

CHAPTER 4

DATA ANALYSIS

4.1 Introduction

This Chapter is devoted to showing the data analysis performed to test the study hypothesis. The First Section of this chapter, an introduction outlining its components, kicks things off. The Second Section discusses the response rate obtained after the data collection phase. The Third Section describes the respondents' characteristics. The Fourth Section provides a detailed description of the preliminary data analysis and assumption assessment required before conducting the confirmatory factor analysis (CFA). The Fifth Section is devoted to showing the first-order CFA results to ensure construct validity and reliability of each latent construct and the full measurement model. The Sixth Section shows the second-order CFA results of employee performance. The Seventh Section represents the hypothesized structural model and its fit measures. The Eighth Section addresses the hypotheses testing and evaluates the direct and indirect effects. The Last Section concludes the Chapter.

4.2 Response Rate

The questionnaire has been distributed physically to participants using a paper-based module. In this study, the researcher distributed a total of 380 questionnaires to the selected participants according to the sampling framework. However, the total number of returned questionnaires was 377, yielding a response rate of 99.2%. Out of the received questionnaires, only 375 were subjected to analysis since the remaining were deemed incomplete and unreturned, leading to their exclusion from the analysis.

Consequently, the adjusted response rate was 98.7%. The distribution of the questionnaire and response rate are detailed in Table 4.1.

Table 4.1: Response Rates of the Final Study

Response Rate	Respondents No
Questionnaires Distributed	380
Returned	377
Not Returned	3
Returned and Unusable	2
Returned and Usable	375
Response Rate	98.7%

4.3 Respondent Profile

In this sub-section, the descriptive statistics of the respondents' demographic profile of respondents that are shown in Table 4.2. Of 375 respondents, there were 317 (84.5%) males and 58 (15.5%) females. Most of them were aged from 30 to 40 years ($n = 220$, 58.7%) while 22.9% of them were aged less than 30 years, and 18.4% of them were aged above 40 years. The distribution of the sample according to the academic qualifications of respondents shows that 46.6% and 46.4% of them had high school or lower and bachelor's degrees, respectively while 8.0% of them had MA or Ph.D. degrees.

The distribution of the sample by military rank shows that 45.9% ($n = 172$) of respondents were policemen to first assistants, 33.9% ($n = 127$) were lieutenants to captains, and 20.3% ($n = 76$) were majors or above. As for years of experience, more than one-half of them had 11 to 20 years ($n = 221$, 58.9%) while 21.3% ($n = 80$) of them had 0 to 10 years and 19.7% of them had more than 20 years of experience ($n = 74$).

Table 4.2: Descriptive Statistics of Participants' Characteristics

Characteristics	N	%
Gender		
Male	317	84.5
Female	58	15.5
Age (years)		
Less than 30	86	22.9
From 30 to 40	220	58.7
Above 40	69	18.4
Academic qualification		
High school or above	171	45.6
Bachelor's degree	174	46.4
MA or Ph.D.	30	8.0
Military Rank		
Policeman to the first assistant lieutenant to captain	172	45.9
major and above	127	33.9
	76	20.3
Experience (years)		
From 0 – 10	80	21.3
From 11 – 20	221	58.9
Above 20	74	19.7

4.4 Preliminary Data Analysis

Before conducting factor analysis, it is important to ensure that assumptions have been met. Such assumptions include sampling adequacy, outliers, normality assumption, collinearity of indicators in each factor, and multicollinearity. This study extensively addressed these issues in the following sub-section.

4.4.1 Assessment of Sampling Adequacy and Collinearity

The first step of factor analysis is to ensure that the data suited the measurement model and check whether the data is appropriate for factor analysis. Sampling adequacy for each variable in the measurement model can be tested using the Kaiser–Meyer–Olkin (KMO) test. It is a measure of the portion of the variation in variables that might be shared variance, whereby larger proportions lead to a higher value of the KMO, and thus the data is considered sufficient to conduct. It also examines whether there are sufficient items that can form and predict each factor in the questionnaire

(Joseph Hair, Anderson, Babin, & Black, 2010; Kline, 2014). The values KMO test lie between 0 and 1 such that values closer to 1 are considered 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. In this study, the values of KMO ranged from 0.842 to 0.942, which signifies the sampling adequacy and an indicative of factor analysis suitability as shown in Table 4.2.

Another assumption that must be met is the collinearity of indicators measuring their underlying construct or factor. This can be tested using Bartlett's test which examines whether the measured items under each factor are highly correlated. A significance value of less than 0.05 is considered a significant indication of highly correlated items underlying each factor (Joseph Hair et al., 2010; Khan & Mohiya, 2020; LoVullo & Matson, 2009; Osborne, Costello, & Kellow, 2014). In this study, the significance values of Bartlett's test are less than 0.001, which provides substantial evidence that items of each construct are highly correlated as shown in Table 4.3.

Table 4.3: KMO and Bartlett's Tests

Construct	No. of items	KMO	Bartlett's Test of Sphericity		
			Approx. Chi-Square	Df	Sig.
TE	10	0.926	2442.605	45	0.000
TS	10	0.894	1945.804	45	0.000
LV	10	0.842	1424.645	45	0.000
CCT	10	0.851	2472.766	45	0.000
EXP	10	0.942	2457.492	45	0.000
QW	10	0.908	2124.381	45	0.000
EI	10	0.921	1866.313	45	0.000
Full model	70	0.842	38947.555	1830	0.000

Notes: TE: Training environment; TS: Training strategy; LV: Leader's vision; CCT: Culture of creative thinking; EXP: Experience; QW: Quality of work; EI: Employee innovation.

4.4.2 Assessment of Outliers

Another important assumption in multivariate analysis deals with outliers, which are the data points that differ considerably from other observations (Byrne, 2010). The presence of outliers in the data can influence the accuracy of the estimation and thus lead to misleading results (Whittaker & Schumacker, 2016). Cao et al. (2017) define outlier observation as an extreme case of one or two variables. Furthermore, extreme cases should be discarded from analysis to obtain accurate SEM results (Jakhetiya et al., 2018).

Accordingly, outliers can be tested using Mahalanobis Distance (MAH) and Cook's Distance (George & Mallery, 2019; Pallant, 2020). George and Mallery (2019) suggested that an outlier case is considered when the squared MAH value is greater than the critical Chi-square value (90.531 at 0.05 level of significance and 100.425 at 0.01 level of significance). 8 cases were detected (i.e., case numbers: 18, 180, 241, 274, 292, 311, 323, 346) that have squared MAH higher than the critical Chi-square value. However, before we decide to discard these items, we have estimated Cook's distance to identify outlier cases as proposed by George and Mallery (2019) and check if these cases have an unusual and unclear influence on the data. The criteria to assess outlier cases using Cook's distance suggests that any case that has Cook's distance value that exceeds 1 is considered to have serious problems with the data (George & Mallery, 2019). Table 4.4 shows the Cook's Distance values, which indicates that the maximum value is 0.7604, which is lower than 1. Hence, the researcher decided to retain these 8 cases since they do not have serious problems (Pallant, 2020).

Table 4.4: Descriptive Statistics of Cook's Distance

	N	Min	Max	Mean	Std. Deviation
Cook's Distance	375	0.00000	0.76035	0.0063258	0.04742650

4.4.3 Assessment of Normality

This study needs to assess the normality of each latent construct, which is the backbone of multivariate analysis. Normality assumption could be assessed using the measures of skewness and kurtosis. Byrne (2016) suggested that the data variables might be considered normally distributed if the skewness values of each item ranged from -2.0 to +2.0 and kurtosis values ranged from -7.0 to +7.0. Nonetheless, values of skewness ranging from -3.0 to +3.0 are acceptable to be normally distributed (Awang et al., 2018). The skewness values in this study ranged from -1.075 to -0.966 as well and kurtosis values ranged from 0.708 to 1.229, showing indicative evidence that the normality of the data variables has been attained. Table 4.5 shows the estimates of skewness and kurtosis of the study variables in each construct, which shows that the normality assumption has met the recommended cut-off values. Table A.1 in the Appendix shows the skewness and kurtosis of each indicator individually and shows that all indicators are normally distributed.

Table 4.5: Assessment of Normality for All Latent Constructs

Construct	No. of items	Min	Max	Skew	Kurtosis
TE	10	1.00	5.00	- 1.074	0.914
TS	10	1.00	5.00	- 1.032	1.224
LV	10	1.00	5.00	- 1.006	1.051
CCT	10	1.00	5.00	- 1.028	1.229
EXP	10	1.00	5.00	- 0.966	0.460
QW	10	1.00	5.00	- 1.075	1.072
EI	10	1.00	5.00	- 0.978	0.708

TE: Training environment; TS: Training strategy; LV: Leader's vision; CCT: Culture of creative thinking; EXP: Experience; QW: Quality of work; EI: Employee innovation

In the meantime, the sample size could also affect the normality assumption, especially low sample sizes of less than 50 or 30 participants, and the results would be not accurately reproduced if the data variables were not normally distributed (Hair et

al., 2010). The sample size of the current study is 375 which is greater than 200 indicating that any departure from normality could not affect the results. Therefore, this study utilized a large sample size, and thus the effect of the non-normality of the data was reduced.

4.4.4 Assessment of Multicollinearity

One of the most important assumptions of multivariate analysis is that the latent constructs should not be highly correlated. If they are highly correlated, then the problem of multicollinearity arises indicating that the correlated latent variables are redundant and might lead to inconsistent results (Awang, Afthanorhan, & Asri, 2015). Before reporting CFA results, therefore, it is important to confirm that all latent constructs are not highly correlated (Joseph Hair et al., 2010). Multicollinearity could be assessed using the bivariate correlations of any two independent constructs in the measurement model of the CFA. As a rule of thumb, the bivariate correlation coefficient between any two independent latent constructs that is less than 0.85 demonstrates that there is no issue regarding multicollinearity, otherwise, the problem exists, and thus the two exogenous constructs are considered redundant and must be removed one of them (Afthanorhan, Foziah, Rusli, & Khalid, 2019; Awang et al., 2015; Joseph Hair et al., 2010). The current study assessed the multicollinearity problem using the correlation matrix between all latent construct variables as shown in Table 4.6. Latent variable scores are obtained by averaging all their respective indicators' responses at this initial step. The results showed that all the bivariate correlation coefficients (Pearson) did not exceed the cut-off value of 0.85 and thus it was concluded that multicollinearity is not detected among latent constructs.

Table 4.6: Bi-variate Correlations Between Latent Constructs Before CFA

	TE	TS	LV	CCT	EXP	QW	EI
TE	1.00						
TS	0.692	1.00					
LV	0.541	0.442	1.00				
CCT	0.564	0.572	0.698	1.00			
EXP	0.596	0.692	0.663	0.621	1.00		
QW	0.701	0.584	0.674	0.556	0.571	1.00	
EI	0.594	0.593	0.532	0.664	0.672	0.689	1.00

TE: Training environment; TS: Training strategy; LV: Leader's vision; CCT: Culture of creative thinking; EXP: Experience; QW: Quality of work; EI: Employee innovation

It is important to note that multicollinearity could also be assessed after conducting the CFA of the full measurement which is predicted in this study later.

4.5 Confirmatory Factor Analysis – Stage 1 of SEM

Before SEM is conducted, it is important to assess the validity and reliability of the latent constructs and ensure that the overall measurement model has met its respective criteria for good fit (Joseph Hair et al., 2010). Indeed, the validity and reliability of the latent construct are usually evaluated using the CFA procedure (Joseph Hair et al., 2021).

Construct validity can be assessed using convergent validity, which is measured based on computing the Average Variance Explained (AVE) which measures the extent to which the indicators measure the underlying constructs (Joseph Hair et al., 2021). Construct validity is also assessed using a discriminant validity index that can be measured using either factor cross-loading, Heterotrait- Monotrait (HTMT), Fornell and Larcker formula (Ab Hamid, Sami, & Sidek, 2017; Harry & Watson, 2022; Henseler, Ringle, & Sarstedt, 2015) and reflect whether any two latent constructs are highly correlated. Convergent validity assesses within-construct

relationships, while discriminant validity assesses validity between constructs (Awang et al., 2015; Joseph Hair et al., 2010).

On the other hand, construct reliability can be evaluated using two reliability measures, namely composite reliability (CR) and Cronbach's alpha, which reflect the internal consistency and accuracy of the measurement model and exhibit the extent to which the findings can be replicated when the study is repeated in similar settings (Awang et al., 2015; Joseph Hair et al., 2010). Furthermore, it is important to check and report model fit indexes to evaluate whether the proposed measurement model shall be either accepted or rejected given the sample data. The literature has cited several model fit indexes with recommended threshold values for a good fit. Among these indexes are which are Absolute Fit, Incremental Fit, and Parsimonious Fit (Byrne, 2010; Joseph Hair et al., 2010; Khalid et al., 2016; Meyers, Gamst, & Guarino, 2006; West, Taylor, & Wu, 2012). Table 4.7 represents the most cited and widely used model fit indexes along with their corresponding cut-off values for a good fit.

Table 4.7: Most Used Model Fit Indexes and Their Acceptance Levels for Good Fit

Model Fit Type	Fit Index	Acceptable Value for Good Fit
Parsimonious Fit Index ^(a)	CMIN/df	CMIN/ DF < 5.0 (ideal if < 3.0)
Incremental Fit Index	GFI ^(b)	GFI > 0.85 (ideal if > 0.90)
	CFI ^(c)	CFI > 0.85 (ideal if > 0.90)
	TLI ^(d)	TLI > 0.85 (ideal if > 0.90)
	NFI ^(e)	NFI > 0.85 (ideal if > 0.90)
Absolute Fit Index ^(f)	RMSEA	RMSEA < 0.1 (ideal < 0.08)

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.

(a): Bentler, 1990; Hair et al., 2010; (b) Chau, 1997; Segars and Grover, 1993; (c): Bentler, 1990; Hatcher, 1994; (d) Byrne, 2010; (e): Bentler and Bonett, 1980; (f): Byrne, 2010; Meyers et al., 2006.

4.5.1 Confirmatory Factor Analysis of the Independent Variable CBT

The CBT variable contains two sub-scales of Training Environment (TE) and Training Strategy (TS), whereby each one has 10 indicators. CFA was conducted to validate the CBT construct and assess whether the indicators measure the underlying latent constructs. The results of the CFA for the independent variable CBT are shown in Figure 4.1. Some items had factor loadings of less than 0.50, which must be removed to improve construct validity and model fit indexes, namely item number (TS.10) which has a factor loading of 0.44.

Furthermore, the findings confirm that the measurement model of the latent construct of CBT is free of irrational correlation because all model fit indexes exceeded the recommended cut-off points. That is, the value of RMSEA was 0.068 which is less than 0.08 indicating a good fit for the study data. Also, the values of GFI, CFI, TLI, and IFI were 0.915, 0.923, 0.937, and 0.924, respectively, and higher than the recommended cut-off point of 0.90 indicating a good fit of the study data. Moreover, the value of the Chi-square to DF ratio (CMIN/DF) was 3.645, which is less than the cut-off value of 5.0 showing a good fit of the study data.

Table 4.8 shows the factor loading of the CBT latent construct. The results revealed that all factor loadings exceeded 0.50 and model fit indexes were greater than their threshold points. That is, the model shows that factor loading (i.e., standardized regression weights) was statistically significant and was acceptable, and ranged from 0.583 to 0.805. These results show a good indication that these items or indicators measure the underlying constructs, namely TE and TS. The AVE was used to evaluate the convergent validity of each construct. A value of AVE that is larger than 0.50 indicates that convergent validity is attained (Awang et al., 2015). The results show that the AVE (0.545 for TE and 0.560 for TS) was greater than 0.50 (Fornell &

Larcker, 1981; Joseph Hair et al., 2010). To assess composite reliability (CR), the CR value should be greater than a cutoff value of 0.60 for CR to be achieved (Kashif, Awang, Walsh, & Altaf, 2015) while Joseph Hair et al. (2010) suggested that a CR of higher than 0.70 confirms composite reliability. The results show that the CR (0.911 for TE and 0.920 for TS) achieved acceptable values higher than 0.70. Hence, the CBT model with its underlying indicators and constructs fits the study data.

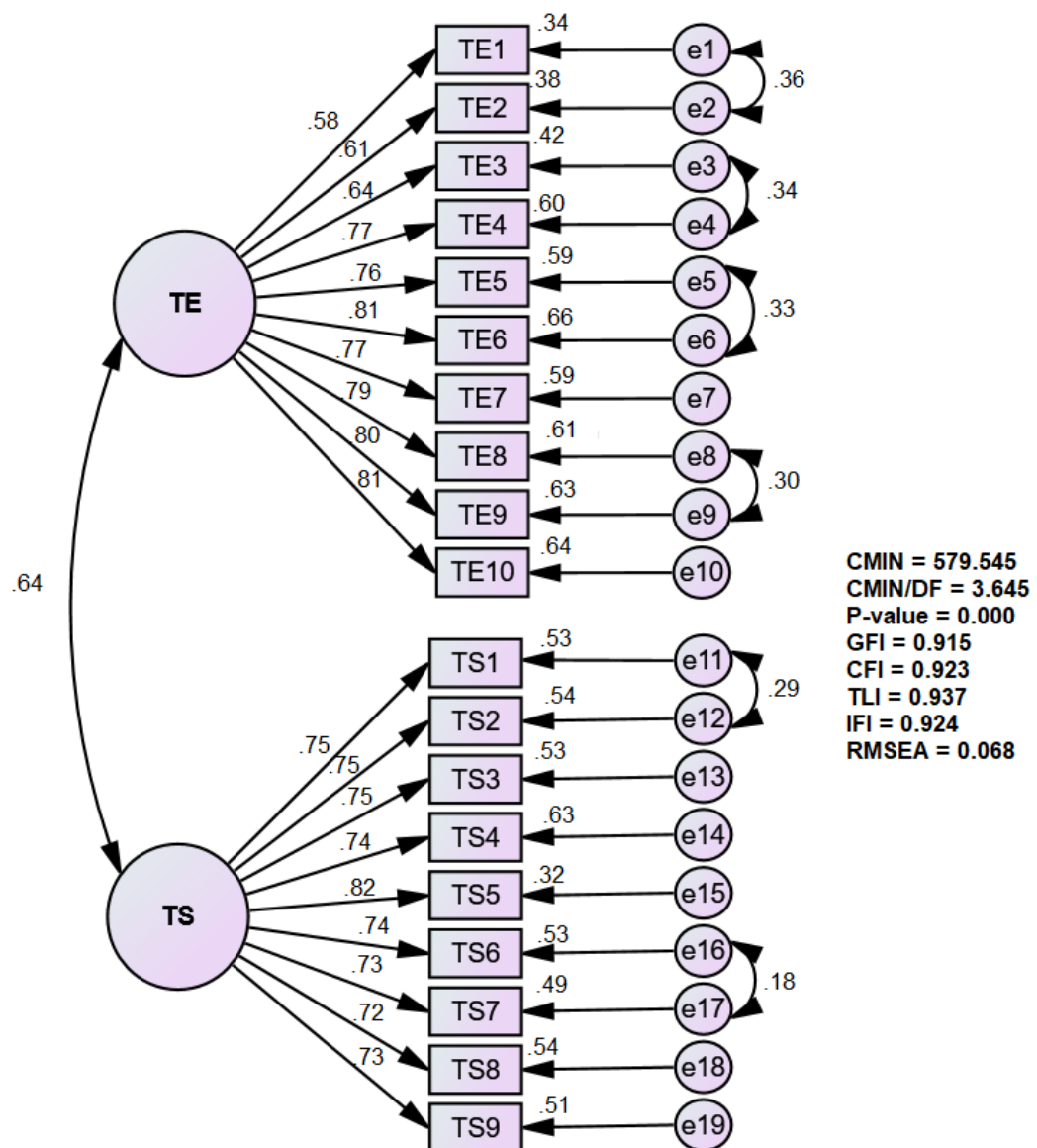


Figure 4.1: Results of CFA for CBT Construct

Table 4.8: Factor Loading, AVE, and CR for the CBT Construct

Items	Training Environment	Training Strategy
AVE	0.545	0.560
CR	0.911	0.920
Items abbreviation	Factor loading (Standardized regression weights)	
TE1	0.583	
TE2	0.606	
TE3	0.644	
TE4	0.768	
TE5	0.759	
TE6	0.810	
TE7	0.773	
TE8	0.789	
TE9	0.801	
TE10	0.805	
TS1		0.752
TS2		0.746
TS3		0.754
TS4		0.739
TS5		0.820
TS6		0.735
TS7		0.730
TS8		0.723
TS9		0.734
TS10		0.442 (deleted)

AVE: average variance explained; CR: composite reliability; TE: training environment; TS: training strategy

4.5.2 Confirmatory Factor Analysis of the Independent Variable CTA

The CTA latent construct contains two dimensions, namely the Leader's Vision (LV) and the Culture of Creative Thinking (CCT) such that 10 items were embedded in each dimension. The results of the initial CFA of the full construct indicate that some indicators have factor loadings of less than 0.50, which are LV.4, LV.7, LV.8, CCT.1, CCT.2, and CCT.3 to ensure construct validity and reliability. After discarding these indicators, the results of CFA show that all factor loading exceeded 0.50 as shown in Figure 4.2. Moreover, the results show that model fit indexes were all met showing that the model fit the study data well. That is the model fit indexes of

RMSEA ($0.065 < 0.08$), GFI ($0.937 > 0.90$) CFI ($0.961 > 0.90$), TLI ($0.950 > 0.90$), IFI ($0.961 > 0.90$) signify as a good fit of the study data. Moreover, the ratio of CMIN/DF was 2.558, which is less than 5.0 indicating an acceptable fit between the hypothetical model and the study data.

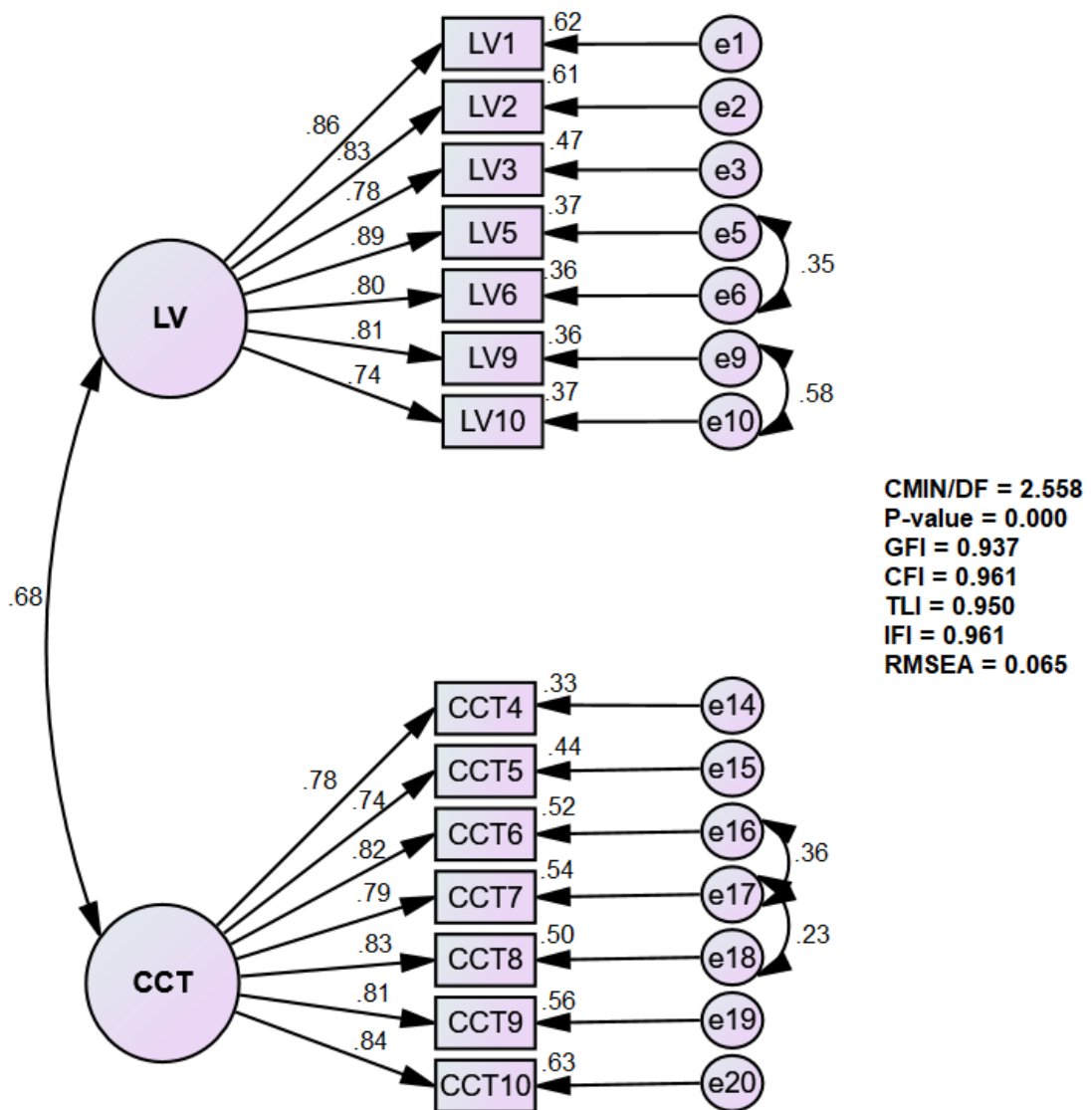


Figure 4.2: Results of the CFA for the CTA Construct

Table 4.9 represents the factor loadings of the indicators that measure the underlying constructs which ranged from 0.683 to 0.853. Furthermore, the AVE were 0.667 and 0.645 for LV and CCT, respectively which exceeded the recommended cut-

off value of 0.50 exhibiting that convergent reliability was attained. The values of CR were 0.933 and 0.927 showing good internal consistency of the measured constructs because it was greater than 0.70.

Table 4.9: Factor Loadings, AVE, and CR for the CTA Construct

Items	Leader's Vision	Culture of Creative Thinking
AVE	0.667	0.645
CR	0.933	0.927
Items abbreviation	Factor loading (Standardized regression weights)	
LV1	0.863	
LV2	0.827	
LV3	0.782	
LV4	0.314 (deleted)	
LV5	0.891	
LV6	0.795	
LV7	0.226 (deleted)	
LV8	0.328 (deleted)	
LV9	0.808	
LV10	0.741	
CCT1		0.426 (deleted)
CCT2		0.279 (deleted)
CCT3		0.342 (deleted)
CCT4		0.782
CCT5		0.741
CCT6		0.824
CCT7		0.789
CCT8		0.831
CCT9		0.808
CCT10		0.844

AVE: average variance explained; CR: composite reliability; LV: leader's vision; CCT: culture of creative thinking

4.5.3 Confirmatory Factor Analysis of the Mediator Variable EXP

The experience constructs (EXP) are the mediator variable in this study, which comprise only one dimension with 10 indicators. After conducting the CFA, the results exhibited in Figure 4.3 shows that there is no indication that factor loadings of less than 0.50 indicate that the factor extracts sufficient variance from that variable, and all indicators measure the EXP construct. Moreover, the CFA model for EXP for

construct validity fit the study data well since all model fit indexes were greater than cut-off points and thus met the recommended criteria for a good fit. The incremental fit indexes were higher than 0.90 (GFI = 0.964, CFI = 0.986, TLI = 0.981, IFI = 0.986). Moreover, the ratio of CMIN/DF was 2.036, which is less than 5.0 showing an acceptable fit between the hypothetical model and the study data. Moreover, RMSEA was 0.053 and thus has exceeded the recommended criteria of a good fit of less than 0.08.

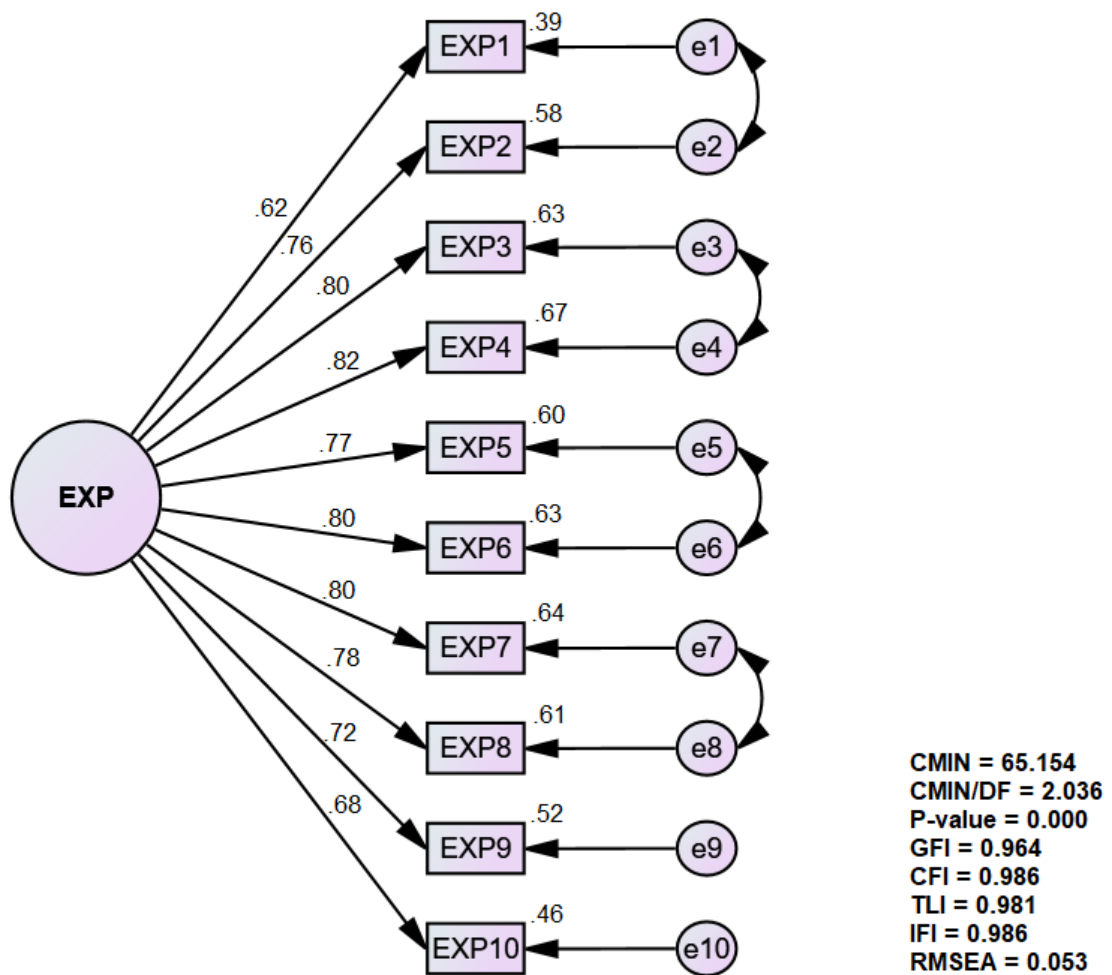


Figure 4.3: The Results of the CFA for EXP Construct

The convergent validity of the EXP construct was achieved since the AVE value was 0.574, which exceeds the cut-off value of 0.50 and all factor loadings were higher

than 0.50. Moreover, the CR value of 0.927 has exceeded the recommended value of 0.70, which is indicative of achieving model composite reliability as shown in Table 4.10.

Table 4.10: Factor Loadings, AVE, and CR for the EXP Construct

Items	Experience
AVE	
CR	0.927
Items abbreviations	Factor loadings
EXP1	0.622
EXP2	0.761
EXP3	0.796
EXP4	0.816
EXP5	0.774
EXP6	0.796
EXP7	0.798
EXP8	0.784
EXP9	0.723
EXP10	0.682

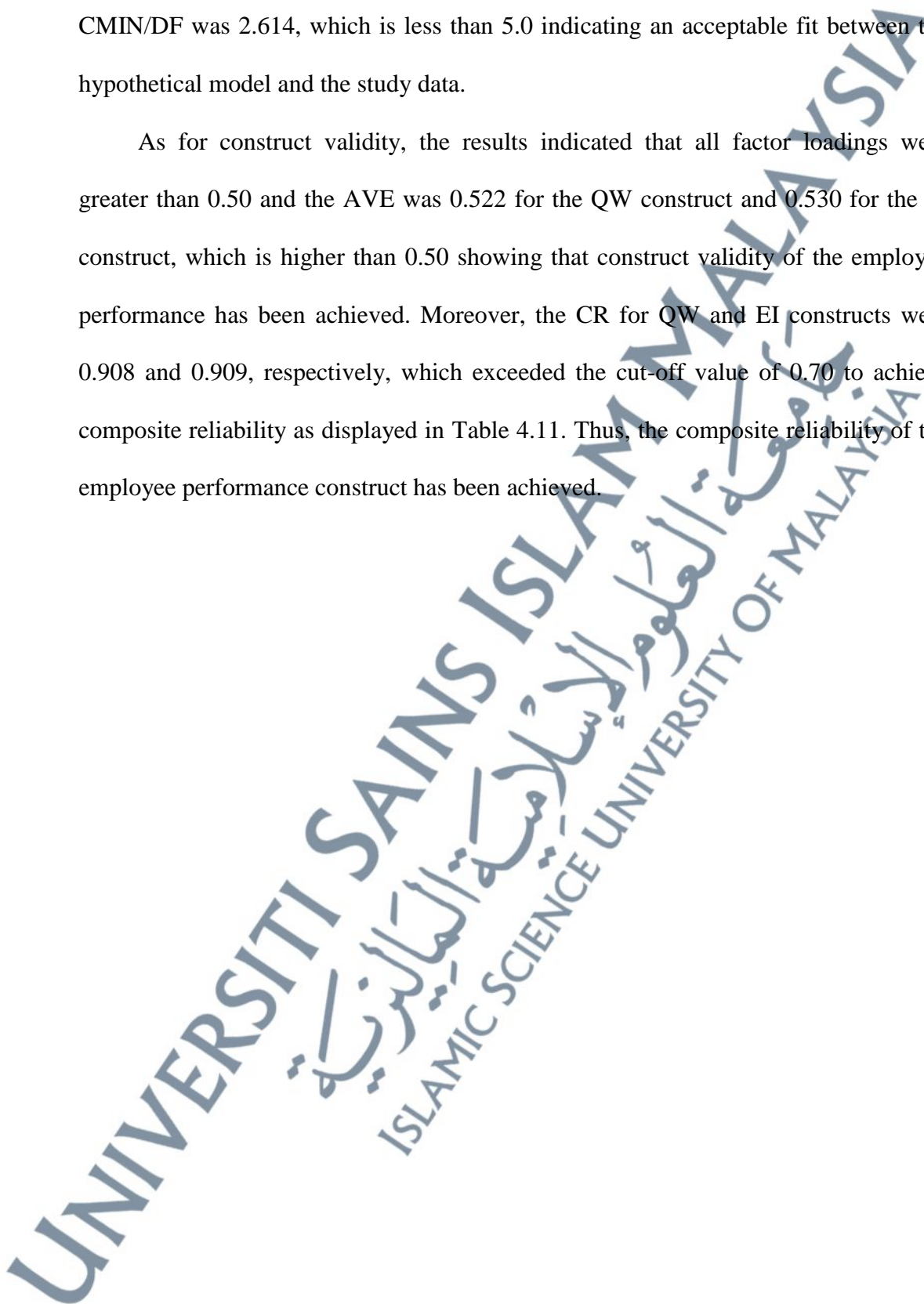
AVE: average variance explained; CR: composite reliability; EXP: experience

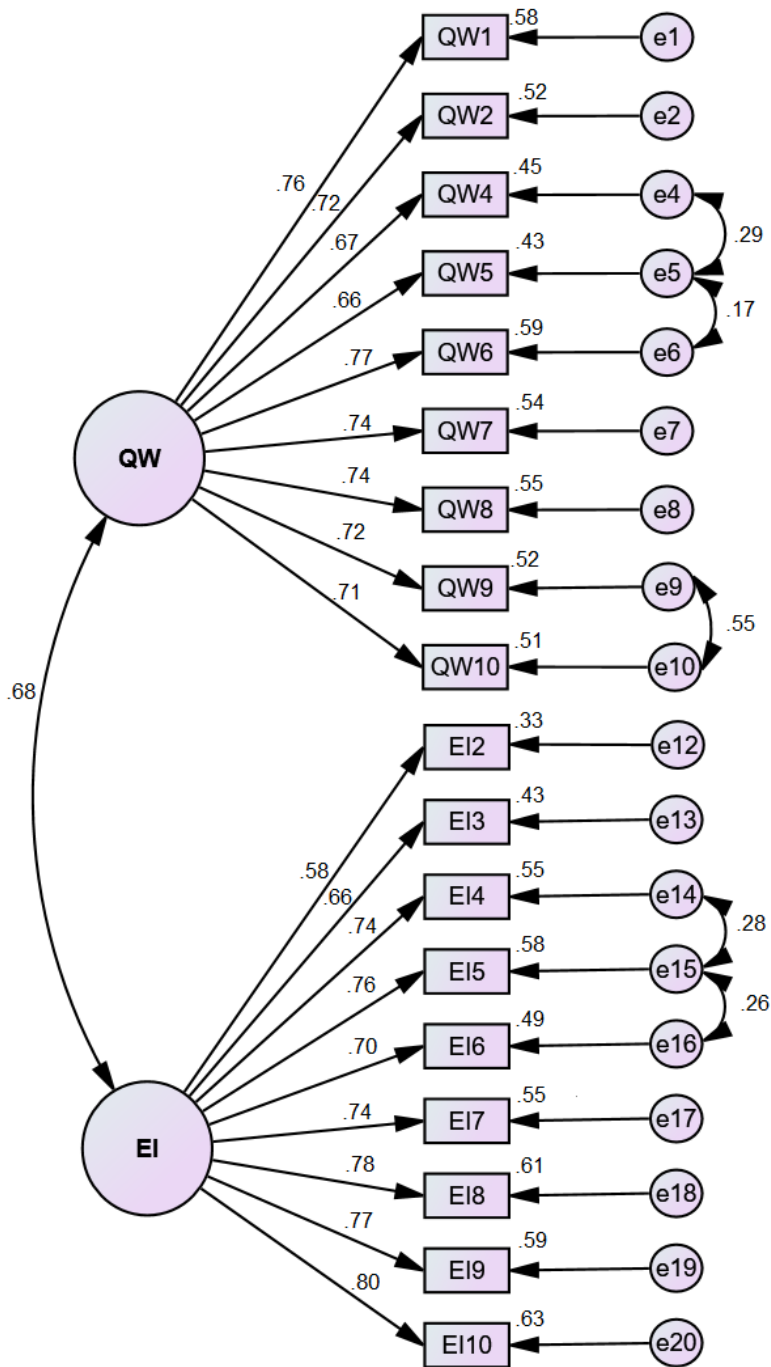
4.5.4 Confirmatory Factor Analysis of the Dependent Variable Employee Performance

The dependent variable of the current study is employee performance which contains two factors, namely Quality of Work (QW) and Employee Innovation (EI), whereby each factor has 10 indicators. After conducting a CFA for employee performance, the findings revealed that two items, namely QW.3 and EI.1, have factor loadings of less than 0.50 and were discarded from the analysis. Then, the CFA was re-run after excluding these items and the findings show that all indicators have factor loadings greater than 0.50. Figure 4.4 shows the results of the CFA for the employee performance model. Moreover, the results show that model fit indexes were all met showing that the model fit the study data well. That is the model fit indexes of RMSEA ($0.066 < 0.08$), GFI ($0.908 > 0.90$) CFI ($0.951 > 0.90$), TLI ($0.940 > 0.90$),

IFI ($0.951 > 0.90$) signify as a good fit of the study data. Moreover, the ratio of CMIN/DF was 2.614, which is less than 5.0 indicating an acceptable fit between the hypothetical model and the study data.

As for construct validity, the results indicated that all factor loadings were greater than 0.50 and the AVE was 0.522 for the QW construct and 0.530 for the EI construct, which is higher than 0.50 showing that construct validity of the employee performance has been achieved. Moreover, the CR for QW and EI constructs were 0.908 and 0.909, respectively, which exceeded the cut-off value of 0.70 to achieve composite reliability as displayed in Table 4.11. Thus, the composite reliability of the employee performance construct has been achieved.





CMIN = 373.206
CMIN/DF = 2.614
P-value = 0.000
GFI = 0.908
CFI = 0.951
TLI = 0.940
IFI = 0.951
RMSEA = 0.066

Figure 4.4: The Results of the CFA for Employee Performance Construct

Table 4.11: Factor Loadings, AVE, and CR for the Employee Performance Construct

Items	Quality of Work	Employee Innovation
AVE	0.522	0.530
CR	0.908	0.909
Items abbreviation	Factor loading (Standardized regression weights)	
QW1	0.764	
QW2	0.722	
QW3	0.443 (deleted)	
QW4	0.673	
QW5	0.656	
QW6	0.766	
QW7	0.736	
QW8	0.744	
QW9	0.721	
QW10	0.714	
EI1		0.255 (deleted)
EI2		0.575
EI3		0.656
EI4		0.743
EI5		0.761
EI6		0.698
EI7		0.743
EI8		0.783
EI9		0.767
EI10		0.796

AVE: average variance explained; CR: composite reliability; QW: quality of work; EI: employee innovation

4.5.5 Confirmatory Factor Analysis – Full Measurement Model

Now will Turn to assess the full measurement model before conducting SEM and testing the hypothesis to ensure its construct validity and reliability. Before performing and executing SEM, it is important to ensure that the validity and reliability of all constructs have been attained. Indeed, the measurement model of the construct would be evaluated for construct validity, convergent validity, and discriminant validity. Furthermore, the composite reliability of the measurement model would be evaluated using CR and Cronbach's alpha (Awang et al., 2015; Memon & Rahman, 2014; West et al., 2012).

The results of CFA are shown in Figure 4.5 and show the model fit indexes for all latent constructs in the full measurement model, the factor loading for each measuring indicator for each construct, and the correlation between constructs. The fitness indexes should meet the cut-off points as shown in Table 4.7, the factor loading for each indicator should not be less than 0.50, and the correlation coefficient between every two constructs should not exceed 0.85 (Afthanorhan et al., 2019; Awang et al., 2015; Joseph Hair et al., 2010). The findings reveal that no indicator has factor loading less than 0.50.

4.5.5.1 Assessment of Multicollinearity

The problem of multi-collinearity problem, which occurs if any two constructs are highly correlated (i.e., the correlation coefficient > 0.85) is also assessed. In this study, the CFA indicated no highly correlated constructs were found and thus the problem of multi-collinearity does not exist here as shown in Table 4.12 (Alfiyah & Riyanto, 2019; Awang et al., 2015; Joseph Hair et al., 2010). Once the results of the pooled CFA are obtained, the process of model validation for the construct validity, convergent validity, discriminant validity, and composite reliability should be initiated (Awang et al., 2015).

Table 4.12: Correlation Matrix between Constructs in the Full Measurement Model

	TE	TS	LV	CCT	EXP	QW	EI
TE	1.00						
TS	0.642	1.00					
LV	0.421	0.422	1.00				
CCT	0.514	0.554	0.680	1.00			
EXP	0.572	0.671	0.663	0.619	1.00		
QW	0.681	0.560	0.674	0.544	0.562	1.00	
EI	0.589	0.582	0.532	0.648	0.663	0.683	1.00

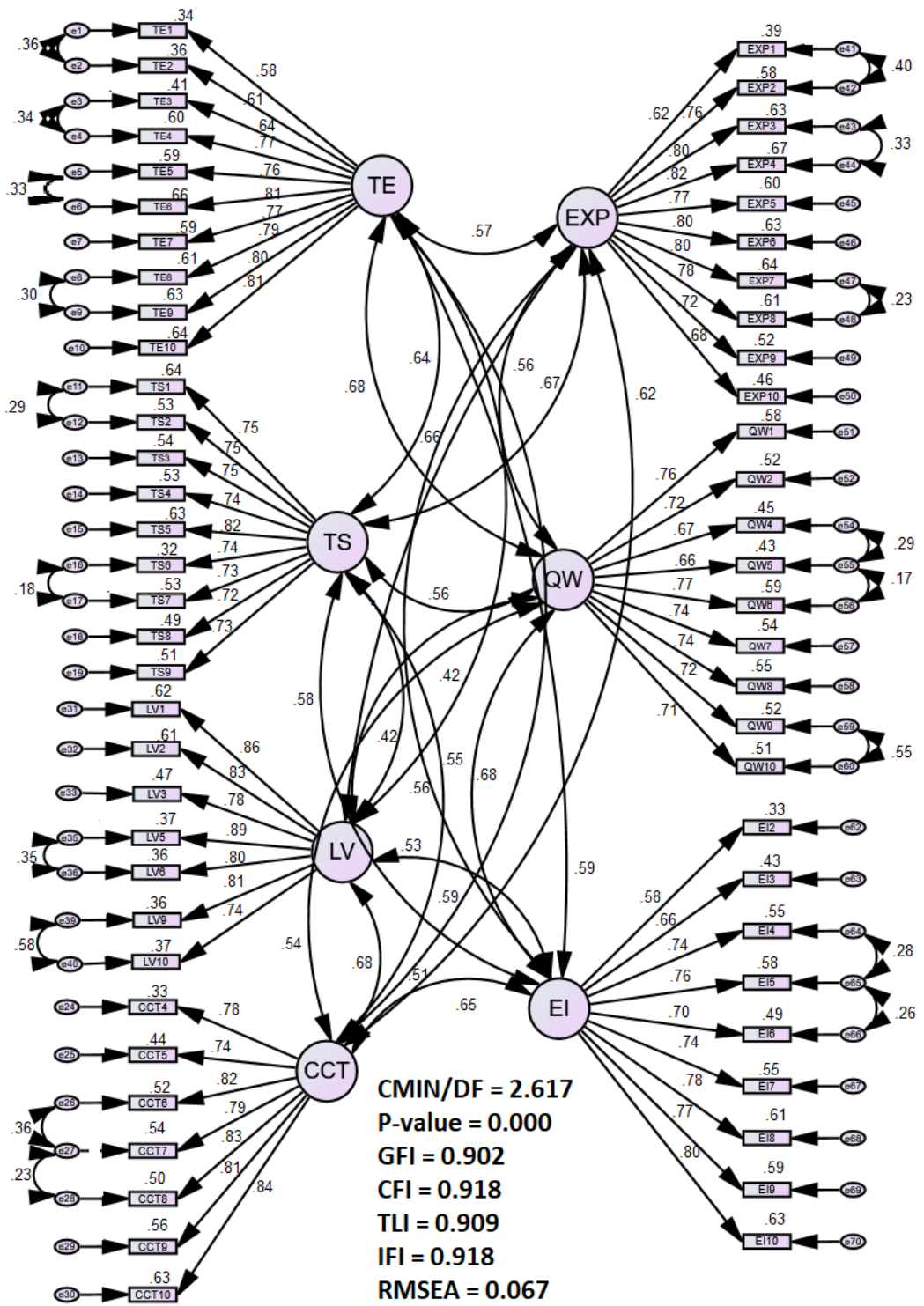


Figure 4.5: The Results for Pooled-CFA for the Measurement Model of Constructs

4.5.5.2 Assessment of Normality

The normality of the latent scores obtained from the data imputation method needs to be assessed. Table 4.11 shows that the skewness values in this study ranged from -1.068 to -0.952 as well as kurtosis values ranged from 0.438 to 1.192 showing evidence that the normality assumption of the latent variables included in the full measurement model because they fall within the recommended range (Byrne, 2016). Table 4.13 shows the estimates of skewness and kurtosis of the latent variables, which suggests acceptable evidence to conclude that all latent variables are normality distributed.

Table 4.13: Assessment of Normality of All Latent Constructs in the Full Measurement Model

Construct	Min	Max	Skew	Kurtosis
TE	1.00	5.00	-1.068	0.886
TS	1.00	5.00	-1.023	1.192
LV	1.00	5.00	-0.992	1.043
CCT	1.00	5.00	-1.021	1.196
EXP	1.00	5.00	-0.952	0.438
QW	1.00	5.00	-1.068	1.041
EI	1.00	5.00	-0.958	0.685

TE: Training environment; TS: Training strategy; LV: Leader's vision; CCT: Culture of creative thinking; EXP: Experience; QW: Quality of work; EI: Employee innovation.

4.5.6 Assessment of Construct Validity and Reliability

It is important to assess the validity and reliability of the constructs to ensure the accuracy and consistency of the measurement model. Awang et al. (2015) indicated that construct validity can be assessed using convergent validity (within construct relationship) and discriminant validity (between construct validity), which measures the extent to which the findings truly measure what they are supposed to measure. Meanwhile, construct reliability can be evaluated using composite reliability (CR) and Cronbach's alpha measure the internal consistency and accuracy of the measurement

model and exhibit the extent to which the findings can be replicated when the study is repeated in similar settings (Awang et al., 2015; Joseph Hair et al., 2010).

4.5.6.1 Convergent Validity

To assess convergent validity, this thesis shall compute the AVE. The values of AVE must exceed the threshold point of 0.50 to achieve convergent validity (Awang et al., 2015). Table 4.14 shows factor loadings and AVE for each latent construct included in the measurement model. The results indicate that all constructs have an AVE of greater than 0.50 showing that convergent validity of the measurement constructs has been achieved. Therefore, all indicators in this study are related to their respective latent constructs and hence there is reasonable evidence for the use of the convergent validity of the model.

Table 4.14: Factor Loadings and Average Variance Explained of the Full Measurement Model

Construct	Code	Loading	AVE
Training Environment	TE1	0.583	0.545
	TE2	0.606	
	TE3	0.644	
	TE4	0.768	
	TE5	0.759	
	TE6	0.810	
	TE7	0.773	
	TE8	0.789	
	TE9	0.801	
	TE10	0.805	
Training Strategy	TS1	0.752	0.560
	TS2	0.746	
	TS3	0.754	
	TS4	0.739	
	TS5	0.820	
	TS6	0.735	
	TS7	0.730	
	TS8	0.723	
	TS9	0.734	

Table 4.14 continued

Construct	Code	Loading	AVE
Leader's Vision	LV1	0.863	0.667
	LV2	0.827	
	LV3	0.782	
	LV5	0.891	
	LV6	0.795	
	LV9	0.808	
	LV10	0.741	
Culture of Creative Thinking	CCT4	0.782	0.645
	CCT5	0.741	
	CCT6	0.824	
	CCT7	0.789	
	CCT8	0.831	
	CCT9	0.808	
	CCT10	0.844	
Experience	EXP1	0.622	0.574
	EXP2	0.761	
	EXP3	0.796	
	EXP4	0.816	
	EXP5	0.774	
	EXP6	0.796	
	EXP7	0.798	
	EXP8	0.784	
	EXP9	0.723	
	EXP10	0.682	
Quality of Work	QW1	0.764	0.522
	QW2	0.722	
	QW4	0.673	
	QW5	0.656	
	QW6	0.766	
	QW7	0.736	
	QW8	0.744	
	QW9	0.721	
	QW10	0.714	
	Employee Innovation	EI2	
EI3		0.656	
EI4		0.743	
EI5		0.761	
EI6		0.698	
EI7		0.743	
EI8		0.783	
EI9		0.767	
EI10		0.796	

4.5.6.2 Discriminant Validity

Discriminant validity is also another type of construct validity that assesses whether the latent constructs are highly correlated or not. It can be measured using the Fornell and Larcker criterion that compares the square root of the AVE with the correlation of latent constructs (Fornell & Larcker, 1981). That is the square root of the AVE on the diagonal and correlation coefficients in the off-diagonal of the matrix of Fornell and Larcker. This method ensures that a latent construct should explain better the variance of its underlying items rather than the variance of any other latent constructs. Therefore, the square root of AVE for each construct should exceed the correlations with other constructs in the same row and column (Ab Hamid et al., 2017; Joseph Hair et al., 2021; Henseler et al., 2015).

The square root of AVE for each construct and correlations with others are shown in Table 4.15. The findings reveal that none of the correlations has exceeded the square root of AVE indicating that discriminant validity has been achieved, which provides evidence that the latent construct is not highly correlated and the indicators underlying each construct explain their respective latent constructs.

Table 4.15: Fornell and Larcker Assessment of Discriminant Validity of All Constructs

	TE	TS	LV	CCT	EXP	QW	EI
TE	0.738						
TS	0.642	0.748					
LV	0.421	0.422	0.817				
CCT	0.514	0.554	0.680	0.803			
EXP	0.572	0.671	0.663	0.619	0.757		
QW	0.681	0.560	0.674	0.544	0.562	0.722	
EI	0.589	0.582	0.532	0.648	0.663	0.683	0.728

The bolded numbers are the AVE

Furthermore, the discriminant validity was assessed using factor cross-loading as shown in Table A.2 in the Appendix. The results indicated that all factor loadings of indicators underlying each latent construct are greater than all loading of any other latent construct as well as exceeded the cut-off value of 0.50 (Ab Hamid et al., 2017; Hair et al., 2022). Therefore, discriminant validity has been attained and the measurement model exhibits a good fit of the study data.

4.5.6.3 Assessment of Composite Reliability

The assessment of Composite reliability (CR) is of utmost importance in research involving latent constructs (Joseph Hair et al., 2021; Kashif et al., 2015). Therefore, this study established CR by computing CR and Cronbach's alpha reliability coefficients, and the results are shown in Table 4.16.

The findings show that both CR and Cronbach's alpha are greater than the threshold values of 0.70 of each latent construct showing indicative evidence of the satisfactory level of composite reliability and internal consistency of all latent constructs.

Table 4.16: Assessment of Composite Reliability of the Full Measurement Model

Latent construct	Code	Mean	SD	CR	Cronbach's alpha
Training Environment	TE	3.52	0.41	0.911	0.925
Training Strategy	TS	3.98	0.71	0.920	0.906
Leader's Vision	LV	2.67	0.43	0.933	0.927
Culture of Creative Thinking	CCT	3.81	0.65	0.927	0.914
Experience	EXP	3.76	0.67	0.927	0.933
Quality of Work	QW	3.58	0.61	0.908	0.910
Employee Innovation	EI	3.87	0.74	0.909	0.911

CR: Composite reliability; SD: Standard deviation.

4.6 Second-order Confirmatory Factor Analysis of the Employee Performance

The current study needs second-order latent variable testing of employee performance because employee performance was examined using two dimensions, namely the quality of work (QW) and employee innovation (EI), and therefore, be able to test the hypothesized model explained in Figure 2.3 in Chapter 2. To do so, first the QW and EI into single variables and then a CFA of the employee performance construct, which contains the two new variables as indicators of this latent construct. The results of the CFA are shown in Figure 4.6 with standardized regression weights (factor loading) and model fitness indexes.

As can be seen from Figure 4.6, the results show that factors loading the two indicators were 0.924 and 0.882, which exceeded the cut-off value of 0.70 indicating good construct validity. Furthermore, the model fitness indexes met the recommended criteria of good fit. Accordingly, the ratio of CMIN/DF was 2.926, which is lower than 5.0 indicating an acceptable fit between the hypothetical model and the study data. Moreover, the model fit indexes of RMSEA ($0.071 < 0.08$), GFI ($0.901 > 0.90$), CFI ($0.912 > 0.90$), TLI ($0.908 > 0.90$), IFI ($0.912 > 0.90$) signify as a good fit of the study data.

The AVE value for this model is 0.816, which is higher than the cut-off value of 0.50 showing evidence of convergent validity. Moreover, the value of CR is 0.899, which is greater than 0.70 indicating indicative evidence of composite reliability.

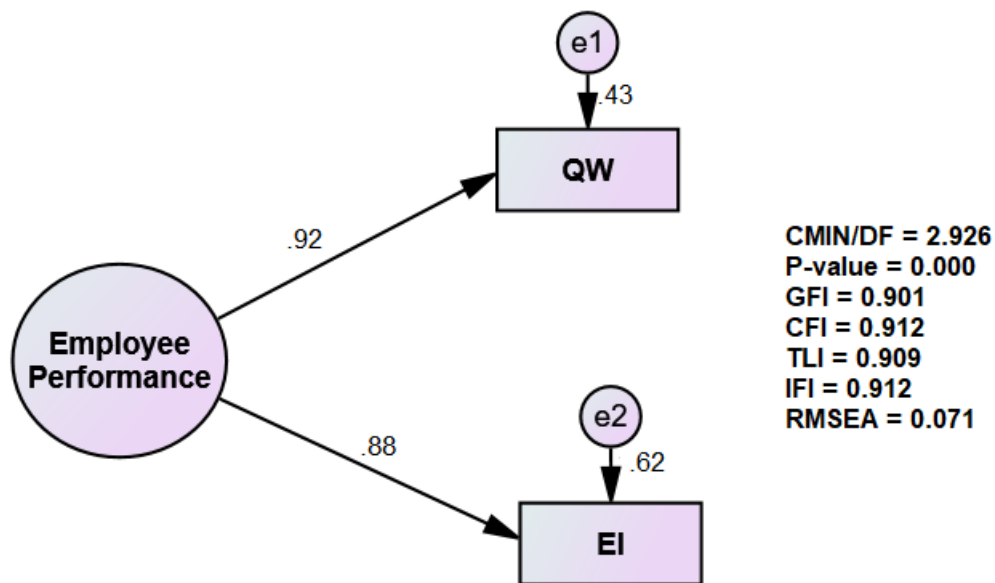


Figure 4.6: The Results of Second-order CFA for Employee Performance

4.7 Structural Equation Modeling of the Hypothesized Model

After completing the procedure of CFA that confirms that the construct validity and composite reliability have been attained, the next step is to perform SEM to test the study hypotheses. The model will be simplified using the data imputation method in AMOS software meaning that it has computed latent variable scores for all latent variables in our model. Therefore, we draw a structural model that contains the latent variable scores to represent the hypothesized model exhibited in Figure 2.3. Hence, the structural mode contains four exogenous variables (TE, TS, LV, CCT), one mediator variable (EXP), and one exogenous variable (employee performance) (Sharif et al., 2022).

The structural model estimates the path coefficients, which represent the hypothesized relationships connecting the latent variables as illustrated in Figure 4.7. The standardized path coefficient is reported, which ranges between -1 to +1 such that values closer to +1 demonstrate strong positive relationships while values closer to -1 are indicative of strong negative relationships. bootstrapping was performed with

5,000 sample replications to estimate standard errors and test the significance path coefficients through a t-test (Joseph Hair et al., 2021). Statistical significance of the path coefficients was sought using a t-value of 1.96 for a two-tail test with a 5% level of significance and probability value (p-value) of lower than 0.05 (Joseph Hair et al., 2021; Kline, 2011).

As shown in Figure 4.7, the findings indicate that the structural model has passed the recommended cut-off value of good fit for all model fit indexes. The value of CMIN/DF is 2.023, which is less than 5.0 showing an acceptable fit of the model. Furthermore, the values GFI, CFI, TLI, and IFI are 0.931, 0.971, 0.954, and 0.971, respectively, which are higher than the cut-off value of 0.90. In addition, the value RMSEA is 0.053, which is less than 0.08 showing indicative evidence of a good fit.

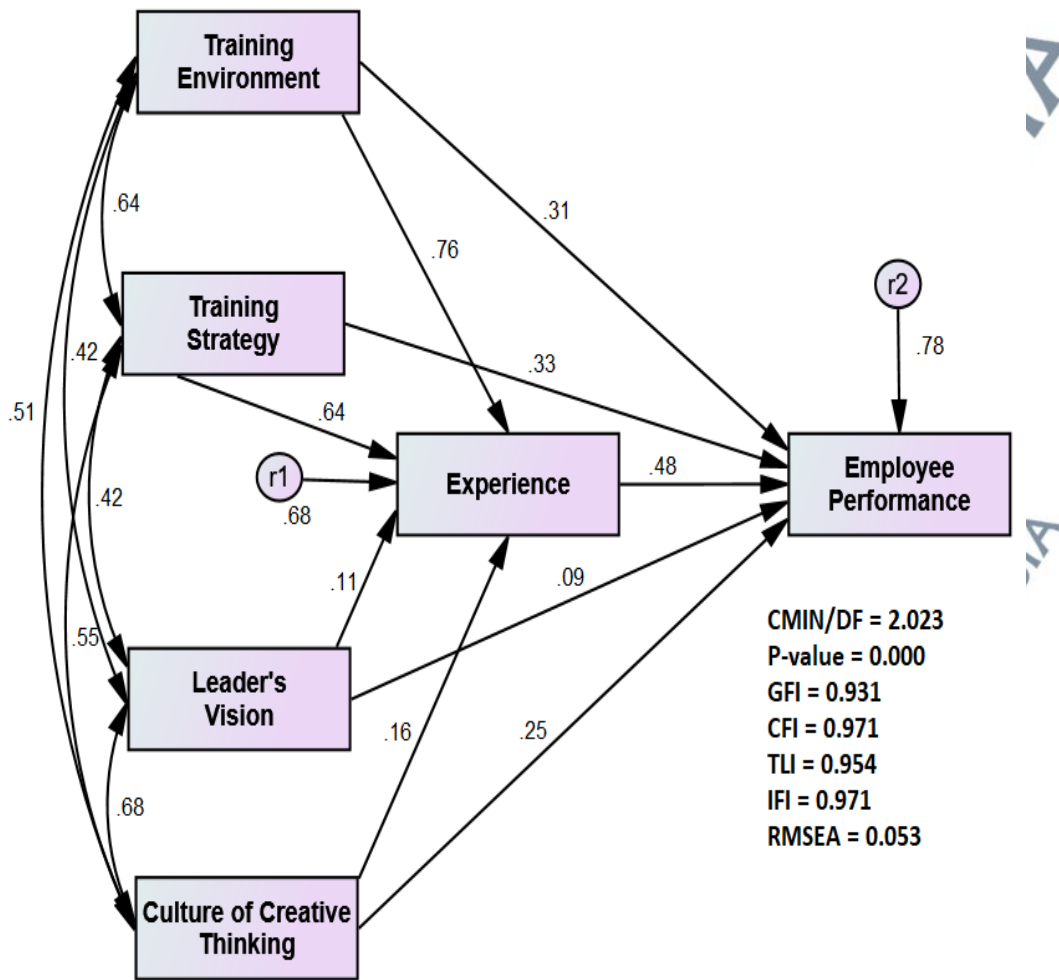


Figure 4.7: The Estimated Standardized Regression Path Coefficient between the Constructs

4.7.1 Coefficient of Determination (R^2)

The coefficient of determination (R^2) is a measure of goodness of fit regarding the predictive ability of the structural model that assesses the amount of variance in the endogenous (dependent) variable that has been explained by the exogenous (independent) variables and should be high enough for a reasonable explanatory power (Falk & Miller, 1992; Hair Jr, Sarstedt, Ringle, & Gudergan, 2017; Urbach & Ahlemann, 2010). Falk and Miller (1992) suggested that the R^2 value should be higher than or equal to 0.10 for acceptable for the explained variance of endogenous

constructs. Meanwhile, Cohen and Francis (2013) suggested that it should be higher than 0.26 with an acceptable power greater than 0.02 while Chau (1997) suggested a cut-off value of higher than 0.65 with a sufficient power of 0.19. On the other hand, Hair Jr et al. (2017) indicated that it should be greater than 0.75 with sufficient power higher than 0.25.

Table 4.17 shows the R2 obtained from the estimated structural model. That is, the R2 for the dependent variable experience is 0.682 showing reasonable fit, which means that 68.2% of the variance in the experience construct is explained by TE, TS, LV, and CCT exogenous variables. Moreover, the R2 value of the endogenous variable of employee performance is 0.784, which means that 78.4% of the variance in employee performance is explained by TE, TS, LV, CCT, and experience variables. Therefore, the findings suggest that the values of R2 are acceptable to reach minimum explanatory power.

Table 4.17: The Results of the Coefficient of Determination

Exogenous variables	Endogenous variable	R²
TE, TS, LV, CCT, EXP	Employee performance	0.784
TE, TS, LV, CCT	EXP	0.682

4.7.2 Effect Size

This study needs to report the effect size (f^2), which measures the change in the coefficient of multiple determination if one construct is omitted from the structural model. In this study, the effect size is computed to determine the exogenous and mediator constructs' power and impact on employee performance latent variable.

Cohen and Francis (2013) formula given by him indicates (Cohen, 1988):

$$f^2 = \frac{R^2 \text{ with (included)} - R^2 \text{ without (excluded)}}{1 - R^2 \text{ with (included)}}$$

(4.1) Cohen Equation

As a rule of thumb, identifying the significance of the effect size indicated that the values of f^2 of 0.02, 0.15, and 0.35 signify small, medium, and large effect sizes respectively (Cohen, 1988; Joseph Hair et al., 2021). Table 4.18 shows the effect size estimate of the structural model. The results indicate that TS, TE, and EXP variables have a large effect size on EP while CCT has a medium effect size on EP. Moreover, TE has a large effect size on EXP while the effect sizes of TS and CCT on EXP were at medium level. However, the effect sizes of LV on EP and EXP were relatively low.

Table 4.18: Effect Size of the Exogenous and Mediator Variables

IV	DV	R ² included	R ² excluded	Effect size f^2	Level of effect size
TS	EP	0.784	0.703	0.375	Large
TE	EP	0.784	0.697	0.403	Large
LV	EP	0.784	0.782	0.009	Low
CCT	EP	0.784	0.714	0.324	Medium
EXP	EP	0.784	0.673	0.468	Large
TS	EXP	0.682	0.584	0.308	Medium
TE	EXP	0.682	0.563	0.374	Large
LV	EXP	0.682	0.681	0.003	Low
CCT	EXP	0.682	0.607	0.236	Medium

4.8 Hypotheses Testing

This section shows the results of testing the hypotheses of the current study. According to the research model, a thorough understanding of the study objectives was obtained by analyzing the hypotheses based on the second dimension. It assesses the direct and indirect effects of the exogenous variables, namely TE, TS, LV, and CCT, on employee performance. Path analysis was used to examine the direct effect

and the Sobel test was used to examine the indirect (mediation) effects. Table 4.19 shows the results of the path analysis.

Table 4.19: The Estimated Standardized Regression Path Coefficients and Their Significance

Path	Estimate ^(a)	t-value	P-value ^(b)	VIF	Result	Hypothesis Result
TE → EXP	0.763	16.432	< 0.001	1.231	Significant	Supported
TS → EXP	0.642	7.437	< 0.001	1.426	Significant	Supported
LV → EXP	0.110	1.533	0.125	1.528	Not Significant	Not Supported
CCT → EXP	0.163	4.487	< 0.001	1.637	Significant	Supported
TE → EP	0.314	9.184	< 0.001	1.263	Significant	Supported
TS → EP	0.331	14.673	< 0.001	1.753	Significant	Supported
LV → EP	0.090	1.215	0.264	1.642	Not Significant	Not Supported
CCT → EP	0.253	2.464	0.018	1.423	Significant	Supported
EXP → EP	0.480	3.481	< 0.001	1.584	Significant	Supported

(a) Standardized regression path coefficient; (b) Calculated using 5,000 bootstrap replications procedure.

4.8.1 Assessment of the Direct Effect Relationships

In this sub-section, this study summarizes the hypotheses testing to examine the direct impact of the exogenous variables (TE, TS, LV, CCT) on the endogenous variable (employee performance).

H1: There is a significant impact of competency-based training on employee performance at the PCP.

As shown in Table 4.19, the findings show that there is a significant impact of the training environment on employee performance ($t = 9.184 > 1.96$, $p\text{-value} < 0.001$). The value of the standardized regression path coefficient for TE is 0.314. The value of the standardized regression path coefficient is 0.314 indicating that as the training environment rises by 1 standard deviation, the employee performance will rise by 0.314 standard deviations.

Moreover, the results show that there is a significant impact of the training strategy on employee performance ($t = 14.673 > 1.96$, $p\text{-value} < 0.001$) as indicated in

Table 4.19. The value of the standardized regression path coefficient is 0.331 indicating that as the training strategy rises by 1 standard deviation, the employee performance will rise by 0.331 standard deviations.

H2: There is a significant impact of creative thinking application on employee performance at the PCP.

The results of this study reveal that there is no significant impact of the leader's vision on employee performance at PCP because $t = 1.215 < 1.96$ and $p\text{-value} = 0.264 > 0.05$ as displayed in Table 4.19. Therefore, it is not statistically supported.

As can be seen from Table 4.19, there is a significant impact of the culture of creative thinking on employee performance, and statistically significant ($t = 2.464 > 1.96$, $p\text{-value} = 0.018 > 0.05$). The value of the standardized regression path coefficient is 0.253 indicating that as the culture of creative thinking rises by 1 standard deviation, the employee performance will rise by 0.253 standard deviations.

H3: There is a significant impact of competency-based training on experience at the PCP.

The analysis of the data showed that the training environment has a significant impact on experience ($t = 16.432 > 1.96$, $p\text{-value} < 0.001$) with a positive standard regression path coefficient of 0.763. The value of the standardized regression path coefficient is 0.763 indicating that as the training environment rises by 1 standard deviation, the experience will rise by 0.763 standard deviations.

Moreover, the analysis of the data showed that the training strategy has a significant impact on experience ($t = 7.437 > 1.96$, $p\text{-value} < 0.001$) with a positive standard regression path coefficient of 0.642. The value of the standardized regression

path coefficient is 0.642 indicating that as the training strategy rises by 1 standard deviation, the experience will rise by 0.642 standard deviations.

H4: There is a significant impact of creative thinking application on experience at the PCP.

The results of the study indicate that there is no statistically significant impact of the leader's vision on experience. The t-value of 1.533, which is less than 1.96, and the p-value of 0.125, which is greater than 0.05, both results are not statistically supported.

Moreover, the finding indicated there is an impact of the culture of creative thinking on experience ($t = 4.487 > 1.96$, $p\text{-value} < 0.001$) with a positive standard regression path coefficient of 0.163. The value of the standardized regression path coefficient is 0.163 indicating that as the culture of creative thinking rises by 1 standard deviation, the experience will rise by 0.163 standard deviations.

H5: There is a significant impact of experience on employee performance at the PCP.

The analysis of the data showed that the experience has a significant impact on employee performance ($t = 3.481 > 1.96$, $p\text{-value} < 0.001$) with a positive standard regression path coefficient of 0.480. The value of the standardized regression path coefficient is 0.480 indicating that as experience rises by 1 standard deviation, the employee performance will rise by 0.480 standard deviations.

4.8.2 Assessment of the Indirect Effect Relationships

In this sub-section, this study summarizes the hypotheses testing to examine the indirect impact of the exogenous variables (TE, TS, LV, CCT) on the endogenous variable (employee performance) through the mediator variable (experience). The

significance of the indirect impact will be assessed using the Sobel test such that its values that are greater than 1.96 are considered significant at a 5% level of significance (Sobel, 1982, 1986). The Sobel test was used to assess the mediation impact (indirect) of the EXP on the impact of TE, TS, LV, and CCT on EP among Palestinian Police personnel.

Furthermore, the direct impact of EXP on employee performance is positive and statistically significant ($t = 3.481 > 1.96$, $p\text{-value} < 0.001$). The value of the standardized regression coefficient is 0.480 indicating that when the experience goes up by 1 standard deviation, employee performance goes up by 0.480 standard deviations.

Table 4.20 illustrates the results of the Sobel test to assess the significance of indirect impact. The indirect effect (ab) can be calculated by multiplying the impact of the exogenous variable on the mediator variable (a) by the impact of the mediator variable on the endogenous variable (b). Mathematically, it can be represented as total indirect impact = $a \times b$ (Sobel, 1982, 1986). The test statistic, standard errors, and p -value of Sobel's test are calculated based on an online interactive calculation tool for mediation test (Preacher & Hayes, 2004; Preacher & Leonardelli, 2001).

Table 4.20: Results of the Sobel Test for the Assessment of Mediation Effect

IV → DV	Direct Effect	Results	IV → M → DV	Indirect Effect (ab) = a × b	Results (Sobel Test)		Mediation Type	
					t-value	p-value		
TE → EP	H1	+ Sig.	TE → EXP → EP	H6	0.366	3.404	0.001***	Partial
TS → EP		+ Sig.	TS → EXP → EP		0.308	3.153	0.002***	Partial
LV → EP	H2	Not Sig.	LV → EXP → EP	H7	0.053	1.399	0.162	No mediation
CCT → EP		+ Sig.	CCT → EXP → EP		0.078	2.758	0.006***	Partial
TE → EXP	H3	+ Sig.						
TS → EXP		+ Sig.						
LV → EXP	H4	Not Sig.						
CCT → EXP		+ Sig.						
EXP → EP	H5	+ Sig.						

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

H6: There is a significant mediator impact of experience between competency-based training and employee performance at the PCP.

It could have been seen from the results shown in Table 4.19 that the impact of TE on EXP is statistically significant ($t = 16.432 > 1.96$, $p\text{-value} < 0.001$) and the standardized regression path coefficient is 0.763 with a positive sign indicating that when TE goes up by 1 standard deviation, EXP goes up by 0.763 standard deviations. Given that the indirect impacts of TE on EXP and EXP on employee performance are statistically significant, the total indirect effect (ab) is 0.366. The Sobel test statistic is $3.404 > 1.96$ and $p\text{-value} = 0.001 < 0.05$, which provides substantial statistical evidence of the indirect impact. Since the direct and indirect impacts are statistically significant, there is a partial mediation impact (see Table 4.19 and Table 4.20).

As shown in Table 4.19 the impact of TS on EXP is statistically significant ($t = 7.437 > 1.96$, $p\text{-value} < 0.001$) and the standardized regression path coefficient is 0.642 with a positive sign indicating that when TS goes up by 1 standard deviation, EXP goes up by 0.642 standard deviations. Given that the indirect effects of TS on EXP and EXP on employee performance are statistically significant, the total indirect effect (ab) is 0.308. The Sobel test statistic is $3.153 > 1.96$ and $p\text{-value} = 0.002 < 0.05$, which is an indicator of the significant indirect impact. Hence, it concludes that experience mediates the relationship between TS and employee performance. Since the direct and indirect impacts are statistically significant, there is a partial mediation effect (see Table 4.19 and Table 4.20).

H7: There is a significant mediator impact of experience between creative thinking application and employee performance at the PCP

According to Baron and Kenny (1986), the direct significant relationship must be significant to implement the mediation impact of EXP on the impact of LV on EP. However, beyond this condition, a study by Hayes (2009) indicated that mediation analysis still can be conducted if the direct impact of IV on DV is not significant.

The findings of this study reveal that the impact of LV on EXP is not statistically significant as displayed in Table 4.19 ($t = 1.533 < 1.96$, $p\text{-value} = 0.125 > 0.05$). Moreover, the total indirect effect (ab) is 0.053, which is relatively small. Sobel's test statistic is $1.399 < 1.96$ and the $p\text{-value}$ is $0.162 > 0.05$ indicating that the total indirect impact is not statistically significant. Hence, that experience does not mediate the relationship between LV and employee performance (see Table 4.19 and Table 4.20).

Given that no direct and no mediation impact of LV on EP, then may conclude that LV has no impact on EP from a theoretical perspective. Zhao, Lynch Jr, and Chen (2010) indicated that when there was neither direct nor mediation impact, the variable did not theoretically impact the DV, and the empirical findings did not support the theory.

The findings of this study indicate that the impact of CCT on EXP is statistically significant ($t = 4.487 > 1.96$, $p\text{-value} < 0.001$) and the standardized regression path coefficient is 0.163 with a positive sign indicating that when CCT goes up by 1 standard deviation, EXP goes up by 0.163 standard deviations. Given that the indirect impact of CCT on EXP and EXP on employee performance are statistically significant, the total indirect impact (ab) is 0.078. The Sobel test statistic is $2.758 > 1.96$ and $p\text{-value} = 0.006 < 0.05$, which is an indicator of the significant indirect

impact. Hence it concludes that experience mediates the relationship between CCT and employee performance. Since the direct and indirect impact are statistically significant, there is a partial mediation impact (see Table 4.19 and Table 4.20).

4.9 Chapter Summary

In this chapter, the researcher has discussed the extensive details of data analysis. The response rate and descriptive statistics of the participant's characteristics have been described. Furthermore, the researcher has successfully checked the assumption of multivariate analysis required to conduct CFA and SEM. That is, no issues regarding sampling adequacy, collinearity, normality, outliers, and multicollinearity have been detected and all model assumptions have been met. Additionally, the researcher has successfully obtained the results from CFA for each latent construct and full measurement model such that all model fit indexes performed well and therefore construct validity using convergent validity and discriminant validity as well as construct reliability using composite reliability and Cronbach's alpha has shown that all latent constructs are valid and reliable and exhibit good fit the sample data. Moreover, the SEM of the measurement model has been tested and verified and provides acceptable results indicating its ability to test the study hypotheses. Finally, the study hypotheses of direct and mediation relationships with employee performance have been successful. The next Chapter will summarize the results followed by an extensive discussion of the findings and will propose recommendations for future research consideration and potential policy implications.