International Journal of Business and Management; Vol. 11, No. 2; 2016
ISSN 1833-3850 E-ISSN 1833-8119
Published by Canadian Center of Science and Education

Testing the Model of Relationship and Impact of Administrative Leadership on Human Resource Training and Customer Satisfaction: Structural Equation Modeling (SEM)

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Received: September 28, 2015 Accepted: January 12, 2016 Online Published: January 23, 2016

doi:10.5539/ijbm.v11n2p127 URL: http://dx.doi.org/10.5539/ijbm.v11n2p127

Abstract

The current study aimed to test and validate a proposed model of the impact of the administrative leadership on customer satisfaction. This model included an external factor which is the administrative leadership, and an internal factor which is the customer satisfaction. The study also aimed to determine the role of human resource training as a mediating factor between the administrative leadership and customer satisfaction. For achieving these research objectives, the study used a quantitative approach to analyzing the data through the use of the structural equation modeling (SEM-AMOS) to test the validity of the proposed research model. The study achieved several results, the most important of which was that the administrative leadership had a positive impact on customer satisfaction. The study also provided evidence of the positive impact of the administrative leadership on customer satisfaction through its positive impact on the training of human resources, which was used as a mediating factor.

Keywords: administrative leadership, customer satisfaction, human resources development

1. Introduction

In terms of successful management is the one that has a sincere desire of work to reach and maintain the success, change the prevailing traditional organizational culture and its development under the surrounding progress. Such development comes only when the organization has an administrative leadership acquainted with the surrounding matters and having the qualification and performance, this is due to the consumer culture and consciousness that had in the past and dependence on quality as the main criterion for selection and preference (Aiyad, 2013). Accordingly, when the administrative leadership became higher within the organization the probability of success became grater to reach its objectives whether organizational or personal (Al-Khudr, 2005); the administrative leadership comes to influence on the others on the basis of its strength sources, which owned by placing in the organizational structure (Hraim, 2003).

Whereas the banking system is considered as one of the pillars underpinning the economic system of the State, so its development is considered as an important developmentally requirement; given the actual intense competition and the marketing of banking services; which leaded many Libyan banks to pursue and adopt the idea and the concept of quality management, but in most of these banks are still suffering from distortions, failure and weakness in the used technology efficient as banking systems limited efficiency, as well as the lack of a communications network linking banks and branches which affects the efficiency of banking operations performance, in addition to continuously deficiencies in the training of human resources (Ben Gadara, 2013) which contribute in the development of the personnel capacities, skills and attitudes (Ben Ishi, 2012); furthermore there is a weakness in the material and moral incentives, which leads to the inability to attract and maintain efficient elements, as well as the lack of customer satisfaction with the quality of service provided by these banks due to their dissatisfaction with the physical aspects quality of the service as well as the quality of dealing (Mosbah, 2007). For developing this sector eliminating the failure and distortions, a strong administrative leadership with high management ability (Al-Hkimi, 2012), having sincere desire to change the followed traditional behavior shall be exist, because any action or change for the better is to discover and

develop leaders known by the efficiency and performance (Mohamed & Akeel, 2010), to place the modern technical means and the client as its marketing strategic axe, as well as to train the human resources in the modern marketing concepts in order to continuously commercialize the banking service.

Therefore, the researcher believes that there are some obstacles and problems that might hinder the marketing of banking services such as the types of prevailing leadership and its strength sources that depend thereon, as well as less awareness of the personnel training in terms of the dimensions and criteria for evaluating the service quality by the customer when the service provided and then the impact on customer satisfaction.

Through the foregoing clarification of the role of the administrative leadership in the Organization, as well as the role of human resources training and the impact on customer satisfaction, the study problem can be formulated in question:

Is there a positive relationship and impact of the administrative leadership on human resources training and customer satisfaction?

Branching from the main question following the previous sub-questions:

Is there a positive relation and impact of the administrative leadership on customer satisfaction?

Is there a positive relation and impact of the leadership on the training of human resources?

Is there a positive relation and the impact of human resources training on to customer satisfaction?

Does the human resources training play a mediator role in positive relation and impact of the administrative leadership on customer satisfaction?

2. Research Objectives

To verify the real relation between the administrative leadership and customer satisfaction.

To test the real role of the training as medial variable in the relation between the administrative leadership and customer satisfaction.

To determine the relation between the administrative leadership and human resources training.

To evaluate the relation between human resources training and customer satisfaction.

3. Theoretical Framework

3.1 Relation between Administrative Leadership and Customer Satisfaction

This paragraph will concern the administrative leadership as a potential factor through its power sources as first apparent factor (Structural, Experience, Personality, Bonus, Coercion) as a set of rules and dimensions that measure the power of the administrative leadership based on the classification (French & Raven, 1959), which is was a pioneer in this field. The classification of leader force is came from (Legitimacy, Reference, Charisma, Bonus, Coercion, Experience). Furthermore, the morals in this field suggest that the most important power sources and the most frequent is the (Legitimate, Information, Reference, Experience) (Al-Jmili, 2004) force. Regarding the leadership styles, it will be reliance on the classification as per its behaviors and methods and manners for influencing its employees as a second apparent factor of administrative leadership. Among these styles (Democratic, Bureaucratic, Free), and the extent of carrying such styles and impact on the behavior of personnel and their motivation towards the provision of quality services achieved to customer satisfaction being as more leadership styles, which depended by managers in organizations (Abbas, 2012).

3.2 Relation between Administrative Leadership and Human Resources Training

This paragraph will concern the administrative leadership as a potential factor through its styles and power sources as a n apparent factors and its relation with the training of human resources as a potential factor and as a (dependent) variable through three apparent factors (Knowledges, Capacities, & Rrends), especially which worked in the front desks and had direct contact with the customers, considering that any organization desired to achieve the required quality levels of service and ensured its continuity in the business world depends on processes to improve administrative systems and development of work as well as the development and training of its human resources.

3.3 Relation between Human Resources Training and Customer Satisfaction

This paragraph will concern the human resources training as a potential factor through three apparent factors (Knowledges, Capacities, & Rrends), with the dimensions and criteria of service quality evaluation, which assesses the customer the level of service quality then affecting the degree of his satisfaction, in particular persons who worked front desks an having direct contact with customers, which may have an impact on the

dependent variable as an independent variable for the dependent variable (customer satisfaction), considering that the achievement of the required service quality levels and ensure its continuity in the business world depends on the improvement and development operations, as well as human resources training.

3.4 Relation between Administrative Leadership, Human Resources Training and Customer Satisfaction

The researcher assumes there is an indirect relation and impact of administrative leadership on customer satisfaction through training of human resources, so it will be dealt with administrative leadership as potential factor through its power sources and styles as apparent factors as (Independent) variable, and its relation to the human resources training as a potential factor in three apparent factors (Knowledges, Capacities, & Rrends), as a (Mediator) factor between the administrative leadership and customer satisfaction as a potential factor through several apparent factors representing in dimensions and criteria of service quality evaluation as (Dependent) factor or variable (see Figure 1).

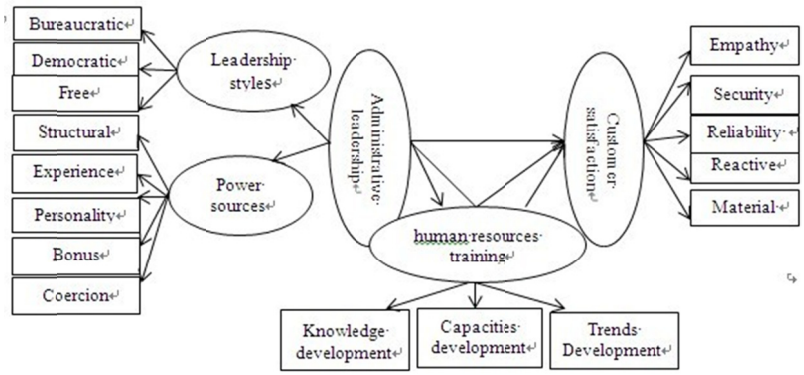

Figure 1. Conceptual framework

4. Research Hypotheses

Based on the conceptual framework proposed in the current study that guides our research objectives and questions, this study attempted to test the following research hypotheses:

There is a direct positive impact of the administrative leadership on customer satisfaction.

There is a direct positive impact of the administrative leadership on human resource training.

There is a direct positive impact of human resource training on customer satisfaction.

There is an indirect positive impact of the administrative leadership on customer satisfaction through the positive impact on the training of human resources.

5. Method

5.1 Population & Sample

The population of this study consisted of managers and heads departments in commercial banks in Libya, which belong to the public sector with a percentage not less than 51% (Central Bank of Libya), including six prime public commercial banks and a number of 402 branches. This sample was selected due to the role such commercial banks play in supporting and developing the Libyan economy, their large size and long ages in conducting banking business as well as their geographical distributions in the study environment (Report of the Central Bank of Libya, 2012). Therefore, this study was scoped to the public banks only while excluding the other privately owned commercial banks from its investigation due to the small size of such private banks and their young ages in conducting banking business in the study environment (Abdurrahim, 2012). Because of the large size of the population, the sample size was determined by 5: 1 of the overall study population (Hari, Black, 1998; Kline, 2005). Therefore, the size of the sample was (92 x 5 = 460). The researcher distributed (460) questionnaires to the study samples, and a number of (449) questionnaires were obtained whereas (11) questionnaires were lost and (7) of them were excluded because of the lack of the respondents' clear responses to the items of the questionnaire. Thus, the final overall number of the valid questionnaires subjected to the quantitative analysis in this study was (442) questionnaires.

5.2 Research Instruments

In this regard, it is relied upon the questionnaire as a tool to gather the necessary information for this study as one of the most suitable scientific research tools that achieve the survey study objectives and to obtain information and facts associated with a determined reality, for achieving the study, a questionnaire is made for the purposes of processing the study questions and hypotheses.

5.3 Confirmatory Factor Analysis

The Structural Equation Modeling (AMOS) model-fitting program is used to test the validity constructs are to test the research hypotheses. The overall model fit is assessed by using four indices of the model goodness-of-fit: (1) the chi-square statistics; (2) the comparative fit index (CFI); (3) the minimum value of the discrepancy between the observed data and the hypothesized model divided by degrees of freedom (CMIN/DF) or normed chi-square. (4) In addition (RMSEA) of between (0.08) to (0.10) indicates a mediocre fit and would not employ a model a RMSEA greater than 0.1 (>0.1).

5.4 Construct Validity

The employment of factor loading composite reliability (CR) and average variance extracted (AVE) were proposed by (Hair,Black,Babin, Anderson and Tatham ,2006) to determine the convergent validity if it equals to or greater than 0.5 (≥0.5) and the composite reliability equals to or greater than 0.7 (≥ 0.7) if were recommended by Hair et al.(2006). In addition (AVE) reading values should be greater than 0.5 (≥ 0.5).

5.5 Testing the Theoretically Hypothesized Research Model Using Integral Structural Equation Modeling:

In this study used the structural equation modeling (SEM-AMOS) for testing the research hypotheses and objectives and test the relationship between the administrative leadership and training of human resources and customer satisfaction.

6. Results

6.1 (CFA) of the Administrative Leadership Model

6.1.1 The Confirmatory Factor Analysis (CFA) of the Administrative Leadership

The (CFA) of the Patterns of Administrative Leadership: The results of the goodness-of-fit of the final modified model of the patterns of administrative leadership as in Figure (2) showed that the normative Chi-Square (Chi-Square /degrees of freedom) was (3.626), and the relative strength index (CFI) was (.951). Moreover, the value of RMSEA was (.077).

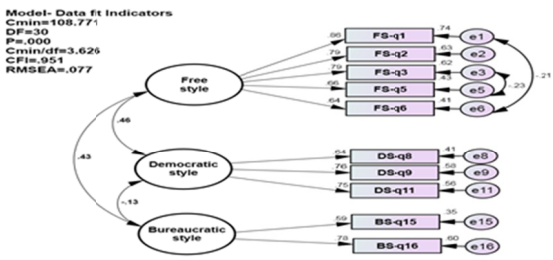

Figure 2. The final revised of the leadership Style model

6.1.2 Construct Validity and Reliability

In this study, we performed the factor lodgings for the items related to the model of the patterns of administrative leadership as shown in the modified model (Figure 2). The results show that the loadings for these items ranged from (0.59 to 0.86), which were higher than 0.5 (≥ 0.5). The values of the reliability of these items also ranged from (0.81 to 0.83), which was greater than 0.7 (≥ 0.7). Furthermore, the values of the divergent or discriminant validity of these three variables that constitute up the factor of the administrative leadership were (0.57, 0.52, 0.47), being higher or greater than 0.5 (≥ 0.5). Thus, these results indicate that the items of this factor of the patterns of administrative leadership are valid and reliable as shown in Table 1.

Table 1. The items of factors of the patterns of administrative leadership

No	Latent variables	Items	R	estimate	S. E	C. R	P	Loading	SMC	AVE
Fs q1	Free Style	Administrative leadership not participate in determining the duties.	.81	1.000	-	-	-	.86	.74	.57
Fs q2		Administrative leadership not participate in determining the work procedures except required to do so.	.81	.882	.046	19.52	.000	.79	.63	-
Fs q3		Administrative leadership shall not criticized the staff performance.	.81	.832	.045	18.55	.000	.79	.62	-
Fs q5		Administrative leadership participate in the work execution.	.82	.672	.046	14.55	.000	.66	.43	-
Fs q6		The administrative leadership shall participate to determine the work procedures when required to do so.	.81	.654	.049	13.32	.000	.64	.41	-
Ds q8	Democratic Style	Suggestions of employees to raise the quality level shall be welcomed.	.82	1.000	-	-	-	.64	.41	.52
Ds q9		Administrative leadership knows how to saturate the staff requirements.	.82	1.112	.098	11.36	.000	.76	.58	-
Ds q11		Executive procedures shall be determined in participation with the administrative leadership and staff.	.82	1.124	.099	11.31	.000	.75	.56	-
Bs q15	Bureaucratic Style	The staff do not participate in the planning for achieving the objectives intended for the bank.	.83	1.000	-	-	-	.59	.35	.47
Bs q16		Administrative leadership welcomes no suggestions from the staff for improving the service quality.	.82	1.350	.205	6.57	.000	.78	.60	-

S.E. Standard Error, **C.R**: Critical Ratio, **P**: Probability, **SMC**: Squared Multiple Correlation, **AVE**: Average Variance Extracted, **R**: Reliability.

6.2 The Confirmatory Factor Analysis (CFA) of the Sources Leadership Power Model

The (CFA) of the Sources leadership power: The results of the goodness-of-fit of the final modified model of the patterns of Sources leadership power as in Figure (3) showed that the normative Chi-Square (Chi-Square /degrees of freedom) was (2.294), and the relative strength index (CFI) was (.956). Moreover, the value of RMSEA was (.054).

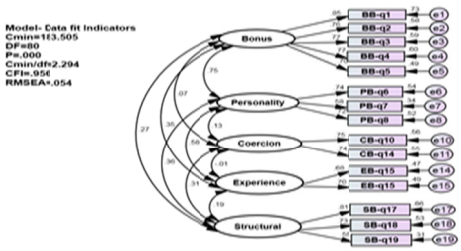

Figure 3. The final revised of the Sources leadership power model

6.2.1 Construct Validity and Reliability

In this study, we performed the factor lodgings for the items related to the model of the Sources leadership power as shown in the modified model (Figure 3). The results show that the loadings for these items ranged from (.55 to .85), which were higher than 0.5 (≥0.5). The values of the reliability of these items also ranged from (.84 to .85), which was greater than 0.7 (≥0.7). Furthermore, the values of the divergent or discriminant validity of these variables that constitute up the factor of the Sources leadership power were (.59, .47, .56, .48, .50), being

higher or greater than 0.5 (≥0.5).Thus, these results indicate that the items of this factor of the Sources leadership power are valid and reliable as shown in Table 2.

No	Latent variables	Items	R	estimate	S. E.	C. R.	P	Loading	SMC	AVE
BB q1		Bank administration gives periodically bonuses to creative staff	.84	1.000	-	-		.85	.73	.59
BB q2	Bonus	Administrative leadership shall honor the retired staff continuously and permanently.	.84	.867	.048	18.22	.000	.76	.58	-
BB q3		Staff shall be awarded upon the performance.	.84	.840	.045	18.52	.000	.77	.59	-
BB q4		Incentives and bonuses system coordinates with the staff expectations.	.84	.855	.046	18.59	.000	.77	.60	-
BB q5		Promotion and awards linked to the staff performance.	.84	.681	.042	16.29	.000	.70	.49	-
PB q6		Administrative leadership enjoys with respect and gratitude towards their personalities.	.85	1.000	-	-	-	.72	.52	.47
PB-q7	Personality	Administrative leadership well listens to who speaks.	.85	.772	.072	10.73	.000	.58	.34	-
PB q8		Administrative leadership enjoys with leadership skills reinforcing the credibility.	.85	.864	.067	12.94	.000	.74	.54	-
CB q10	Coercion	Threat method shall be used when faults committed.	.85	1.000	-	-	-	.74	.55	.56
CB q11		Performance and punishment shall be linked by the management	.85	.892	.193	4.625	.000	.75	.56	-
EB q14	Expertise	Administrative leadership shall depend on the previous expertise for facing such problem	.85	1.000	-	-	-	.68	.47	.48
EB q15		It shall be depended on the expertise for promoting the staff as teamwork	.85	.981	.137	7.162	.000	.70	.49	-
SB q17	Structural	Administrative leadership shall use the official power for settlement of dispute in bank	.85	1.000	-	-	-	.81	.66	.50
SB q18		Administrative leadership shall strictly apply laws	.85	.940	.085	11.05	.000	.73	.53	-
SB q19		Supreme management shall approve the offered power to control the work	.85	.589	.061	9.665	.000	.55	.31	-

S.E. Standard Error, **C.R**: Critical Ratio, **P**: Probability, **SMC**: Squared Multiple Correlation, **AVE**: Average Variance Extracted, **R**: Reliability.

6.3 The Confirmatory Factor Analysis (CFA) of the Human Resources Training Model

The (CFA) of the human resources training: The results of the goodness-of-fit of the final modified model of the patterns of human resources training as in Figure 4 show that the normative Chi-Square (Chi-Square /degrees of freedom) was (2.263), and the relative strength index (CFI) was (.978). Moreover, the value of RMSEA was (.054).

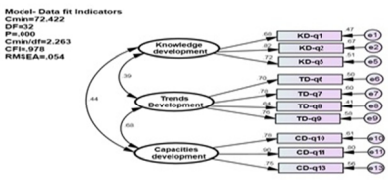

Figure 4. The final revised of the human resources training model

6.3.1 Construct Validity and Reliability

In this study, we performed the factor lodgings for the items related to the model of the human resources training as shown in the modified model (Figure 4). The results show that the loadings for these items ranged from (.64 to .90), which were higher than 0.5 (≥0.5). The values of the reliability of these items also ranged from (.89 to .89), which was greater than 0.7 (≥0.7). Furthermore, the values of the divergent or discriminant validity of these three variables that constitute up the factor of the human resources training were (.55, .52, .66,), being higher or greater than 0.5 (≥0.5).Thus, these results indicate that the items of this factor of the human resources training are valid and reliable as shown in Table 3.

No	Latent variables	Items	R	estimate	S. E	C. R	P	Loading	SMC	AVE
KD q1	Knowledge	Data shall be updated regarding the organization's plans and objectives.	.89	1.000	-	-	-	.68	.47	.55
KD q2		Technical knowledge shall be renewed by service production ways and materials.	.89	1.194	.096	12.43	.000	.82	.67	-
KD q5		Knowledge shall be developed in various administrative jobs in the organization	.89	1.085	.089	12.12	.000	.72	.51	-
TD q6		Emotion shall be developed at employees in terms of liability in the organization.	.89	1.000	-	-	-	.70	.50	.52
TD q7	Trends	Emotion shall be developed in terms of team spirit between the employees and management in the organization	.89	1.081	.077	13.92	.000	.78	.60	-
TD q8		Emotion shall be developed by the importance of distinction for the required service produced.	.89	0.882	.074	11.79	.000	.64	.41	-
TD q9		Cooperation spirit shall be developed between the employees and administrative leadership in the organization.	.89	1.072	.078	13.72	.000	.76	.58	-
CD q10		Skills and capacities shall be developed to take the appropriate decision.	.89	1.000	-	-	-	.78	.61	.66
CD q11	Capacities	Employees' skills shall be developed for solving problems faced during the work.	.89	1.262	.068	18.38	.000	.90	.80	-
CD q13		Employees' skills shall be developed in terms o expression and discussion during providing the service to the customer.	.89	0.945	.059	15.94	.000	.75	.56	-

S.E. Standard Error, **C.R**: Critical Ratio, **P**: Probability, **SMC**: Squared Multiple Correlation, **AVE**: Average Variance Extracted, **R**: Reliability.

6.4 The Confirmatory Factor Analysis (CFA) of the Customer Satisfaction Model

The (CFA) of the human resources training: The results of the goodness-of-fit of the final modified model of the patterns of Customer satisfaction model as in Figure (5) showed that the normative Chi-Square (Chi-Square /degrees of freedom) was (3.353), and the relative strength index (CFI) was (.939). Moreover, the value of RMSEA was (.073).

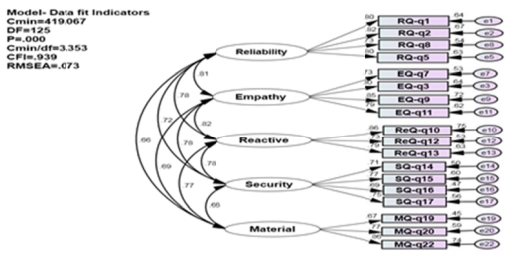

Figure 5. The final revised of the customer satisfaction model

6.4.1 Construct Validity and Reliability

In this study, we performed the factor lodgings for the items related to the model of the Customer satisfaction as shown in the modified model (Figure 5). The results show that the loadings for these items ranged from (.67 to .86), which were higher than 0.5 (≥ 0.5). The values of the reliability of these items also ranged from (.94 to .94), which was greater than 0.7 (≥ 0.7). Furthermore, the values of the divergent or discriminant validity of these variables that constitute up the factor of the human resources training were (.62, .63, .64, .53, .60), being higher or greater than 0.5 (≥ 0.5).Thus, these results indicate that the items of this factor of the Customer satisfaction are valid and reliable as shown in Table 4.

No	Latent variables	Items	R	estimate	S. E	C. R	P	Loading	SMC	AVE
RQ q1		Suggestions proposed by customers shall be took in consideration.	.94	1.000	-	-	-	.80	.64	.62
RQ q2	Reliability	Service shall be obtained in appropriate time	.94	.989	.053	18.68	.000	.82	.67	-
RQ q8		Problems faced the customers during the service shall be took in consideration.	.94	.966	.053	18.68	.000	.80	.63	-
RQ q5		Required service shall be completed when no customers.	.94	.834	.051	16.29	.000	.73	.54	-
EQ q7		Customer's requirements shall be continuously studied.	.94	1.000	-	-	-	.73	.53	.63
EQ q3	Empathy	Customers shall participate in social sides.	.94	1.171	.071	16.32	.000	.80	.64	-
EQ q9		Short waiting periods for customers shall be maintained.	.94	1.287	.074	17.25	.000	.85	.72	-
EQ q11		Customer's requirement shall be acquainted since first time.	.94	1.131	.070	16.05	.000	.79	.62	-
ReQ q10		Quick answer for customer inquiry with smile.	.94	1.000	-	-	-	.86	.75	.64
ReQ q12	Reactive	Employees shall deal with customers with high morals and ethics	.94	.704	.040	17.25	.000	.73	.53	-
ReQ q13		No distinction between customers	.94	.927	.047	19.60	.000	.79	.63	-
SQ q14		Data and information Privacy regarding the customers shall be respected.	.94	1.000	-	-	-	.71	.50	.53
SQ q15	Security	Mistake percentage shall be reduced when required serviced provided.	.94	1.090	.075	14.52	.000	.77	.60	-
SQ q16		Confidence shall be maintained when service provided as required by the customers	.94	.940	.071	13.07	.000	.69	.47	-
SQ q17		Behaviors for acquiring confidence to customer in the bank shall be followed.	.94	1.097	.078	14.07	.000	.75	.56	-
MQ		Recent equipment shall be provided for	.94	1.000	-		-	.67	.45	.60

q19		required service produced.								
MQ q20	Material	Parking for customers' cars, to be followed to the bank.	.94	1.529	.112	13.64	.000	.77	.59	-
MQ q22		Comfortable waiting halls shall be provided for customers.	.94	1.647	.113	14.53	.000	.86	.74	-

S.E. Standard Error, **C.R**: Critical Ratio, **P**: Probability, **SMC**: Squared Multiple Correlation, **AVE**: Average Variance Extracted, **R**: Reliability.

7. Testing the Theoretical Model Using the Integrated Formula of Structural Equation Modeling

7.1 Testing the Standard Theoretical Research Model Using a CFA

7.1.1 Main Standard Model

After confirming the statistical assumptions required by the analysis using the SEM, we tested the goodness of fit between the model and collected data. This was followed by testing the proposed research hypotheses in the conceptual model. Figure 6 shows a diagramic representation of the proposed conceptual model of the study using the SEM via the AMOS program. This includes the administrative leadership as the independent factor that consists of two potential dimensions: patterns or styles of leadership represented by three sub-factors known as democratic, bureaucratic and free, and the power source represented by five sub-factors known as structural, experience, personality, bonus and coercion force. In addition to human resources as a dimension, it was used in the present study as a mediator factor which consists of three sub-factors: knowledge, capacities and trends. Regarding the customer satisfaction as a dependent factor, it consists of five sub-factors namely; materialistic, reactive, security, reliability and empathy. It was found that the proposed model of the study fits the data collected from the context of the study. Furthermore, the same figure shows the indices of the goodness of fit between the model and the data collected in the present study the Figure 6.

Moreover, Figure 6 shows that the correlation values are higher than (.85) and the value of correlation between the factor of the administrative leadership and the factor of human resource training is (1.01), which is higher than (1). Such results indicated that there is a problem concerning the linear or the strong internal correlation (Multicollinearity), thus leading to another problem known as non-reasonable estimation (Offending Estimation) in the SEM. It is also shown that the RSI value was equal to (.89), which is less than (.90). These results are indicative of the need for modifying the model of the present study required some (model modification). In addition, the RMSEA index or the relative approximate error index is equal to (.09), which is greater than the (T value). Furthermore, the factor loadings of the bureaucratic leadership pattern, the structural power and the coercion force were all low (.07, .33, -.19), respectively.

Through All the above values and indices indicate that there was a need to modify and improve the model in the current study. Therefore, based on this, we removed those variables with low loadings as compared to other remaining variables seen in Figure 6.

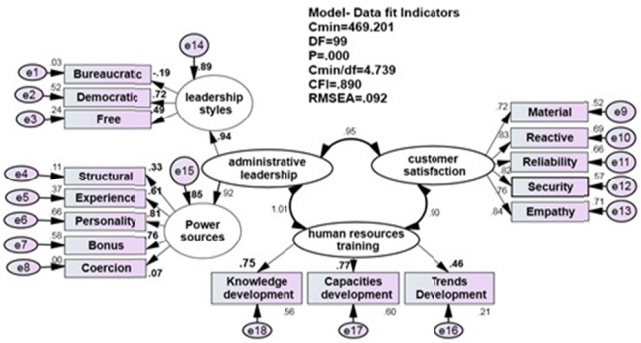

Figure 6. Main measurement model

7.1.2 Modified Measurement Model

After modifying the model of the study by removing the three variables which achieved low loadings, the

modified model was free of errors related to the high correlation values (e.g., higher than .85) as pointed out by Brown (2006). This also indicates that the modified model is free from the above stated problem concerning the strong inner correlations (Multicollinearity) as shown in Figure 7 and also that the modified model is free from the previously stated problem related to the offending estimation.

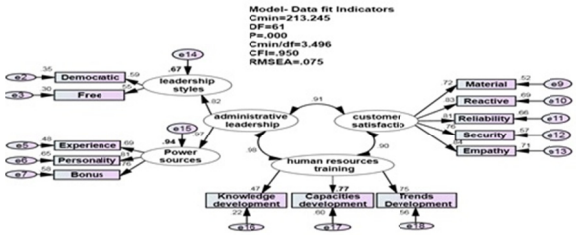

Figure 7. Modified measurement model

7.2 Testing the Research Model Fit with Sample Data

Based on the values and model fit indices between the research model and the sample data as shown in Table (5) and Figure 7, it is evident that there is a goodness of fit between proposed model (administrative leadership, human resources training, customer satisfaction) and the data collected. Based on the value of the Chi-square (213.245), degrees of freedom (61) and the significance level (.000) as a statistic equation and because of the significance level affected by the sample size whenever it was more than 200 (Hair & Black, 2010), we tested the quality of goodness of fit through other indices such as the normative Chi-Square which was (3.496) and less than (5). As shown, the RSI value equal to (.950), which was greater than (.90), thus indicating and confirming that there are correlations among the variables proposed in the research model, and that such values are far from the value of zero that underlies the lack of correlations among the variables in the model. Moreover, the value of the RMSEA index or the relative approximate error index was (.075) and this confirmed that the proposed research model is widespread over the overall population.

Table 5.

Indicators consistency	Standard Model		Structural model	Function value on the quality
	Main, figure: 2 index value	Amended, figure : 3 index value	figure: 4 index value	of conformity
Cmin	469.201	213.245	228.466	---
df	99	61	61	---
P	.000	.000	.000	Non
Cmin/Df	4.739	3.496	3.745	Less than (5)
CFI	.890	.950	.945	More (.90)
RMSEA	.092	.075	.079	Less than (.08)

As From these values and indices of goodness of fit between the proposed model that consists of the three specified factors and the collected data, it can be concluded that it is possible to test the factor loadings and the internal relationships between the factors and their variables as hypothesized in the research model.

7.3 Testing the Efficiency of Factors Saturations in the Model

There are correlations or relations between each main factor and its variables that represent it (e.g., the relations between the potential factor of administrative leadership and its sub-factors or the patterns: democratic and free), and the same can be said about the other remaining potential factors and the variables that represent them. Accordingly, the value of such relation should be at least (.50). As shown from the analysis in Figure 7, the weights between the potential factor of administrative leadership and its patterns as well as sources of power were higher as they obtained (.82, .97), respectively in addition to the large size of the impact between them as (.67, .94), respectively.

It As shown from the model illustrated in Figure 7 and Table 6, we find that the loadings or correlations of the

variables represented by the rectangular shapes and their potential factors exemplified by the oval circuits were high and exceeded (.50). These are usually called saturations, loadings or estimates, which, in this study, ranged from the highest correlation (.84) between customer satisfaction and the variable of the quality of empathy to the lowest one (.55) between the administrative leadership and the variable of the free pattern. In addition, Table 6 presents the T value of each relation between the potential factors and variables that represent them. It can be seen that the T value was higher than (1.964) for all such identified relations, thus being statistically significant at (.05). Such results confirm the existing remarkable relations or correlations between the potential factors and their variables.

Table 6.

Observed variables	Latent variables	Estimate	S. E	C. R	P	Loading	S. M. C
Leadership	Democratic	1.000	-	-	-	.60	.35
styles	Free	2.070	.222	9.325	0.000	.55	.30
Power	Experience	1.000	-	-	-	.69	.47
sources	Personality	1.700	.103	16.577	0.000	.81	.65
	Bonus	3.117	.200	15.592	0.000	.76	.58
human resources training	Knowledge	1.000	-	-	-	.47	.22
	Capacities	2.092	.220	9.510	0.000	.77	.60
	trends	2.204	.234	9.412	0.000	.75	.56
	Material	1.000	-	-	-	.72	.52
Customer	Reactive	1.130	.067	16.922	0.000	.83	.69
satisfaction	Security	1.429	.086	16.592	0.000	.81	.66
	Credibility	1.081	.070	15.441	0.000	.76	.57
	Empathy	.811	.047	17.171	0.000	.84	.71

S.E. Standard Error, **C.R**.: Critical Ratio, P: Probability, SMC: Squared Multiple Correlation.

7.4 Testing the Correlations among the Main Factors in the Research Model

As shown from Figure 7 and Table 7, it is evident that all the correlations among the three main factors: administrative leadership, human resource training and customer satisfaction were statistically significant as their statistical T values were higher than (1.964) and the significance level (probability value) was less than (.05). The values of such correlations among the three factors ranged between (.90) and (.98). Based on the divisions of the proposed research model (administrative leadership, human resource training and customer satisfaction), this required investigating the research hypotheses or the structural research model.

Table 7.

Latent variables	Correlations	Latent variable	Estimate	S. E	C. R	P	C
administrative leadership	<------>	customer satisfaction	2.368	.234	10.120	***	**.909**
human resources training	<------>	customer satisfaction	2.133	.277	7.696	***	**.899**
human resources training	<------>	administrative leadership	1.300	.166	7.842	***	**.977**

S.E. Standard Error, **C.R**.: Critical Ratio, P: Probability, C: Correlation**.**

7.5 Testing the Structural Modeling of the Research Model: Structural Model

The structural model as shown in Figure 6 differs from the measurement model as shown in Figure 7. In the structural model, the independent and dependent variable as well as medial variable are determined by the unidirectional arrow (→), so the model is completely identical to the proposed study. Regarding the measurement model, the relations among the three factors represent independent relations which are reflected or expressed by the bidirectional arrow (↔), but without determining the independent variable, the dependent

variable and the mediating variable. Furthermore, we find that the model fits the sample data through the structural model which is not totally different from the measurement model. Based on the model fit indices in Table 5 and Figure 7. There is a goodness of fit between the research model and the sample collected data. Based on the value of the Chi-square (228.466), degrees of freedom (61) and the significance level (.000) as a statistic equation and because of the significance level affected by the sample size whenever it was more than 200 (Hair & Black, 2010), we again used other indices such as the normative Chi-Square to test the quality of goodness of fit. The normative Chi-Square was (3.745), which is less than (5). As shown, the RSI value equal to (.945), which was higher than (.90). This result indicates and confirms the existing correlations among the variables proposed in the research model, and these values are far from the value of zero that underlies the lack of correlations among the variables in the model. In addition, the value of the RMSEA index or the relative approximate error index was (.079), thus confirming the widspeadness of the proposed model over the overall population.

Based on the above values and indices of goodness of fit between the research model that comprises three determined factors and the collected data, the proposed research hypotheses were tested as follows :

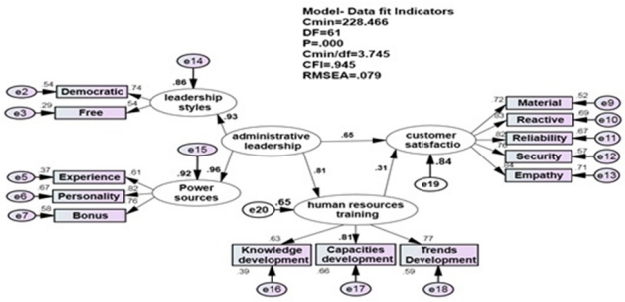

Figure 8. Structural model

8. Testing the Main Research Hypotheses

After confirming the efficiency of the factor loadings and correlations among the variables and their factors as previously discussed, we tested the following research hypotheses that determine the relations or correlations among the three main factors of the study:

8.1 The Impact of Administrative Leadership on Customer Satisfaction

The first hypothesis confirms that there is a positive and direct impact of the administrative leadership on customer satisfaction. As shown in Figure (8) that illustrates the conceptual model of the study as well as Table 8 that shows the outputs of the Amos program, the first research hypothesis was statistically significant since the T value (6.794) was higher than (1.964), and the value of the significance level (.000) was also statistically significant since it was less than (.05). In addition, the value of the path coefficient or estimates was equal to (.65) and shows a positive direction which emphasizes that the increased attention to administrative leadership leads to higher customer satisfaction.

Table 8.

Latent Construct		Latent Construct	Estimate	S. E	C. R	P-Value	S. R. W
administrative leadership	--->	customer satisfaction	.743	.109	6.794	.000	.65
administrative leadership	--->	human resources training	.725	.070	10.340	.000	.81
human resources training	--->	customer satisfaction	.400	.112	3.573	.000	.31

S.E. Standard Error, **C.R**.: Critical Ratio, **S.R.W**: Standardized Regression Weights.

8.2 Administrative Leadership & Human Resource Training

The second hypothesis indicates that there is a direct impact of the administrative leadership on human resources training, and given to the default theoretical model Figure 8 and outputs Amos program Table 8, the hypothesis was a statistical significant given that the statistical value of (T) (10.340) was higher than the stake (1.964), and

the value of the significance level (.000) is significant statistically less than stake (.05), in addition to the value of the path coefficient or standard estimates equal to (.81) and has a positive direction which emphasizes the increased attention to administrative leadership leads to higher human resource training , the effect size was (.65), that means (65%) of human resources training due to the administrative leadership. This is significant impact the potential variables where it is greater than (25%).

8.3 Human Resource Training & Customer Satisfaction

The third hypothesis indicates that there is a positive and direct impact of human resources training on improving customer satisfaction, as in the previous steps to the default theoretical model and outputs of Amos program scheme Table 6, the hypothesis was a statistical significant given that the statistical value of (T) (3.573) was higher than the stake (1.964), and the value of the significance level (.000) is significant statistically less than stake (.05), in addition to the value of the path coefficient or standard estimates equal to (.31) and has a positive direction which emphasizes the increased attention to human resource training leads to higher customer satisfaction, in addition the total effect size on customer satisfaction (.84), this means that (84%) of customer satisfaction due to both the administrative leadership and human resources training. This size is considered due to significant impact on the potential variables. The analysis also indicated in terms of importance of the effect that the effect sixe of administrative leadership was (.65), most important of human resources training, which its effect size was (.31) and the most influential on the high level of customer satisfaction.

8.4 The Impact of Administrative Leadership on Customer Satisfaction through Human Resource Training

The fourth research hypothesis confirms that there is an indirect impact of the administrative leadership on customer satisfaction through the mediating factor of human resource training. As seen in Table 9 and Figure 8, the value of the indirect impact or relation is (.25), which was obtained by multiplying the value of the path coefficient or estimates of the relation between administrative leadership and human resource training (.81) by the value of the path coefficient or estimates of the relation between human resource training and customer satisfaction (.31). The overall impact estimated was (.90) which was resulting from the addition of the overall path coefficient or direct impact of the administrative leadership on customer satisfaction (.65) to the overall path coefficient or non-direct impact of the administrative leadership on customer satisfaction (.65 +.25).

Table 9. The value of the indirect impact

Independent	Mediator	Dependent	Indirect Effect	Total Effect
administrative leadership	human resources training	customer satisfaction	.25	.90

9. Conclusion

The results of statistical analysis using the SEM-AMOS for the proposed research hypotheses indicate that all the factors of the study have positive relations and significant impact on customer satisfaction. Such results corroborate those results obtained in previous studies (Abu Zeid, 2012; Pangil, 2011; Issa, 2014; Al-Otaibi, 2014; Lori, 2011). These results are considered as the main findings through which the researcher achieved the research objectives in this study. The results of the present study imply that in reality, achieving customer satisfaction depends on the patterns of the administrative leadership as well as the power sources for the administrative leadership in the bank. The interesting part of these results is that the results proved that the patterns of the democratic and free leadership had a positive impact on customer satisfaction as opposed to the bureaucratic pattern of leadership that showed a negative impact on customer satisfaction. As far as the power sources of the administrative leadership are concerned, customer satisfaction depends on the experience and the strong personality as well as the bonus as opposed to the structural power that had a negative impact on customer satisfaction. The current study obtained another result showing that human resource training plays an important role as a mediator between (1) the administrative leadership through the democratic and free patterns of leadership as well as the strong personality, experience and reward, and (2) customer satisfaction by developing their knowledge and abilities as well as their attitudes towards the dimensions and criteria used for evaluating the quality of services offered to customers while accessing or obtaining the service.

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