

Using Multiple Linear Regression Model to Identify the Relationship between Leadership Styles and Job Satisfaction in Government

Organizations in Sulaimani City - KRG

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Abstract:

The intent of the study was to examine the impact of managers' leadership styles on employee job satisfaction of the government organizations in Sulaimani city. The study's sample consists of (398) employees that will help answering the study's questions and hypotheses; in addition, a questionnaire developed for the detection of leadership style features (Autocratic leadership style, Democratic leadership style, and Laissez-Faire leadership style) and the level of Employees Job Satisfaction on the authority of each leadership style. The most important findings and conclusions of the research are: The correlation between Employees Job Satisfaction and both (Autocratic and Democratic) leadership styles are in moderate level and towards a positive direction. In other words, Employees Job Satisfaction increases as Autocratic or Democratic leadership styles increases in an organization. Furthermore, Regression results indicates that there is statistically significant effect for Autocratic and Democratic leadership style influence came first regarding the level of the effect. Whereas, Laissez-Faire leadership style does not have any effect on the Employees Job Satisfaction.

Based on the outcomes of this research, democratic leadership style is the greatest impact compared to others with regards to job satisfaction. In order to preside over their employees in daily activities and succeed in achieving the organizational goals, it is suggested that the powerful leader ought to have the high capability to control and identify at all levels of the organization. Furthermore, since the Laissez-Faire leadership style statistically was not significant according to the results, in order to increase employees job satisfaction in the government organization, the managers should get rid of this kind of leadership style in the public sectors or government organizations.

Keywords: Multiple Linear Regression, Correlation Coefficient, Test Normality, Leadership Style, Autocratic Leadership Style, Democratic Leadership Style, Laissez-Faire Leadership Style, Employee Job Satisfaction.

الملخص:

تهدف هذه الدراسة الى تحديد تأثير أساليب القيادة للمديرين على الرضا الوظيفي لدى المؤسسات الحكومية في مدينة السليمانية-حكومه اقليم كردستان. تتكون عينة الدراسة من (398) موظفًا ساهموافي الإجابة عن أسئلة وفرضيات الدراسة ؛ بالإضافة إلى ذلك



، تم تطوير استبيان للكشف عن مميزات نمط القيادة (أسلوب القيادة الاستبدادية (الأوتوقراطية) ، أسلوب القيادة الديمقراطية و أسلوب قيادة عدم التدخل) ومستوى الرضا الوظيفي للموظفين عن سلطة لكل نمط من انماط القيادة. أهم النتائج التي توصل إليها البحث هي: العلاقة بين الرضا الوظيفي عن الموظفين وبين أساليب القيادة الاستبدادية والديمقراطية في مستويات معتدلة ونحو اتجاه إيجابي. بمعنى آخر ، يزيد الرضا الوظيفي لدى الموظفين مع زيادة أساليب القيادة الاستبدادية أو الديمقراطية في علاوة على ذلك ، تشير نتائج الانحدار الخطى إلى وجود تأثير ذي دلالة إحصائية لأساليب القيادة الاستبدادية أو الديمقراطية في المؤسسة. الرضا الوظيفي للموظفين و جاء تأثير أسلوب القيادة الديمقراطية أو لأ فيما يتعلق بمستوى التأثير ، حيث أن أسلوب قيادة عدم التدخل ليس له أي تأثير على الرضا الوظيفي لموظفين. لقد تم الاستنتاج بان أسلوب القيادة الاستبدادية والديمقراطية على مقارنة بالا نماط الاخرى فيما يتعلق بالرضا الوظيفي الموظفين. العد تم وترفي موظفيها في الأنسطة اليومية والنية عدم مقارنة بالا نماط الاخرى فيما يتعلق بالرضا الوظيفي الموظفين. من أجل ترؤس موظفيها في الأنسطة اليومية والنجاح في تعقيق الأداف التنظيمية ، يُقترح أن يتمتع القائد القوي بالقدرة العالية على التحكم وتحديد جميع مستويات المؤسسة. من ناحية أخرى ، نظرًا لأن أسلوب قيادة عدم التدخل من الناحية الإحصائية لم يكن مهمًا من أجل زيادة الرضا الوظيفي وفقًا للنتائج، ينبغي على المديرين أسلوب قيادة عدم التدخل من الناحية الإحصائية لم يكن مهمًا من أجل زيادة الرضا الوظيفي وفقًا للنتائج، ينبغي على المديرين

پوخدهی تویژیدهوه

1. Introduction

The purpose of this study is to investigate about how different leadership styles in governorate organizations in Sulaimani city has impact on employees' job satisfaction and how employees are satisfied with what they do on daily basis and strategic decisions throughout their careers in governorate organizations.



To understand leadership, one has to understand what leaders do first. A leader is expected to think about ways to manage possibilities that are needed to test the assumptions made about reality (Selart, 2010). Leadership comes in many styles which are used in a variety of fields; In this study, the focus is on three particular styles of leadership which include: Autocratic leadership style, Democratic leadership style, and Laissez-Faire leadership style, while connecting these leaderships styles with employee's job satisfaction by using multiple linear regression method. According to (Nonyelum & Dolly , 2018) autocratic leadership regarded as the leaders who makes decision without the concurrence of their team members, this style reflects when there are urgent conditions happen or urgent decisions needs to be taken, in such cases the leader or the manager does not take any of the employees opinions into consideration.

It is required for autocratic leaders to prepare and accomplish all tasks that are set out; furthermore, autocratic leaders do not accept words of advice from team members while they are making decisions (Khan, et al., 2015). About democratic leadership style it can be introduced as that style which inspires employees in a way that gets along with the principles of democratic procedures and essentials, such as negotiation, planning, contribution and self-determination, democratic leaders actively encourage and stimulate group decisions and group discussions (Basit, Sebastian, & Hassan, 2017). On the other hand, the democratic leadership style is often referred to as the participative style meaning the team leader emboldens team members to partake in the decision-making process as well as involving them in other important responsibilities, working hand in hand with their group members and agree to negotiate when disagreements arise (Khan, et al., 2015).

Regarding laissez-faire leadership styles (Gavriletea & Dean , 2014) highlighted that Laissez-faire leaders do not deliver enough information and resources to their staff which results in employee to employee exchange concerning the job necessities understanding, rules, regulations, policies, and the processes of the job, employees will rarely be directed or motivated, the leader do not hold the responsibility of introducing the plan and the methods of reaching the plan's goals. As the results of the previous studies, the most of the discussions on leadership styles were rehearsed on non-government organizations but examine this issue on the government organization is lacking, and the significance of this study is trying to fill this gap in knowledge and find out this kind of leadership style which is more practice in the government organization in Sulaimani city. In other words, this research will be advantageous for both sides employees and managers to identify which leadership style is more motivated the employees in the government organizations concerning job satisfaction.

Furthermore, since three leadership styles (Democratic, Autocratic, and Laissez-Fair) are used as independent variables on the job satisfaction as a dependent variable, multiple linear regression model is used to analyze the dataset.

2. Literature Review

Job satisfaction can be described as the level on which an employee's anticipations, wants and needs toward his or her job and the organization he or she works for are met (Chirchir, 2015). There are varieties of aspects that can affect employee job satisfaction; in this research the leadership styles and their impact on employee job satisfaction have been studied.



As (Rad & Yarmohammadian, 2004) highlighted, employee's job satisfaction regarding the leadership styles differs from a style to another, hence this can be defined as a point of view or a manner that the workers have toward their job's execution in the firm they work for. Furthermore, employees can be more creative if they are allowed to share ideas and participate in the decision-making process which will lead them to more satisfaction.

Autocratic leadership styles are crucial in many environments such as companies, organizations and most workplace environments due to the fact that Autocratic leadership claims no inaccuracy in results (Schaeffer, 2002). The word Autocratic is originally greek and it is separated into two parts; Auto which means self and cratic which means rule, this makes it easier to understand autocratic leaders; this makes it easier to understand autocratic leaders; they are people who only take their own thoughts into consideration and rarely accept the suggestions that are proposed by the people around them (Chukwusa, 2018).

In addition to that, autocratic leaders follow the obligatory rules and also do not trust team members' thoughts or suggestions for decision-making processes, preparation, victory, discipline, as well as making all the right decisions for themselves and their team members are expected from autocratic leaders, however, while autocratic leaders make all of the decision making themselves, it is crucial for communication to take place between the leader and the team members (Khan, et al., 2015). According to (Sharma & Singh, 2013) a democratic leader has confidence in the capacities and ability of their representatives or employees. The individual in question includes their workers broadly in numerous hierarchical activities. The person believes that the primary motivating factor for the employee is investment and ability sharing.

In addition to that, democratic leaders may not always agree with their group members' opinions so they are expected to keep an open mind and to take notice of their words considering that even if the team member's opinion is not advantageous, team leader can still benefit from their ideas and remarks (Khan, et al., 2015). The next type of leadership style that is going to be discussed is the Laissez-faire leadership style, the French word laissez-faire stands for (allow to do) and this indicates that team leaders do not want to partake in the decision-making process, Laissez-faire leadership style focuses on the idea that team members are expected to make decisions themselves and be able to maintain an out-going work atmosphere without total guidance or supervision by the team leader (Chaudhry & Javed, 2012).

On the other hand, laissez-faire leadership style might result in damages to the organization's workflow and goals due to several problems facing the team such as not meeting the deadlines, lack in appropriate feedback, disagreements among the team and uncertainties, all these made this style to be known as an unusual style which leads to a weak and ignorant position for the leader (Tosunoglu & Ekmekci, 2016). Furthermore, laissez-faire leaders give the responsibility of decision making to team members. However, it is important for leaders to make sure all team members are accomplishing their tasks (Chaudhry & Javed, 2012).



3. Methodology

The main purpose of this study is to deal with the data presented by the survey questionnaire and its analysis regarding leadership styles of Government Organizations in Sulaimani city of Iraq, which is classified into four main variables, a dependent variable (Employees Job Satisfaction), and three independent variables of leadership styles (Autocratic, Laissez-Faire, and Democratic). Furthermore, a five point Likert-type scale was used for rating the answers of the questions paragraph in which (give 5 to Strongly Agree) to the lowest weight of the paragraph (give 1 to Strongly Disagree), and between them three other weights are (give 4 to Agree, give 3 to I Do Not Know, and give 2 to Disagree). Furthermore, Multiple Linear Regression Model and Correlation Coefficient tested on the data by using JMP software which is a statistical analysis tool. Based on the results, the values of the arithmetic averages reached by the study will be solved to interpret the data as follows:

High Level	Moderate Level	Moderate Level	High Level
Strongly Disagree	Disagree	Agree	Strongly Agree
$1 \le \mu < 2$	$2 \le \mu < 3$	$3 \le \mu < 4$	$4 \le \mu \le 5$

Table (1) Statistical Analysis for Independent Variable Leadership Styles

Research Problem and Question

The influence of the leader in the overall success and attainment of an organization cannot be easily denied. The majority of employees in government organization in general, lacking their ability to achieve the set goals and objectives of the organization due to the problem created by leadership style of the managers. Therefore, it is the leader's liability to direct and manage the activities of employees towards solving the problems. The levels of employee job satisfaction of government organization may be related to the leadership style implemented by the managers. This is exactly what this study tries to find out. There are many employees in the government organization in the Sulimani city. However, this study was carried out only in some organization located to the city center of Sulaimani and is there any impact of leadership styles on job satisfaction of government organization in Sulaimani city? is the vital question of this study.

Objective of the Research

The main objective of this research is to examine the impact of Democratic Leadership Style, Autocratic Leadership Style, and Laissez-Fair Leadership Style on Employees Job Satisfaction in the government organization in Sulaimani city.

Importance of the Research:



The most importance and beneficial of this study is useful for employees to identify which leadership style is better for them to increase job satisfaction, and the results if the study is worthful for managers or leaders to recognize how employees can be motivated through leadership styles in a government organization.

Research Hypothesis and Model

- The Democratic Leadership Style has significant impact on Job Satisfaction in government organization in Sulaimani city.

- The Autocratic Leadership Style has significant impact on Job Satisfaction in government organization in Sulaimani city.

- The Laissez-Fair Leadership Style has significant impact on Job Satisfaction in government organization in Sulaimani city.

While three leadership styles (Democratic, Autocratic, and Laissez-Fair) leadership styles are tested on the job satisfaction, multiple linear regression model is used to analyze the dataset.

Sampling and Data Collection

The essential data for this study was conducted by the use of questionnaires, and the simple random sampling was used to collect a sample size of 398 employees from all the government organization in the city of Sulaimani in Kurdistan Region of Iraq. The surveys were handed out to employees who randomly selected from some government organizations in Sulaimani city. Besides, the background information used in the study consists of 36 questions, in which 18 questions for dependent variable (Employee Job Satisfaction), and it is some sections of job satisfaction survey developed by (Spector, P.E, 1985), and 18 questions concerning independent variables, or leadership styles of (Autocratic, Democratic, and Laissez-Faire), This statement is a part of leadership style survey adapted by (Clark, 2002) and all the predictor and response variables derived from the data are given in Table 2 for reference.

Tuble 2. The distribution of predictor and response variables		
Dependent Variable	Independent Variables	
	Autocratic Leadership Style	
Employee Job Satisfaction	Democratic Leadership Style	
	Laissez-Faire Leadership Style	

Table 2: The distribution of predictor and response variables

4. Analysis and Results



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Cronbach	sα	
	α	8642 0 .2 .4 .6 .8
Entire set	0.8679	
Excluded Col	α	8642 0 .2 .4 .6 .8
y1	0.8665	
y2	0.8621	
y3	0.8623	
y4	0.8594	
y5	0.8603	
y6	0.8634	
y7	0.8664	
y8	0.8625	
y9	0.8658	
y10	0.8607	
y11	0.8633	
y12	0.8612	
y13	0.8617	
y14	0.8602	
y15	0.8615	
y16	0.8621	
y17	0.8619	
y18	0.8627	
x1	0.8653	
x2	0.8615	
x3	0.8667	
x4	0.8684	
x5	0.8660	
хб	0.8694	
x7	0.8642	
x8	0.8668	
x9	0.8706	
x10	0.8722	
x11	0.8629	
x12	0.8665	
x13	0.8619	
x14	0.8629	
x15	0.8708	
x16	0.8624	
x17	0.8683	
x18	0.8740	

Figure (1) The value of the reliability coefficient for the internal consistency of each variables

Figure (1) shows the Cronbach's alpha values which are measures the internal consistency or reliability of a data set; this is one of the considerations to judge the suitability of a data set for statistical analysis. Cronbach's α values for the overall score and for all individual scales were more than 0.70 for all dependent variable (Employee Job Satisfaction) and independent variables of leadership styles (Autocratic, Democratic, and laissez-Faire) which is between (0.8594 – 0.8740), suggesting that the items have very good internal consistency. Note that a reliability coefficient of 0.70 or higher is considered acceptable (Cortina, J. M, 1993). Thus, that reliability coefficients for all study dependent and independent variables are accepted, and the data is possible for statistical analysis and scientific research.



Table (3) Statistical Analysis for Independent Variable Leadership Styles

		Statistical Indicators			
Variable s	Leadership Styles	Weighted Mean	Standard Deviation	p-value	Ranks
	Autocratic	3.2031	0.73209	<.0001*	2
ndependent Variables	Laissez-Faire	3.2718	0.79696	<.0001*	1
Independ Variables	Democratic	3.0133	0.79226	<.0001*	3

1. The overall weighted mean of the Laissez-Faire Leadership Style is (3.2718) with a standard deviation (0.79696) and p-value (0.0001); It is in rank 1 which indicates that employees Moderated agree with this leadership Style.

2. The overall weighted mean of the paragraph the Autocratic (Authorization) Leadership Style is (3.2031) with a standard deviation (0.73209) and p-value (0.0001), and it is in rank 2 which indicates that employee's agreement is at the moderate level. In other words, employees believe that Autocratic leadership Style of the managers of the government organization in positive manner.

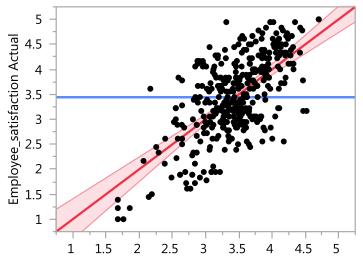
3. The overall weighted mean of the Democratic Leadership Style is (3.0133) with a standard deviation (0.79226) and p-value (0.0001), and it is in rank 3 which indicates that employees moderated agreement with this kind of leadership style.

Table (4) Statistical Analysis for Independent Variable Leadership Styles

		Statistical Indicators		
Variable s	Response Variable	Weighted Mean	Standard Deviation	p-value
Depende nt	Employees Job Satisfaction	3.4457	0.79046	<.0001*

The overall weighted mean of dependent variable (Employees Job Satisfaction) is (3.4457) with a standard deviation (0.79046) and p-value (0.0001); It indicates that all employees were moderately satisfied with their jobs and all dimensions of job satisfaction.





Employee_satisfaction Predicted

Figure (2) Actual by Predicted plot

Figure (2) shows how the predicted values and the real values of the response variable (Employee Job Satisfaction) are related to each other. Furthermore, it illustrates that the predicted variables (Autocratic Leadership Style, Democratic Leadership Style, and Laissez-Faire Leadership Style) are linearly related to the Employee Satisfaction.

R-Square	0.422598
Root Mean Square Error	0.602931
Mean of Response	3.445701
Observations (or Sum Wgts)	398

In Table (5), R^2 shows the amount of variance of y explained by the changes in x. In this case, the variables leadership styles of (Autocratic, Democratic, and Laissez-Faire) altogether explain 42.26% of the variance in Employee Job Satisfaction, and the remaining 57.74% of the variation of Employee Satisfaction is presumed to be due to random variability or some other variables which are not related to this study. Likewise, Root Mean Square Error (MSE= S =0.70629), indicating that within every combination of these variables, the standard deviation of Employee Satisfaction is about 0.60. Also, notable that mean of response or dependent variable = 3.45, and total observation number is 398.



Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	104.82874	34.9422	96.1222
Error	394	143.22928	0.3635	Prob > F
C. Total	397	248.05801		<.0001*

 Table (6) Analysis of Variance (ANOVA)

Analysis of Variance is to test whether or not the means of predicted variables are equal, and all equal to zero.

 $H_0: \mu(Autocratic Style) = \mu(Democratic Style) = \mu(Laissez - Faire Style) = 0$ $H_1: at least on of the means is not equal to zero$

Since P-value = 0.0001, and it is less than $\alpha = 0.05$, the means of the predicted variables are not equal which is indicated that at least one of the leadership styles has affected on Employee Job Satisfaction.

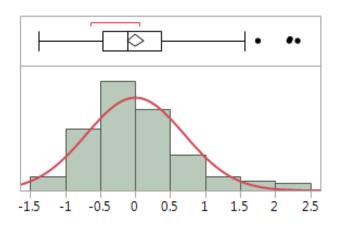
Term	Estimate	Std Error	t Ratio	Prob> t
	beta			
Intercept	1.17082	0.204239	5.73	<.0001*
Autocratic	0.325971	0.048064	6.78	<.0001*
Democratic	0.467961	0.042449	11.02	<.0001*
Laissez-Faire	-0.101379	0.051358	-1.97	0.0491*

Table (7) Parameter Estimates

In the Table (7), since the P-values of all variables (*Autocratic*, *Democratic* and *Laissez* – *Faire* less than $\alpha = 0.05$, these variables are significant and have some effected on Employee Satisfaction. However, these results cannot be concentrated before testing the normality of the Residuals of the response variable (Employee Job Satisfaction).



PP: 128-144



- Normal(7.3e-17,0.60065)

Figure (3) Residual Normality Plot

Figure (3) is the graph of normality. Even though, the residual of Employee Job Satisfaction has (Mean = 7.3 e-17 = 0) and (Variance = 0.60065), the plot doesn't look like that the data comes from a normal distribution. In order to emphasize this issue, Shapiro-Wilk W Test can be used

Table	(8)	Goodness	s-of-Fit Test
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Shapiro-Wilk W Test		
W	Prob <w< th=""></w<>	
0.948369	<.0001*	

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

Since the (Prob < W) = 0.0001, and it is smaller than $\alpha = 0.05$, the fit of the residuals is not come from a normal data. Thus, the data need to be transformed for normality, then refitting the model again.

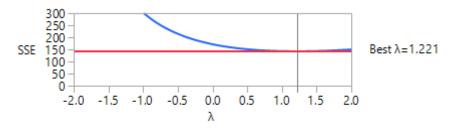


Figure (4) Box-Cox Transformations



Figure (4) is the Box-Cox Normality method to select the best Lambda (λ) to transform the response variable of the data (*Employee Job Satisfaction*) with the following formula described by (Box, G. E. P. and Cox, D. R., 1964):

$$y_{\lambda}' = \frac{y^{\lambda} - 1}{\lambda \ \overline{(g)}_{y}^{\lambda - 1}}$$

..... formula (1)

While $\bar{g} = Geometric Mean = \sqrt[n]{y_1 * y_2 * \dots + y_n}$

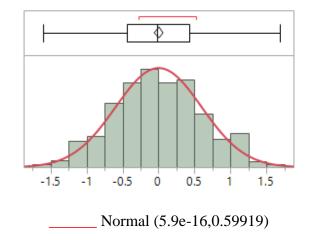


Figure (5) Residual Normality Plot After Transform the Data

Figure (5) now looks like a symmetric plot, and the data comes from the normal distribution with (Mean = 0) and (Variance = 0.59919). To confirm the normality of the data, it should make Goodness of Fit Test as shown below:

Table (9) Goodness-of-Fit Test After Transform the Data

Shapiro-Wilk W Test		
W Prob <w< th=""></w<>		
0.995665	0.3409	

In the Table (9), While the (Prob < W) = 0.3409, and it is bigger than $\alpha = 0.05$, there is no evidence to reject the normality of the residuals. Thus, the fit of the residuals of the response variable (Employee Job Satisfaction) comes from a normal data.



Term	Estimate	Std Error	t Ratio	Prob> t	
	beta				
Intercept	-0.010435	0.203742	-0.05	0.9592	
Autocratic	0.3180748	0.047948	6.63	<.0001*	
Democratic	0.4626453	0.042346	10.93	<.0001*	
Laissez-Faire	-0.097281	0.051233	-1.90	0.0583	

Table (10) Parameter Estimates After Transform the Data	
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Table (10) shows the parameter estimates after transform the data, and it shows that variables of Autocratic and Democratic Leadership Style both are significant because of small p-value = 0.0001. On the other hand, the variable of (Laissez-Faire Leadership Style) is not significant while its pvalues = 0.0583 which is greater than $\alpha = 0.05$. and it indicates that Laissez-Faire Style of Leadership doesn't have any influence on the (Employee Job Satisfaction).

Thus, the linear regression equation will be:

Employee Job Satisfaction = -0.010435 + 0.3180748 (Autocratic Leadership Style) + 0.4626453 (Democratic Leadership Style)

The regression equation indicates that the estimated beta of Autocratic = 0.3180748 and it shows the positive relation between (Autocratic Leadership Style) and (Employee Job Satisfaction). In other words, with increasing every one-unit of (Autocratic Style) by manager in an organization, the Employee Job Satisfaction increases by 31.81 %. In addition, for Democratic Leadership Style, the estimated coefficient = 0.4626453, and it illustrates that (Employee Job Satisfaction) increases by 46.26% as Democratic Leadership Style accomplishes one-unit more by leaders in a government organization.

Table (11) Correlation Matrix Between Variables

	Employee satisfaction	Autocratic	Democrat	Laissez-
			ic	Faire
Employee	1.0000	0.4887	0.5960	0.0771
satisfaction				
Autocratic	0.4887	1.0000	0.4471	0.3048
Democratic	0.5960	0.4471	1.0000	0.1365
Laissez-Faire	0.0771	0.3048	0.1365	1.0000



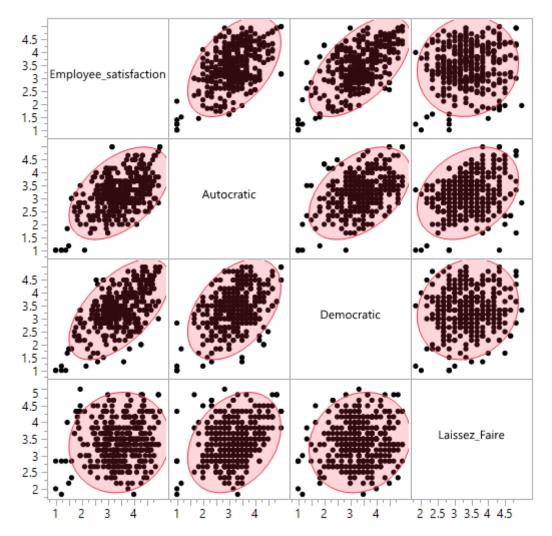


Figure (6) Scatterplot Matrix of the Correlation Between the Predictor Variables

Table (11) and Figure (6) show the power of correlation between variables. In the results, correlation between (Employee Job Satisfaction) and (Democratic Leadership Style) is about 0.60, which is the strongest correlation compared to other variables, and it indicates that there is a moderate positive relationship between these two variables. In other words, as the variable of (Democratic Leadership Style) increases, (Employee Job Satisfaction) also increases. Furthermore, the correlation between (Employee Job Satisfaction) and (Autocratic Leadership Style) is about 0.49. The relationship between these two variables is a moderate and positive, which illustrates that, as (Autocratic Style) increases in an organization (Employee Job Satisfaction) increases. Whilst, there is a weak positive correlation between (Employee Job Satisfaction) and (Laissez-Faire Leadership Style) which is about 0.0771.

In addition, the results show that there is no any highly correlated between predictor variables (Autocratic, Democratic, and Laissez-Faire) of leadership styles, and it is evident that there is not collinearity problem in the data.



Pairwise Variables		Correla tion			P-value (Signific Plot Correlation ant		
Variable	by Variable			Lower 95%	Upper 95%	Probabi lity)	-0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8
Autocratic	Employee satisfaction	0.4887	398	0.4101	0.5601	<.0001*	
Democrati c	Employee satisfaction	0.5960	398	0.5286	0.6558	<.0001*	
Laissez- Faire	Employee satisfaction	0.0771	398	-0.0214	0.1740	0.1248	

Table ((12)	The	Pairwise	Correlation
I able (141	Inc	1 an wise	Conclation

Table (12) shows the pairwise correlation values in one side, and hypothesis test to know whether there is any correlation in the population (The Employees of Government Organizations in Kurdistan Region of Iraq) between pairwise variables in another side. That is to say:

- $H_0: \rho = 0$, means there is no linear correlation in the population
- $H_1: \rho \neq 0$, means there is some linear correlation in the population

Since the p-values of the pairwise variables (Autocratic, Employee Satisfaction), and (Democratic, Employee Satisfaction) smaller than $\alpha = 0.05$, there is evidence to reject *null hypothesis* (H_0), and their correlation statistically significant. In other word, there is some

linear correlation between these pairwise variables in the population. In contrast, there is no correlation between (Laissez-Faire Style) and (Employee Job Satisfaction) in the population because of its large p-value = 0.1248.

When it comes to the column of Confidence Interval of Correlation on the Table (12), the interpretation of the confidence interval is that there are 95% confident of the real correlation between (Autocratic Style and Employee Satisfaction) in the population is between 0.4102 and 0.5601. In other words, there is 95% confident that $[0.2975 \le \rho \le 0.5581]$, and this true for pairwise variables of (Democratic Style and Employee Job Satisfaction), which is 95% confidence that $[0.5286 \le \rho \le 0.6558]$.

Furthermore, the lower level correlation of the pairwise of (Laissez-Faire, Employee Satisfaction) is negative (-) and the upper level is positive (+), and Zero is a value between these two levels. It indicates that the correlation between these variables might become zero. That is why the laissez-Faire Leadership Style is not significant.



5. Conclusion

The objective of this study is to illustrate the common leadership styles that affect employee job satisfaction in the organizations of Kurdistan Region Government of Iraq; According to the results. the autocratic and democratic leadership styles both are significant and have positive influence on employee job satisfaction in such a way that the estimated beta of Autocratic shows the positive relation between (Autocratic Leadership Style) and (Employee Job Satisfaction). In other words, with increasing every one-unit of (Autocratic Style) by manager in an organization, the Employee Job Satisfaction increases.

Likewise, for Democratic Leadership Style, its estimated coefficient proves that (Employee Job Satisfaction) increases as Democratic Leadership Style accomplishes one-unit more by manager in a government organization. In other words, this study found out that the prevalent leadership style among employees was democratic style.

On the other hand, the outcomes reported that there is no any statistically significant for Laissez-Faire Leadership Style, and this kind of leadership style does not have any influence on Employee Job Satisfaction in government organization in Sukaimani city of Iraq.

Recommendation:

- In order to Find out whether the effective study is applicable to all organizations in Iraq and Kurdistan Region, on the other hand, to find and to adapt other leadership styles that influence employee job satisfaction in government organization, similar studies should be conducted in other cities of the country.
- Further research and study could use different questioners, and test some different kind of leadership style that would be able to distinguish between all kind of leadership styles among employees

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