct validity was assessed using a couple of fit indices described below. The convergent validity was assessed using Average Variance Extracted (AVE). The AVE is identified by calculating the mean of the squared loadings of each item associated with a construct. The discriminant validity was assessed using the Discriminant Validity index summary (Henseler et al., 2015). The discriminant validity assessment is vital to confirm no items are highly correlated or redundant. A threshold of correlation higher than 0.85 considered any two exogenous structures are considered highly correlated and hence multicollinearity problem exists. In other words, discriminant validity ensures that the problem of multicollinearity does not exist (Awang, 2015; Rahlina et al., 2019).

Concerning reliability, instead of traditional Cronbach's alpha coefficient of reliability, Composite Reliability (CR) is an adequate reliability measure using SEM. There is also a set of indicators through which the proposed model is accepted or rejected in light of the study data, and they are called model fit indices. The latent construct is considered valid if its respective fit indices attained the following three model fit categories, which are Absolute Fit, Incremental Fit, and Parsimonious Fit (Byrne, 2001, 2010; Hair et al., 2010; Jackson et al., 2009; Kline, 2015; Meyers et al., 2005; West et al., 2012; Yuan et al., 2016; Schumacker & Lomax, 2016). The most

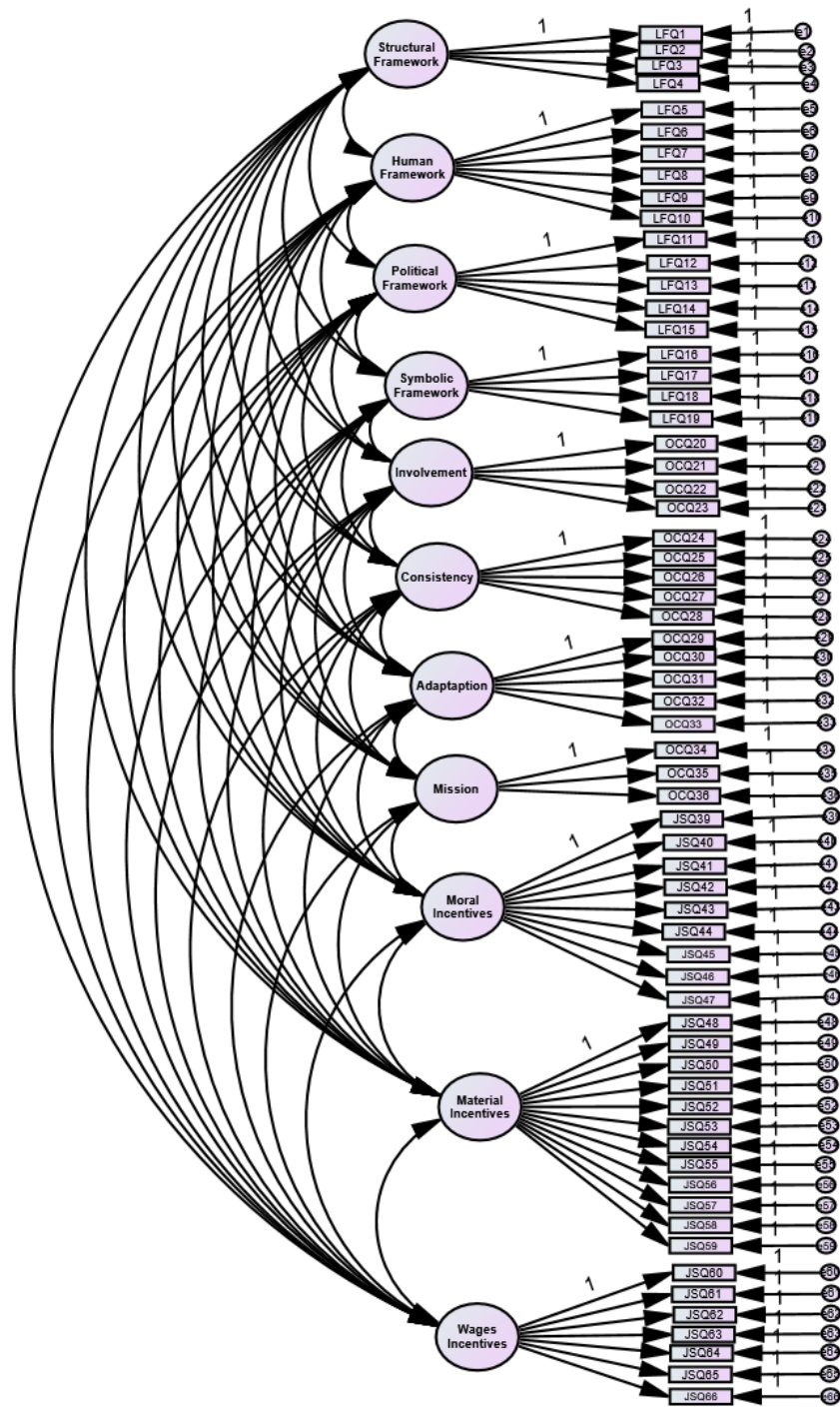
commonly used indices of model fit and their respective benchmark values are given in Table 4.13.

**Table 4.13:** Model Fit Indices and Their Respective Level of Acceptance

Category	Index	Level of acceptance	Reference
Absolute Fit Index	RMSEA	RMSEA < 0.1 (ideal < 0.08)	Byrne, 2001, 2010; Meyers et al., 2005
Incremental Fit Index	GFI	GFI > 0.85 (ideal if > 0.90)	Chau, 1997; Segars and Grover, 1993
	CFI	CFI > 0.85 (ideal if > 0.90)	Bentler, 1990; Hatcher, 1994
	TLI	TLI > 0.85 (ideal if > 0.90)	Byrne, 2001, 2010
	NFI	NFI > 0.85 (ideal if > 0.90)	Bentler and Bonett, 1985
Parsimonious Fit Index	CMIN/df	CMIN/ df < 5.0 (ideal if < 3.0)	Bentler, 1990; Hair et al., 2010

Note: RMSEA: Root Mean Square Error of Approximation; GFI: Goodness of Fit Index; CFI: Comparative Fit Index; TLI: Tucker Lewis index; NFI: Normed fit index; df: degrees of freedom.

Figure 4.1 shows the structure of the pooled-CFA measurement model for the latent constructs used in the current study. CFA was conducted with 5000 re-sampling with 95% bias-corrected confidence intervals. Pooled-CFA was conducted on latent constructs, considering the items retained from EFA as shown in the previous section.



**Figure 4.1:** The Pooled-CFA Structure of the Measurement Model of All Constructs

#### 4.7.1 Construct Validity of Latent Construct

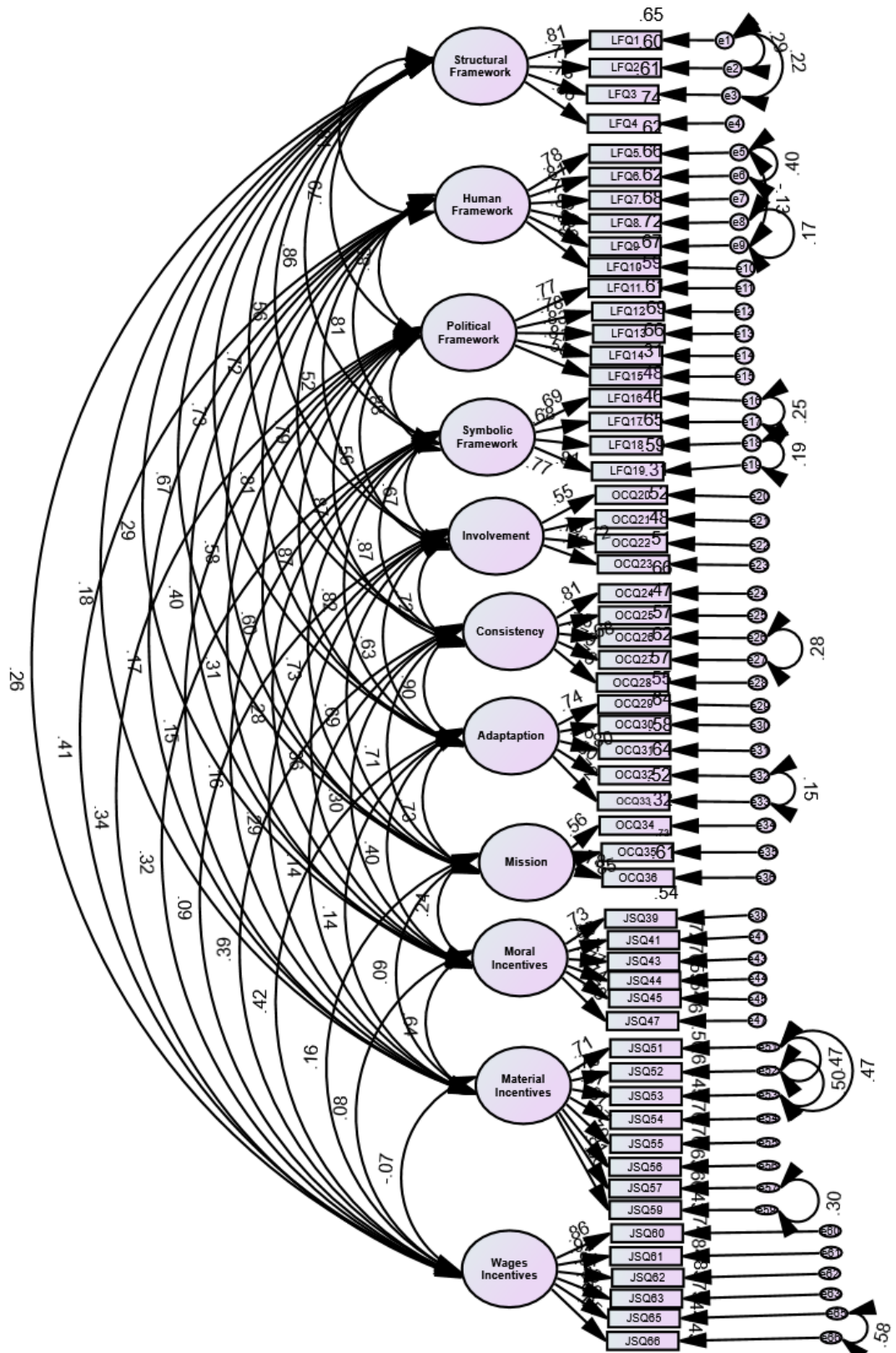
Construct validity for the measurement model of the latent construct in this study was assessed using the fit indices displayed earlier in Table 4.14. The findings of CFA revealed that the model fit indices of RMSEA ( $0.059 < 0.08$ ), GFI ( $0.915 > 0.90$ ), CFI ( $0.934 > 0.90$ ), TLI ( $0.923 > 0.90$ ), NFI ( $0.924 > 0.90$ ) and the ratio of Chi-square/df was 2.655, which is less than 5.0 indicating that measurement model achieved the construct validity of leadership framework. The covariance of the following pairs of error terms (e1, e2), (e1, e3), (e5, e6), (e5, e9), (e8, e9), (e16, e17), (e16, e19), and (e17, e19) to improve model fit indices since these pairs were highly correlated at 5% level of significance and thus reduce the chi-square test statistic (CMIN) as shown in Figure 4.2. Hence, leadership framework contains four factors which are structural framework (LFQ1, LFQ2, LFQ3, LFQ4), human resource framework (LFQ6, LFQ7, LFQ8, LFQ9, LFQ10), political framework (LFQ11, LFQ12, LFQ13, LFQ14, LFQ15), and symbolic framework (LFQ16, LFQ17, LFQ18, LFQ19) such that the standardized regressions (i.e., loadings) of these items underlying the measured construct were all greater than 0.50 as shown in Table 4.14 and Figure 4.2.

**Table 4.14: Model Fit Indices for Construct Validity**

Category	Index	Level of acceptance	Did the result meet the criteria	
Absolute Fit Index	RMSEA	0.059	Yes	
	Incremental Fit Index	GFI	0.915	Yes
		CFI	0.934	Yes
		TLI	0.923	Yes
		NFI	0.924	Yes
Parsimonious Index	Fit CMIN/df	2.230	Yes	

RMSEA: Root Mean Square Error of Approximation; GFI: Goodness of Fit Index; CFI: Comparative Fit Index; TLI: Tucker Lewis index; df: degrees of freedom.

\* Only most commonly model fit indices were reported.



**Figure 4.2:** The Result of Pooled-CFA of the Measurement Model of All Constructs

As for the mediating variable of organizational culture, the CFA showed that all items under each measured latent variable have loadings higher than 0.50, except item

no. 38 (OCQ38). It should be noted also that item no. 37 (OCQ37) was removed from the EFA process. Therefore, the measurement model of the construct is valid. Figure 4.2 shows the results of the CFA of the organizational culture. The researcher considered the covariance between the following error terms (e26, e27), and (e32, e33) as they are highly correlated to improve model fit. Thus, the latent construct of organizational culture has four factors which are involvement (OCQ20, OCQ21, OCQ22, OCQ23), consistency (OCQ24, OCQ25, OCQ26, OCQ27, OCQ28, OCQ29), adaption (OCQ30, OCQ31, OCQ32, OCQ33), and mission (OCQ34, OCQ35, OCQ36) in the final model. All items underlying each component have factor loading that is higher than 0.50 as indicated in Figure 4.2 and Table 4.14.

Finally, for the job satisfaction variable, the items retained from EFA were used in performing CFA. The findings show that all items included in the measurement model were statistically significant and their factor loadings exceed the cutoff value of 0.50 as displayed in Table 4.14. Furthermore, we take the covariance between the following error terms (e51, e53), (e51, e52), (e52, e53), (e57, e59), and (e65, e66) because they were highly correlated to improve model fit. The results of the CFA showed that job satisfaction constructs exhibited good construct validity since the estimated model fit indices met the acceptance criteria (i.e., exceeded the threshold value) for each index as exhibited in Table 4.14. Therefore, the latent construct of job satisfaction has three subscales, which are the moral incentives subscale containing 6 items (JSQ39, JSQ41, JSQ43, JSQ44, JSQ45, JSQ47), the material incentives subscale containing 8 items (JSQ51, JSQ52, JSQ53, JSQ54, JSQ55, JSQ56, JSQ57, JSQ59), and the wages incentives containing 6 items (JSQ60, JSQ61, JSQ62, JSQ63, JSQ65, JSQ66). All these items have factor loading greater than 0.50 as

shown in Figure 4.2 and Table 4.14.

#### 4.7.2 Convergent Validity and Composite Reliability of Each Construct

For the AVE was used to evaluate the convergent validity of the latent construct. A value of AVE that is larger than 0.50 indicates that convergent validity is attained (Awang, 2015). To assess composite reliability (CR), the CR value should be greater than a cutoff value of 0.6 for CR to be achieved (Kashif et al., 2015, 2016). Table 4.15 illustrates the AVE and CR values of all constructs obtained from CFA. The results revealed that all AVE and CR exceeded the threshold values of 0.50 and 0.60, respectively for all constructs measured in the current study. Therefore, the items measured their respective underlying constructs.

**Table 4.15:** The Average Variance Extracted (AVE) and Composite Reliability (CR) for All Constructs

Construct	Items	Factor loadings*	CR (> 0.60)	AVE (> 0.50)	Cronbach's Alpha
<b>Leadership framework</b>					
Structural framework	LFQ1	.808	0.881	0.649	0.806
	LFQ2	.772			
	LFQ3	.781			
	LFQ4	.860			
Human framework	LFQ5	.784	0.921	0.661	0.813
	LFQ6	.811			
	LFQ7	.788			
	LFQ8	.825			
	LFQ9	0.851			
	LFQ10	0.818			
<b>Table 4.15, continued</b>					
Construct	Items	Factor loadings*	CR (> 0.60)	AVE (> 0.50)	Cronbach's Alpha
Political framework	LFQ11	.766	0.867	0.570	0.930
	LFQ12	.780			
	LFQ13	.829			
	LFQ14	.812			
	LFQ15	0.553			
Symbolic framework	LFQ16	.691	0.827	0.545	0.738
	LFQ17	.681			
	LFQ18	.808			
	LFQ19	.766			
<b>Organizational Culture</b>					

Involvement	OCQ20	.554	0.768	0.503	0.709
	OCQ21	.719			
	OCQ22	.695			
	OCQ23	.717			
Consistency	OCQ24	.812	0.847	0.578	0.760
	OCQ25	.684			
	OCQ26	.758			
	OCQ27	.789			
	OCQ28	0.755			
Adaption	OCQ29	.742	0.876	0.587	0.766
	OCQ30	.801			
	OCQ31	.763			
	OCQ32	.798			
	OCQ33	0.719			
Mission	OCQ34	0.562	0.783	0.553	0.743
	OCQ35	0.854			
	OCQ36	0.783			
<b>Job Satisfaction</b>					
Moral incentives	JSQ39	.733	0.906	0.618	0.786
	JSQ41	.851			
	JSQ43	0.836			
	JSQ44	0.771			
	JSQ45	0.738			
	JSQ47	0.780			
Material incentives	JSQ51	.709	0.922	0.599	0.773
	JSQ52	.782			
	JSQ53	.672			
	JSQ54	.870			
	JSQ55	.870			
	JSQ56	.793			
	JSQ57	.813			
	JSQ59	.656			
Wages incentives	JSQ60	.859	0.925	0.676	0.822
	JSQ61	.915			
	JSQ62	.912			
	JSQ63	.891			
	JSQ65	.660			
	JSQ66	.653			

\* Factor loading are the standardized regression weights

#### 4.7.3 Discriminant Validity among Each Construct

The current study evaluated the discriminant validity to ensure that there are no redundant or correlated constructs. That is, two pairs of constructs are considered duplicates if they are substantially correlated (Hair et al., 2010). The discriminant validity index is estimated by putting the square root of the AVE in the diagonal of the correlation matrix between the constructs while the off-diagonal entries are the bivariate

correlations between the two constructs. The criteria for ensuring discriminant validity of each construct are that the square root AVE must be greater than the inter-construct correlations, and thus we can conclude that the model had achieved discriminant validity (Awang, 2015).

The results of the Fornell - Larcke discriminant validity are shown in Table 4 .16. The finding indicated that the square root of the AVEs on the diagonals of the matrix represented by bold values are greater than the bivariate correlations between constructs represented in the corresponding row and column values. These results suggested that constructs are strongly correlated to their respective items or indicators (Chin, 1998; Fornell & Larcker, 1981), and therefore show a good discriminant validity (Hair et al., 2017). Moreover, the exogenous constructs have a correlation that is less than 0.85 (Awang et al., 2015). Hence, the study demonstrated that the discriminant validity of all constructs was achieved.

**Table 4.16:** Summary of the Discriminant Validity Index for All Constructs

	SF	HF	PF	SMF	IC	CC	AC	MC	MRJ	MTJ	WJ
<b>LF</b>	<b>0.806</b>										
<b>HF</b>	.804	<b>0.813</b>									
<b>PF</b>	.785	.788	<b>.930</b>								
<b>SMF</b>	.795	.709	.724	<b>.738</b>							
<b>IC</b>	.563	.524	.557	.668	<b>.709</b>						
<b>CC</b>	.725	.728	.673	.684	.601	<b>.760</b>					
<b>AC</b>	.726	.715	.567	.629	.625	.727	<b>.766</b>				
<b>MC</b>	.667	.585	.602	.731	.689	.707	.733	<b>.743</b>			
<b>MRJ</b>	.290	.399	.308	.284	.355	.301	.399	.242	<b>.786</b>		
<b>MTJ</b>	.177	.166	.152	.159	.292	.143	.143	.086	.641	<b>.773</b>	
<b>MWJ</b>	.261	.405	.336	.316	.091	.393	.423	.157	<b>0.079</b>	-.073	<b>.822</b>

Bolded entries are the square root of AVE.

#### 4.8 Structural Equation Modeling (SEM)

According to Hair et al. (2006), analyzing the SEM entails two important steps, which are standard model assessment and evaluation of the structural model to

determine the value and direction of the relationships between all latent constructs. In this section, the structural equation model and its assessment using model fit indexes and the coefficient of squared multiple correlations to investigate the nature of the relationships between latent variables using job satisfaction as a dependent variable and leadership framework as an independent variable as well as check the mediation effect of organizational culture on this relationship. The results of the hypotheses testing will also be explained as well.

The current study implemented the SEM using the statistical package AMOS 26.0. Indeed, SEM is a useful tool to identify measurement errors and test the measurement model through CFA and structural model simultaneously using path analysis, which makes it superior to conventional factor analysis and regression models (Kline, 2016). Moreover, the SEM typically evaluates the dimensionality, validity, and reliability of every single construct as well as assesses model fit and parameter estimation simultaneously (Hair et al., 2010; Kline, 2016). Furthermore, the SEM approach can assess the direct and indirect effects linkage between dependent and independent variables, in addition, to assessing the hypothesized structural model and testing the hypotheses about the linkage between observed and latent variables (Byrne, 2016; Hoyle, 2012; Ringle et al., 2012).

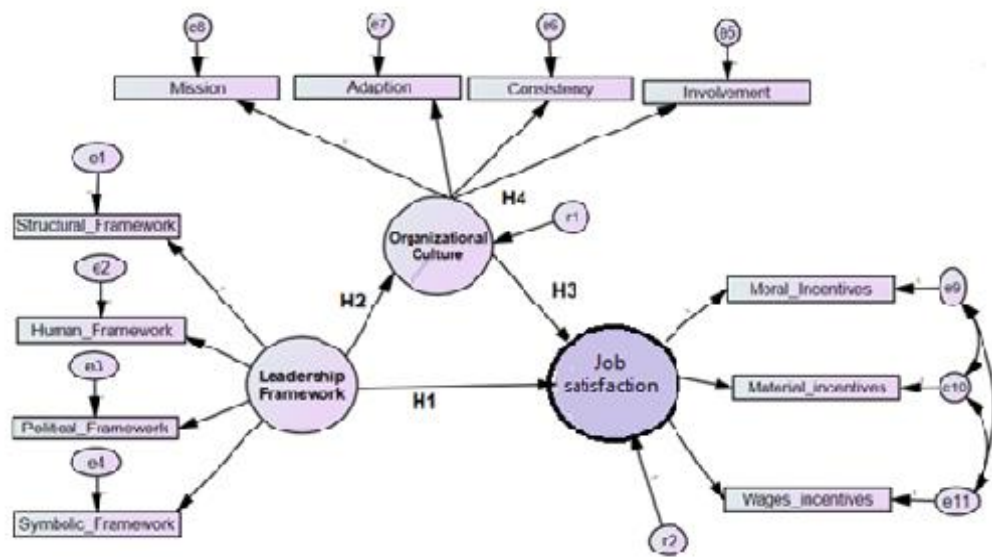
#### **4.8.1 The Confirmatory Factor Analysis (CFA) of the Pooled-CFA**

##### **Structural Model**

The current study needed to evaluate all of the measurement models of latent constructs for unique dimensionality, reliability, and validity before performing modelling the structural model and executing SEM (Awang, 2015; Hair et al., 2017).

The measurement model demonstrates how every construct is measured.

The theoretical framework of the present study contains one exogenous construct (i.e., leadership framework), one endogenous construct (i.e., job satisfaction), and one mediator construct (i.e., organizational culture). Figure 4.3 illustrates the theoretical framework of the measurement model, paths, and hypotheses that will be tested in this study.



**Figure 4.3:** The Research Framework of the Study Paths and Hypotheses

The hypothesis of the current study presented in Figure 4.3 is described in Table 4.17 with their respective statistical method used to test each one of them. Every construct explained and existed in the framework presented in Figure 4.3 was measured using a set of indicators in the questionnaire resulting from the EFA and confirmed by the CFA of every single construct. As mentioned earlier the exogenous construct contains four latent variables such that each latent variable has a number of indicators as shown previously in Figure 4.2. Likewise, the organizational structure was measured using four latent variables such that each one had a number of items in the study instrument resulting from EFA and confirmed by CFA as presented previously in Figure

4.2, respectively. Similarly, the job satisfaction construct was measured using three latent variables whereby each variable has a certain number of indicators in the study questionnaire as found earlier in EFA and by CFA in Figure 4.2.

**Table 4.17: Hypotheses of the Current Study**

No.	Hypothesis
<b>H1</b>	The effect of leadership framework on police officers' job satisfaction is statistically significant.
<b>H2</b>	The effect of leadership framework on police officers' organizational culture is statistically significant.
<b>H3</b>	The effect of organizational culture on police officers' job satisfaction is statistically significant.
<b>H4</b>	Organizational culture significantly mediates the linkage between leadership framework and officer's job satisfaction

Each construct was then measured using pooled CFA and by performing data imputation in AMOS 26.0. The scientific literature suggested that pooled CFA could provide a more efficient measurement of the proposed model as well as its ability to address the identification problem (Afthanorhan et al., 2014). Moreover, Awang (2015) indicated that all constructs measured and involved in a certain study should be evaluated together at once. Figure 4.5 presents the pooled-CFA model that was measured and assessed in this study.

The results of the CFA of the measurement model illustrated in Figure 4.3 are shown in Figure 4.5 and contain factor loadings and correlations between constructs. It seemed that all factor loadings exceeded the threshold point of 0.50. The model best fits the data since all model fit indexes passed their respective threshold criteria exhibited earlier in Table 4.14. Furthermore, the problem of multi-collinearity does not exist because the correlations between any two constructs did not exceed the benchmark of 0.85 (Afthanorhan et al., 2017, 2019).

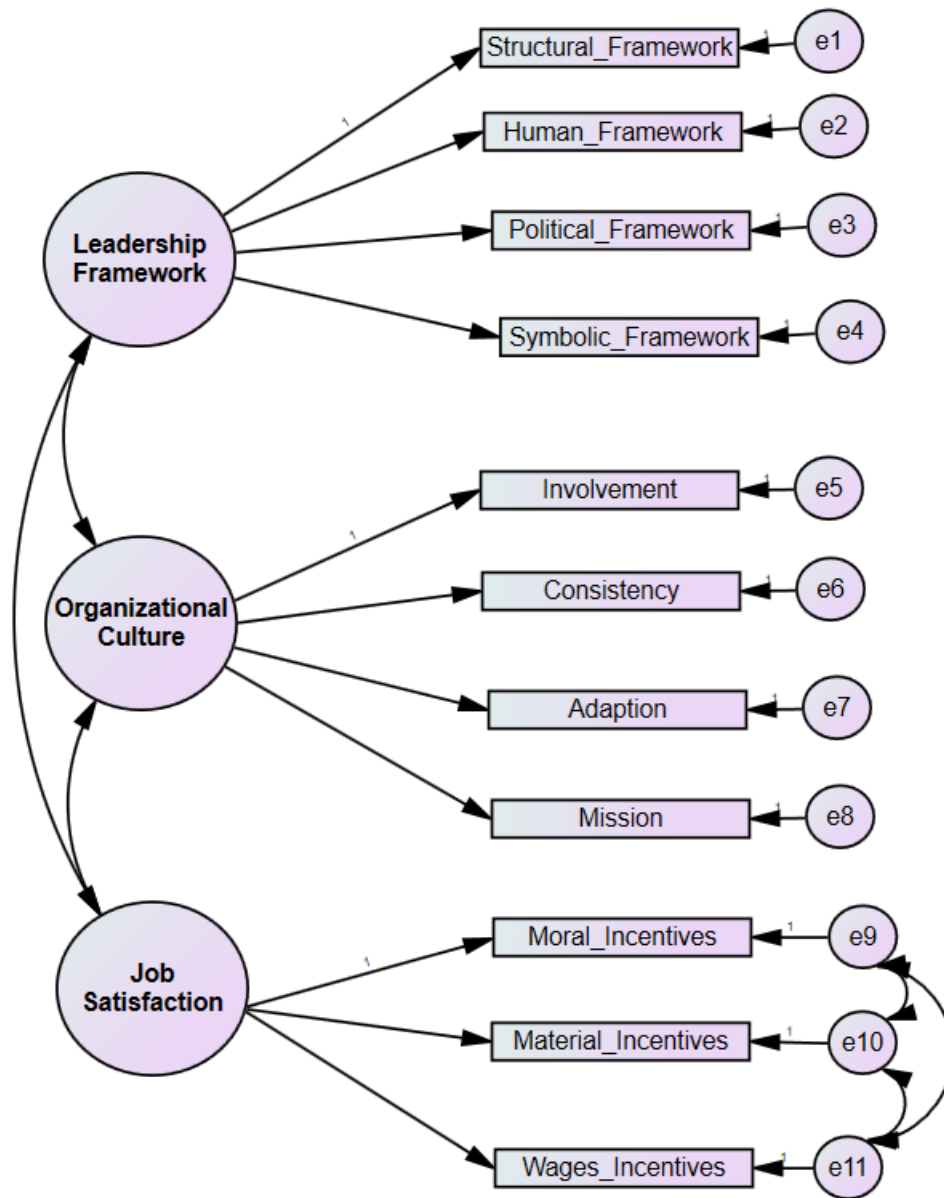
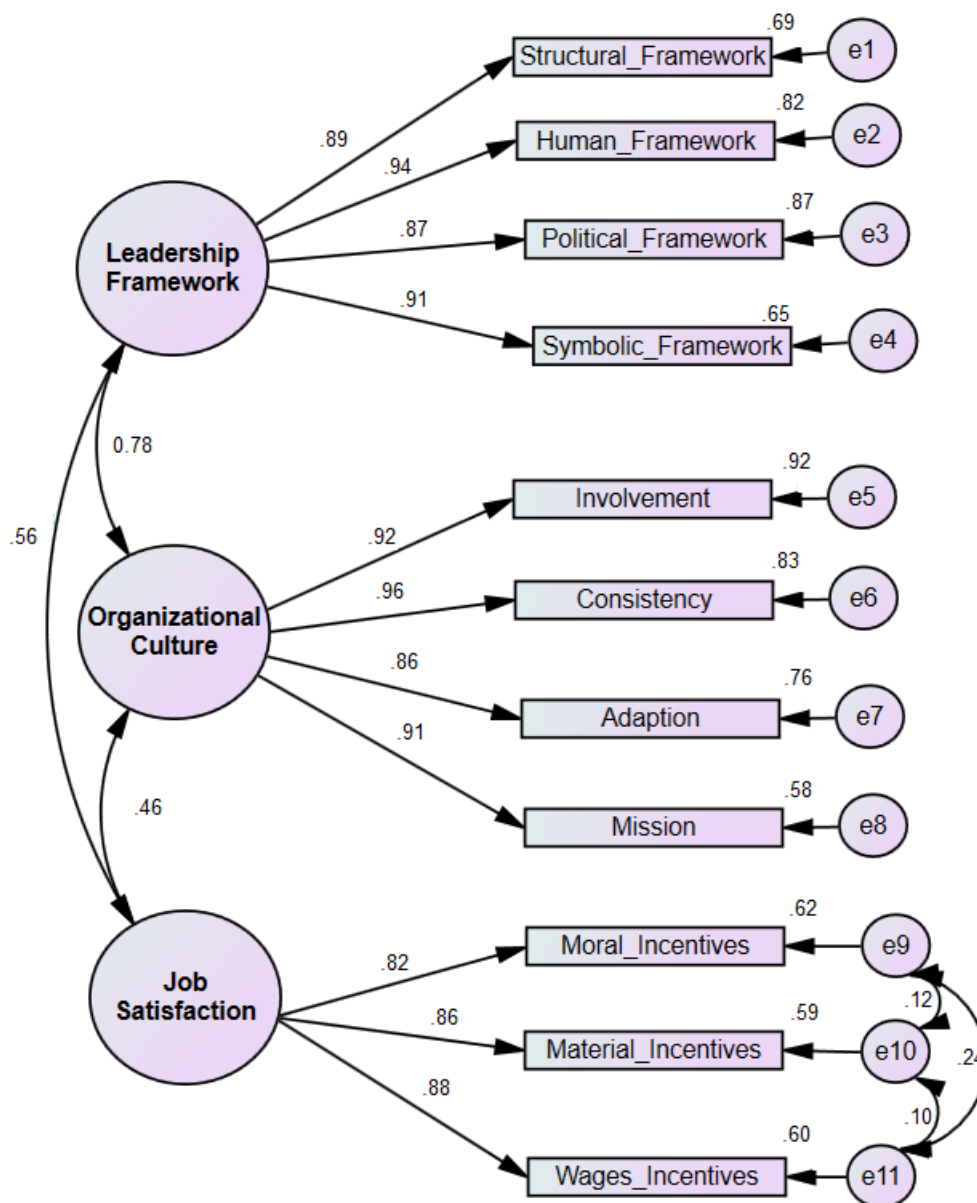


Figure 4.4: The Latent Constructs Along with Their Respective Items

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CMIN/df = 2.091  
 GFI = 0.913  
 CFI = 0.924  
 TLI = 0.914  
 NFI = 0.928  
 RMSEA = 0.053

**Figure 4.5:** Summary of the Results of the Pooled-CFA for the Structural Model

#### 4.8.1.1 Measurement Model Assessment (Pooled-CFA Model)

The resulting pooled-CFA model was assessed for its reliability and validity.

Reliability was assessed using indicator reliability measured by factors loadings and

using composite reliability (CR). Construct validity was assessed using model fit indexes (CMIN/df, GFI, CFI, TLI, NFI, RMSEA) as well as convergent validity measured by AVE, and discriminant validity measured by discriminant validity index. The process of model assessment is detailed in the following subsections.

#### 4.8.1.2 Indicator and Construct Reliability (Pooled-CFA Model)

The current study measured indicator reliability based on factor loading. Factor loading for every indicator should surpass the cutoff point of 0.50 (Hair et al., 2017). Construct reliability was measured using CR and the internal consistency reliability coefficient, namely Cronbach's alpha (Hair et al., 2017; Kline, 2016, Sekaran & Bougie, 2012). Accordingly, CR must exceed 0.60 or 0.70 to ensure construct reliability while the acceptable reliability coefficient of Cronbach's alpha must surpass the cutoff value of 0.70 (Gefen et al., 2000; Kashif et al., 2016; Kline, 2016). The factor loading, CR, Cronbach's alpha, and AVE are presented in Table 4.18.

The findings showed that all indicators have factor loading that exceeds the threshold value of 0.50 as suggested by Hair et al. (2017). This indicates that all indicators meet the requirement of indicator reliability and have much in common to capture the construct. Furthermore, Cronbach's alpha for each construct was higher than the acceptable value of 0.70 indicating that the indicators captured the construct and reflected a higher internal consistency reliability (Hair et al., 2017; Sekaran & Bougie, 2012). This was also confirmed by the CR that were all greater than the threshold points of 0.60 (Kline, 2016; Hair et al., 2017).

**Table 4.18:** Factor Loading, Composite Reliability, and Average Variance Explained of the Pooled-CFA Measured Constructs

Construct	Items	Factor loading	CR (> 0.60)	Cronbach's Alpha (> 0.70)	AVE (> 0.50)
-----------	-------	----------------	-------------	---------------------------	--------------

Leadership framework	Structural framework	0.891	0.948	0.932	0.820
	Human framework	0.942			
	Political framework	0.873			
	Symbolic framework	0.914			
Organizational culture	Involvement	0.923	0.954	0.942	0.837
	Consistency	0.961			
	Adaption	0.863			
	Mission	0.910			
Job satisfaction	Moral incentives	0.822	0.891	0.885	0.732
	Material incentives	0.863			
	Wages incentives	0.881			

#### 4.8.1.3 Convergent Validity and Discriminant Validity (Pooled-CFA Model)

The convergent validity of the current constructs in this study was established using the AVE index. To ensure convergent reliability, the AVE must exceed the threshold value of 0.50 (Awang et al., 2017). AVE was presented in Table 4.18. The results showed that all latent constructs in the pooled-CFA model attained convergent validity.

Moreover, the discriminant validity of the pooled-CFA model was established by the discriminant validity index based on Fornell-Larcker criteria that ensure that there are no redundant variables in the model. Accordingly, the square root of AVE must surpass all pairwise correlations between any two constructs. Table 4.19 presents the square root of AVE on the diagonal and in bolded text and the off-diagonal entries are the correlations between two latent constructs. The findings showed that the square root of AVE exceeded the correlations between two constructs either in the corresponding row or column indicating that constructs are strongly correlated with their respective indicators as opposed to other model constructs (Chin, 1998; Fornell & Larcker, 1981),

Hence, the current study showed that discriminant validity of all constructs has been achieved.

**Table 4.19:** Result of Discriminant Validity by Fornell-Larcker Criterion

<b>Latent constructs</b>	<b>Leadership framework</b>	<b>Organizational culture</b>	<b>Job satisfaction</b>
Leadership framework	<b>0.906</b>		
Organizational culture	0.782	<b>0.915</b>	
Job satisfaction	0.561	0.462	<b>0.856</b>

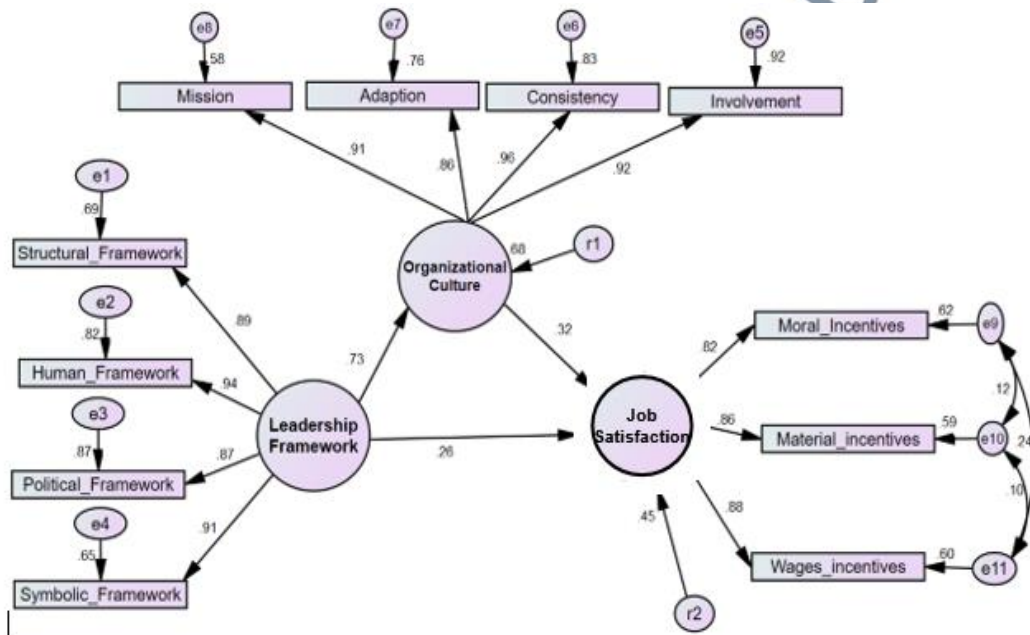
Furthermore, the construct validity was also confirmed by model fit indexes, which were attached to Figure 4.5. All model fit indexes exceeded the threshold values. As such, RMSEA was 0.053, which is lower than 0.08, the incremental model fit indices of GFI = 0.913, CFI = 0.924, TLI = 0.914, and NFI = 0.928 were all higher than 0.90. Finally, the CMIN/df = 2.091, which is less than 5.0. As a result, we conclude that the model presented in Figure 4.5 achieved all indicator and construct validity requirements.

#### **4.8.2 Structural Equation Model Assessment (Hypotheses Testing)**

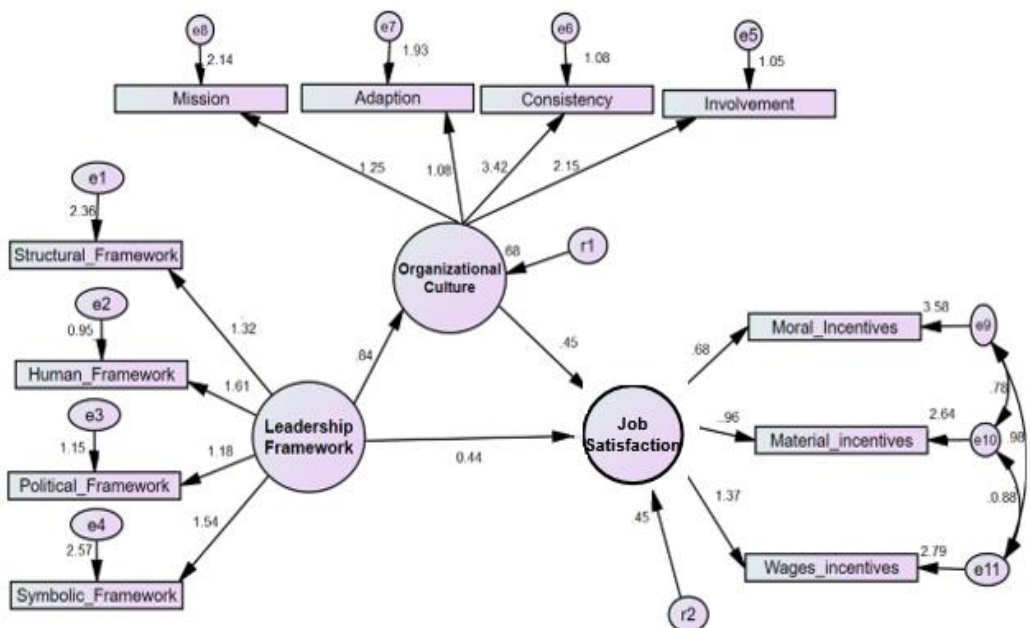
After ensuring the validity and reliability of the model in the CFA, the researcher can now perform SEM and test the hypotheses postulated in Figure 4.4 and detailed in Table 4.10 assuming that the measurement models of all latent constructs utilized in the current study were validated (Awang, 2015, Hair et al., 2006). This study must then compile these latent constructs into the hypothesized framework of the structural model and execute SEM to estimate the regression path coefficients, standardized regression path coefficients, coefficient of multiple determination (R-squared) as well as the corresponding t-values using bootstrapping approach with a sample of 356 samples

replications and 95% bias-corrected confidence interval (Awang et al., 2017). Hence, the researcher can investigate the proposed hypotheses of the current study.

Figure 4.6 shows the results of the estimated standardized regression path coefficients obtained from implementing the SEM. On the other hand, Figure 4.7 shows the results of the estimated regression path coefficients from the same SEM.



**Figure 4.6:** The Estimated Standardized Regression Path Coefficients of the Structural Model



**Figure 4.7:** The Estimated Regression Path Coefficients of the Structural Model

#### 4.8.2.1 Assessment of Model Satisfaction using R-squared

The findings of this study revealed that the measurement models performed well based on the evaluation of path coefficients, as shown in Table 4.20, with the R-squared value of 0.678 for the model of organizational culture, implying that the leadership framework can significantly explain 67.8% of the variance in organizational culture. The R-squared for the job satisfaction model was 0.447, showing that organizational culture substantially explained 44.7% of the variance in job satisfaction. As a result, the models demonstrated moderate explanatory power and adequate predictive ability (Hair et al., 2017).

**Table 4.20:** Results of the Coefficient of Multiple Determination (R-squared)

Endogenous construct	Exogenous construct	R <sup>2</sup>	Explanation
Organizational culture	Leadership framework	0.678	67.8% of the variance in organizational culture explained by leadership framework
Job satisfaction	Organizational culture	0.447	44.7% variance in job satisfaction explained by organizational culture

#### 4.8.2.2 Assessment of Regression Path Coefficients

The current study established the assessment path coefficients using the estimated regression path coefficients estimated from the structural model shown in Figure 4.6. Table 4.21 shows the estimated standardized regression path coefficients from exogenous constructs on the endogenous constructs along with their respective standard errors (SE), critical t-values, p-values, and bootstrapping confidence intervals (BCI). It should be noted that the researcher interpreted the results based on the standardized regression coefficients and judged the statistical significance by a p-value of less than 0.05 and the critical value (t) that must be greater than 1.96. The findings showed that

that there is a statistically significant and positive effect of leadership framework on job satisfaction ( $\beta = 0.264$ ,  $t = 9.103 > 1.96$ ,  $p\text{-value} < 0.001$ ). That is, a one-point increase in the leadership framework score will lead to an increase in average job satisfaction by 0.264 points. Therefore, we accept the first hypothesis (H1) and addressed our first research question. Hence, we conclude that leadership framework has positive effects on job satisfaction among Palestinian police officers.

The current finding of this thesis is congruent with some previous studies (Al-Omari et al., 2022; Lian & Tui, 2012; Menon, 2014; Zainudin et al., 2022). For example, a study by Zainudin et al. (2022) showed that heads of Malaysian polytechnic department who practiced human resource leadership had advanced skills in using human resource leadership to elevate satisfaction levels by controlling the administrative problems confronting the polytechnic department. Another study by Al-Omari et al. (2022) indicated that there were significant positive relationships between intrinsic and extrinsic job satisfactions and leadership frameworks (i.e., structure, human, political, and symbolic). Likewise, leadership behaviour considered a significant factor that affects employees' job satisfaction (Lian & Tui, 2012; Menon, 2014).

The results revealed that there is a direct and statistically significant effect of organizational culture on job satisfaction ( $\beta = 0.319$ ,  $t = 9.667 > 1.96$ ,  $p\text{-value} < 0.001$ ). This result elucidated that the average score of job satisfaction will increase by 0.319 points for a one unit increase in organizational culture. Thus, we accept the second hypothesis and answered the second research question. Hence, the study concluded that organizational culture has positively affected Palestinian police officers' job satisfaction, which is in line with previous studies (Dobrini & Fabac, 2021; Korner et al., 2015; Marques-Quinteiro et al., 2019; Ternes et al., 2018). For instance, Ternes et

al. (2018) and Marques-Quinteiro et al. (2019) concluded that the effect of adaptation as an organizational culture dimension on job satisfaction was evident. Another study conducted by Korner et al. (2015) revealed that mission, strategy, structure, leadership, and human resource practices are all important factors of organizational culture. A strong culture in an organization helps employees achieve their goals and tasks while remaining satisfied in their jobs. Furthermore, Dobrini and Fabac (2021) suggested that employees' awareness of the organization's mission and vision had a positive impact on their job satisfaction. Perhaps this reflects the organization's culture, which promotes positive values that are embedded in the vision and mission.

Furthermore, the findings of this also showed that leadership framework has significantly and positively affected organizational culture ( $\beta = 0.727$ ,  $t = 26.926 > 1.96$ ,  $p\text{-value} < 0.001$ ). This indicates that when the leadership framework score goes up by one unit, the average organizational culture score will increase by 0.727 units. Therefore, this result led to the acceptance of the third hypothesis and answered the third research question. Hence, the study concluded that leadership frameworks has positively affected organizational culture among Palestinian police officers.

This result is congruent with several previous literature (Bolman and Deal, 2017; Garcia et al., 2020; Mahat et al., 2021; Zeynep et al., 2014). For example, a study by Mahat et al. (2021) focused on the importance of taking care of structural and human leadership frameworks by making the necessary structural changes that may be an early and important intervention to change the negative organizational culture. Moreover, the results of the current study were consistent with dramatic and institutional theory, which are covered in the book by Bolman and Deal (2017). These two theories demonstrated how organizational structures and activities such as planning, evaluation, and decision-making are frequently more important because they demonstrate the value of what is done. Besides, Zeynep et al. (2014) explored the

correlation between four leadership frameworks and organizational culture. According to the findings human resource frame is the most preferable leadership style besides symbolic frame. Mission culture is the dominant organizational culture of the primary schools. And there is a relationship between LOQ and organizational culture.

Additionally, Garcia et al. (2022) emphasized the significance of the symbolic framework and its role in shaping organizational culture and climate by leaders who use myths, metaphors, stories, tales, rituals, and celebrations to symbolically motivate followers in institutions to get things done.

**Table 4.21:** Summary of the Results of Standardized Regression Coefficients and Hypotheses

Hypothesis	Path	Beta* ( $\beta$ )	SE	CR ( <i>t</i> )	<i>p</i> - value	BCI		Result
						LL	UL	
H1	LF → JS	0.264	0.029	9.103	0.000	0.207	0.321	Supported
H2	OC → JS	0.319	0.033	9.667	0.000	0.245	0.452	Supported
H3	LF → OC	0.727	0.027	26.926	0.000	0.628	0.781	Supported

LF: Leadership framework; OC: organizational culture; JS: job satisfaction; SE: standard error; CR: critical *t* value; BCI: bootstrap confidence interval; LL: lower limit; UL: upper limit

\*: regression weight or regression path coefficient

#### 4.8.2.3 Assessment of Mediating Effect

The current research has proposed the hypothesis that organizational culture influences the relationship between leadership framework and job satisfaction among police officers in Palestine (H4) to test the effect of organizational culture as a mediator. To do so, a bootstrapping approach with 356 re-sampling and a 95% bias-corrected confidence interval was executed (Hair et al., 2017). Scientific literature established that the mediating effect exists when the indirect effect (i.e.,  $a \times b$ ) is statistically significant (Hair et al., 2017; Nitzl et al., 2016).

Table 4.22 shows the mediation analysis results and Table 4.22 details the bootstrap analysis of the mediation effect. The findings of this study demonstrated that there is a significant indirect effect of leadership framework on job satisfaction through organizational culture ( $a \times b = 0.232$ ,  $t = 4.258$ ,  $p\text{-value} = 0.026 < 0.05$ ), which means that organizational culture has a significant mediating role on the linkage between leadership framework and job satisfaction among police officers in Palestine. Considering that the direct and indirect effects are statistically significant, the study concluded that organizational culture has a partial mediation effect on the relationship between leadership framework and job satisfaction. Figure 4.8 shows the procedure for testing the mediation effect.

This finding is consistent with various previous findings (Kang & Oh, 2017; Metwally et al., 2019; Sabuhari et al., 2020; Shirini & Xenikou, 2022; Tsai, 2011; Tore & Cetin, 2022; Pradhan et al., 2017). For example, a study by Tsai (2011) which showed that officials usually modify their leadership behaviour to accomplish the organization's mission, which may affect employee job satisfaction. Sabuhari et al. (2020) found an indirect relationship between human resource flexibility and employee performance via adaptation to organizational culture, as well as an effect of efficiency on employee performance via job satisfaction as a mediating variable.

Furthermore, Shirini and Xenikou (2022) confirmed the importance of organizational culture as a mediator in influencing the relationship between leadership and job satisfaction. That is, organizational culture had a significant and positive influence on the relationship between transformational leadership and organizational effectiveness. Additionally, Tore and Cetin (2022) showed that organizational culture fully mediates the effect of authentic leadership on organizational citizenship behaviour. Similarly, Metwally et al. (2019) demonstrated that ethical leadership

increases employees' willingness to change mediated by an effective corporate culture. Furthermore, Pradhan et al. (2017) emphasized that organizational culture mediates transformational leadership and psychological empowerment. A study by Kang and Oh (2017) showed that organizational culture significantly mediated the relationship between emotional/core leadership and organizational performance including work satisfaction and organizational commitment). Nonetheless, Al-Maslamani and Hassan's (2021) showed that there is a negative influence of organizational culture as a mediating role on the relationship between leadership framework and job satisfaction because culture can sometimes generate consequences that inhibit employees and drive them from succeeding, which is not congruent with this study.

**Table 4.22:**Results of Degree of Mediation

Hypothesis	Linkage	Effect			Result
		Direct c'	Indirect a × b	Total c = (c' + a×b)	
H4	LF → OC → JS	0.264*	0.232*	0.496*	Partial mediation
<i>p</i> -value		0.000	0.026	0.007	

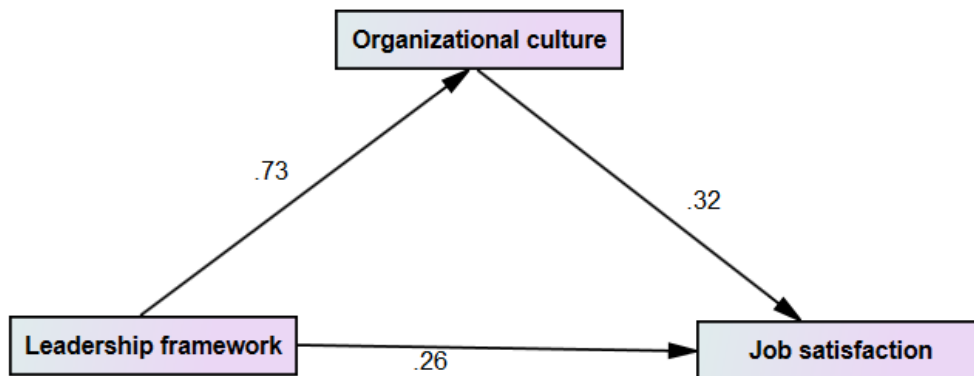
LF: Leadership framework; OC: organizational culture; JS: Job satisfaction; S.E.: Standard error; C.R.: critical t value; BCI: bootstrap confidence interval; L.L.: lower limit; U.L.: Upper limit.

\*: Significant at 5% level of significance.

**Table 4.23:**Bootstrap Results of Mediation Analysis

Hypothesis	Relationship effect	Indirect effect	S.E.	C.R. (t)	P-value	BCI		Result
						L.L.	U. L	
H4	LF → OC → JS	0.232	0.062	4.258	0.026	0.208	0.426	supported

LF: Leadership framework; OC: organizational culture; JS: Job satisfaction; S.E.: Standard error; C.R.: critical t value; BCI: bootstrap confidence interval; L.L.: lower limit; U.L.: Upper limit.



- The indirect effect  $a = .73$  (Sig.)
- The indirect effect  $b = .32$  (Sig.)
- Total indirect effect  $a \times b = (.73 \times .32) = .23$  (Sig.)
- The direct effect  $c' = .26$  (Sig.)
- The total effect  $c = c' + (a \times b) = .26 + .23 = .49$  (Sig.)
- There is a mediation effect because both  $a$  and  $b$  are statistically significant.
- The mediation type is partial because the direct effect ( $c$ ) is also statistically significant.

**Figure 4.8:** Testing the Mediation Effect of Organizational Culture

#### 4.9 Chapter Summary

The current chapter began with a data analysis overview, response rate, description of the data collected, and preliminary data analysis including reliability test as well as checking model assumption of normality, multi-collinearity, and correlations. It then focused on the EFA of the measured constructs. This was followed by implementing CFA for the latent variables and checking the measurement model for its reliability and validity. The resulting construct was used to build the pooled-CFA measurement model and checked its reliability and validity as well as assessment of the structural model. The measurement model evaluation process included indicator and constructs' reliability and construct analysis. In the meantime, the structural model was evaluated using the estimation of the path coefficients, and checked its performance using the R-squared coefficient of multiple determination. The mediation effect was

also assessed and the hypotheses testing was also addressed. Finally, a comparison of the study findings with previous research was also reported.

The next chapter summarizes and discusses the findings of the study found in this chapter, which indicate the most important studies that supported and confirmed the direct impact of leadership frameworks on job satisfaction, as well as studies that agreed with this study regarding the direct impact of organizational culture on raising the level of job satisfaction, and also dealt with many studies that demonstrated the mediating role of organizational culture in the relationship between leadership frameworks and job satisfaction.

Also, it discusses the scholarly input and contribution to the current body of literature, the study's implications and some potential limitations, and a suggestion for future research considerations as well as some potential limitations.