

## The Impact of Leadership Styles on Job Satisfaction in the ICT Sector, Egypt

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### ABSTRACT

**Purpose:** The main purpose of this study is to investigate the impact of leadership style (transformational and transactional) on employees' job satisfaction.

**Design/methodology/approach:** A mixed-method approach has been used for data collection. A self-structured questionnaire with non probability convenience sampling was carried out for collecting the quantitative data. 500 surveys were delivered to the employees in all different management levels, but 388 respondents completed the questionnaires, making the response rate 78%. SPSS version (26) IBM has been used to statistically analyze the collected quantitative data. ANOVA and Multiple Regression P-Value are used to test this study's hypotheses. The semi-structured interviews have been done with 10 managers using the judgmental sampling strategy. Thematic analysis was selected as a method for analyzing the qualitative data.

**Findings:** The findings of the study support that transformational and transactional leadership styles significantly positively affect job satisfaction among employees.

**Research limitations:** The study is limited to the examination of two leadership styles, neglecting other styles that could affect employees' job satisfaction levels.

**Empirical implications:** The findings of this study contribute to providing a guideline model to top management containing which behaviors of leadership should be followed when hiring managers in this sector. Top management must focus on specific behaviors related to both leadership styles that lead to increased satisfaction among employees at work.

**Keywords:** Leadership, Transformational leadership, Transactional Leadership, Employees' Job Satisfaction, the ICT Public Sector

### INTRODUCTION

Leadership and employee job satisfaction have been studied in several research in recent years (Rahman, 2021). Leadership plays a pivotal role in developing employee job satisfaction in the organization (Al Khajeh, 2018). Leadership comes in many forms; nevertheless, transformational as well as transactional leadership are proven to be highly significant and most widely used in organizations (Bass, 1985; Kamel, 2017).

The transformational leadership style inspires followers by providing moral values and new ideas (Burns, 1978). On the other hand, the transactional leadership style reflects the leaders' reward or punishment of the followers for performing their tasks and increasing their productivity level at work, (Bektas, 2017). Many studies suggest a link between transformational and transactional leadership styles is generally associated with employees' job satisfaction (Bekele, 2021).

Job satisfaction refers to a positive emotional status from the perspective of a job or work

experience (Siswanto, 2020). More satisfied and happy employees would be more productive and profitable for the organization (Bektas, 2017). Job satisfaction helps to create positive attitudes in employees, boosts their morals, enhances their performance, and creates a respectful relationship with their managers (Al-maaitah, 2021). According to the theory of transformational and transactional leadership, leaders have a great impact on the way their followers complete their work which leads to an increase in overall job satisfaction (Thomas, 2018). For this reason, this study seeks to assess the influence of leadership styles (transformational and transactional) on employees' job satisfaction in the information and communication technology government sector in Egypt.

### RESEARCH PROBLEM

This study aims to investigate empirically the effect of leadership styles (transformational and transactional) on job satisfaction among employees to identify which adequate leadership style should be employed in the Information and Communication Technology (ICT) government sector in Egypt. The ICT sector needs to select appropriate leaders who will participate in achieving the objectives of the digital Egypt strategy (MCIT, 2022). Due to insufficient knowledge and lack of research tackling in depth this point especially in the government sector in the context of developing countries (Parsehyan, 2017), the researcher wants to close this gap and choose to investigate which appropriate leadership styles should be employed in the ICT government sector in Egypt to mitigate the influence of the public bureaucracy system, also to enhance the quality of government employees, and develop a modern and efficient system to achieve job satisfaction of employees and gave a significant effect on employees' job satisfaction. The researcher in this study tests the hypothesis to identify if there is a presence or absence of a significant impact of transformational and transactional leadership styles on employees' job satisfaction.

### RESEARCH QUESTIONS

1. What is the appropriate and significant leadership style (transformational and transactional leadership style) that should be selected in the ICT government sector in Egypt that impacts employees' job satisfaction?

2. Which transactional leadership style dimensions hold a significant impact on employees' job satisfaction (Contingent reward, Active management by exception) in the ICT government sector in Egypt?
3. Which transformational leadership style dimensions hold a significant impact on employees' job satisfaction (Intellectual Stimulation, Individualized Consideration, Inspirational Motivation, Idealized Influence Attributes, and Idealized Influence Behaviors) in the ICT government sector in Egypt?

## LITERATURE REVIEW

### Leadership

Leadership was considered in the past a personal quality, exceptional persons or heroes who they able to use their charisma, intelligence, wisdom, and political skill to have power and influence over other people (Bekele, 2021). Leadership is an important element for the success of an organization, regardless of its nature of activities, profit or charity-orientated, private or government organizations (Martin, 2017). Leadership is a combination of special traits or characteristics that some individuals possess which enable those individuals to induce others to accomplish tasks. (Lunenburg, 2011). Leadership requires followers, and the two factors cannot be separated because there will be no leader if there are no followers which emphasizes the significance of the leader's relationship with the followers (Parsehyan, 2017). The original leadership model was created by Burns in 1978 and developed by Bass and Avolio in 1997 (Bekele, 2021). This study focused on two leadership styles: transformational leadership, and transactional leadership styles.

### Transformational Leadership

Transformational leadership is leadership that motivates followers to go beyond their lower level of meeting expectations to reach their full potential and to be extraordinary (Jameel, 2019). Transformational leadership style consists of four components (the "4 I's"): Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. Each of these 4 dimensions plays a vital role related to the job satisfaction of employees (Burgess, 2016). *Intellectual*

*Stimulation (IS)*—(*Thinking outside of the box*) refers that leaders stimulating followers to explore new ways of doing things and find new ideas for solving problems compared to methods employed in the past (Sutanto, 2021). *Individualized Consideration (IC)*—(*Compassionate leader/Care*) focuses on the development of followers. Leaders pay attention to each individual's needs through a range of behaviors include: listening, coaching, mentoring, and teaching, and directly addressing achievement and growth (Zelege, 2021). *Inspirational Motivation (IM)*—(*Sharing Vision*) refers that leaders with high levels of inspirational motivation behaviors being capable to motivate and inspire their followers to achieve levels of performance beyond their own expectations by giving challenges and meaning to their works (Burgess, 2016). *Idealized Influence (II)*—(*Role Modeling/ Influencing*) exhibited by leaders results in them being role models for their employees (Burgess, 2016). Researchers have recently re-conceptualized Idealized Influence into two sub-dimensions: *Idealized influence attributes (IIA)*, which explain the actual charisma, where the leader is seen as possessing supernal traits that are given to the leader by their subordinates, and how the leader is perceived by the follower as being confident and powerful. *Idealized influence behaviors (IIB)*, explain the role-modeling ability of the leader which is linked with the actions of the leader reflecting his/her values, beliefs, sense of mission, and ethical and moral orientation (Kariuki, 2021).

### Transactional Leadership

Transactional leadership refers to a task-orientated leadership style, relating to reward-based performance initiatives (Cherry, 2016). Transactional leadership provides followers with clearness about instructions and standards to keep the status quo and includes care in observing and modifying followers' mistakes to assure short-term achievement (Kamel, 2017). Although existing literature agrees that the transformational style of leadership is generally more desirable than the transactional style, Bass, (2006) asserted that this perception could be misleading. Leaders must influence and/or inspire their followers by using a mixture of both immediate and long-term rewards in order to enhance followers' satisfaction with stated organizational outcomes (Tetteh, 2016).

This study focused on the two dimensions of transactional leadership: *Contingent Reward* includes for instance bonuses, promotions, recognition, and appreciation (Xenikou, 2017). Contingent reward refers to the extent to which effective transactions and exchanges are set up between leaders and followers. Here, employees or followers are motivated to perform the task on the implicit or explicit agreement between leaders and followers (Aloysius, 2017). Whilst *Active Management by Exception* refers to the ability of the leaders to actively monitor the work of followers in an ongoing manner and make sure that employees are working up to the set standards (Tetteh, 2016). Active leaders are proactive therefore anticipate problems and have their eyes on the behavior of the employees, so they can take corrective actions before the problems become serious (Northouse, 2016).

### Employees' Job Satisfaction

Employees' job satisfaction is basically how the employee thinks about their jobs as well as the diverse facets of their jobs (Locke, 1976). It is the degree to which the employee like (satisfaction) or dislike (dissatisfaction) their jobs (Smith, 1969). Employees' job satisfaction is a pivotal force in public and private organizations, and employees who feel satisfied are less likely to leave their organizations (Spector, 1997). The critical element of employees' job satisfaction is that it creates a feeling of belonging to the workplace and provides a productive atmosphere (Al Yahyae, 2021). The job satisfaction of employees and leadership style are the main elements that impact the organization's effectiveness. Leadership is known as one of the important aspects of job satisfaction among employees (Yalew, 2016).

### Relationship between Leadership Styles and Employees' Job Satisfaction

Leadership style is an essential determinant of worker job satisfaction. The responses of workers to their leaders will generally depend on the attributes of the employees also as on the qualities of the leaders (Yalew, 2016). Leadership styles represented in (transformational leadership, and transactional leadership) have statistically significant impacts on employees' job satisfaction (Alrwili, 2022). The quality of the leader-employee relationship or the lack thereof has a great influence on the employee's job satisfaction

(Northouse, 2016). Therefore, improving leadership and management capability is an issue that no organization wishing to achieve long-term success can ignore (Alemu, 2017). In the choice of leadership style, transformational leadership has been reported to be positively related to job satisfaction in various sectors of the organization as compared to other styles of leadership such as transactional and laissez-faire (Yalew, 2016). Transformational leaders are supporting and motivate their employees to achieve human needs as well it is essential to promote employee satisfaction (An, 2019). On other hand, transactional leaders create an exchange relationship with their followers. They give incentives to their followers who perform better and punish those who don't work well (Mesfin, 2020).

### ICT Public Sector

The public sector has been the subject of numerous attempts to define the competence of leaders (Puni, 2018). The need to improve leadership and management skills in public organizations is acute in today's rapidly changing climate (Puni, 2018). The ICT government sector contributed to 5% of Egypt's GDP growth in the fiscal year (FY) 2020/2021 (World Bank, 2022). The IMF said that Egypt is proceeding with structural reforms that include taking measures to improve the efficiency of resource allocation by improving governance (Brooks, 2022). For this reason, scholars and practitioners always recommend further studies in this field (MCIT, 2020). The growth rate of the Information and Communication Technology (ICT) public sector is 16%. It is considered the highest of its kind among economic sectors during the fiscal year (FY) 2020/2021 which reflects the pivotal role played by the ICT sector in the economic development of Egypt (MCIT, 2022). Egypt's ICT 2030 strategy contributes to achieving the objectives of Egypt's vision of 2030, by building Digital Egypt. One of these objectives entails building human capacities and encouraging innovation (MCIT, 2022). Therefore, The ICT government sector needs to select appropriate leaders who will participate in achieving a digital Egypt country, (MCIT, 2022).

### MATERIALS AND METHODS

In this deductive study, the researcher employed the explanatory sequential mixed method to study this phenomenon (Hafsa,

2019). The research starts with the quantitative research approach to test the research model and hypotheses. Once the hypotheses-testing and empirical insights emerge through the statistical analyses, the researcher begins the qualitative research analysis. The qualitative inquiry is sought to gain an in-depth understanding of social phenomena (the effect of leadership styles on employee's job satisfaction).

In this study, the survey method is conducted online using Google Form to reach the employees so as to describe their attitudes and behavior toward different leadership styles and their job satisfaction. A cross-sectional time horizon is selected to collect the needed information (Phair, 2021). The researcher collects data through a mixed research approach. Quantitative data was collected by using Self-Administered Questionnaires that consist of a series of closed-ended questions and the respondents fill it in themselves, without the help of the researcher (Sekaran, 2016). The questionnaire assesses the leadership styles (transformational and transactional leadership), using the scale MLQ 5X-Short form which contains 28 items with a five-point Likert scale developed by Bass & Avolio (1994). The employees' job satisfaction assesses by using the scale JSS form, which contains (17) items with a five-point Likert scale developed by Spector (1997).

Whilst the qualitative data were collected by semi-structured interviews with 10 managers from different departments. The collected data was analyzed by using the thematic technique (Creswell, 2014). Based on the finding of the qualitative analysis, the 10 themes have emerged that acted as empirical evidence, supporting the research topic and the quantitative outcomes of this study in the Egyptian context.

### RESEARCH POPULATION AND SAMPLE

The target population includes the ICT government sector in Egypt. According to Dolma, (2010), the term unit of analysis refers to the entity that is to be analyzed by research. Individual Egyptian employees in the information and Communication Technology public sector in Egypt serve as the unit of analysis in this study. They are not dedicated to a specific management level, comprising all job levels, ranging from senior level, middle level, and clerical personnel.

According to the quantitative approach, the sampling strategy for this study is *the non probability convenience sample method*. It involves non-random selection based on convenience criteria which allow for easily collect data and the chance of each unit being selected is not known or confirmed (Etikan, 2017). *Convenience sampling* is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand and easily accessible to the researcher (Rahi, 2017). This method is used because of a lack of access to a list of the population being studied (Taherdoost, 2016).

The non probability convenience sampling size was defined as the minimum number of respondents from which data could be drawn for the generalization of results (Rahi, 2017). The sample in this study was Egyptian employees who are working in government entities that are affiliated with the ICT sector in Egypt which deals with a population of 285000 employees. The sample size of this study is 388. This sample size is appropriate to develop conclusions that can be generalized to a population of 10,000 and above which required sample size would have to be not less than 384 (Krejcie, 1970).

According to the qualitative approach in this study, the researcher uses judgmental sampling. This type of sampling technique is convenient and cost-effective (Sekaran, 2016). Etikan, (2017) argues that with this sampling technique, the researcher needs to focus on those people with the same opinion to have the required information and be willing of sharing it.

**Table1.** Reliability Statistics of all variables in this study

Variables	Cronbach’s Alpha ( $\alpha$ )	No.of Items
Transformational Leadership	.963	20
Transformational Leadership	.898	8
Employees’ Job Satisfaction	.763	17
<b>Transformational Leadership Dimensions</b>	<b>Cronbach’s Alpha (<math>\alpha</math>)</b>	<b>No.of Items</b>
Inspirational Motivation (IM)	.920	4
Intellectual Stimulation (IS)	.879	4
Idealized Influence Behavior (IIB)	.870	4
Idealized Influence Attribute (IIA)	.841	4
Individual Consideration (IC)	.835	4
<b>Transformational Leadership Dimensions</b>	<b>Cronbach’s Alpha (<math>\alpha</math>)</b>	<b>No.of Items</b>
<b>Contingent Reward</b>	<b>.877</b>	<b>4</b>
<b>Active Management by Expectation</b>	<b>.863</b>	<b>4</b>

Source: Developed by the researcher

**STUDY ANALYSIS, RESULTS, AND DISCUSSION**

According to the quantitative analysis in this study, the questionnaire was placed on Google Form, and the link was posted on various social media platforms (LinkedIn, WhatsApp, and Facebook). The link was opened 500 times; nevertheless, 388 questionnaires were completed and returned to the researcher, making the response rate 78%. The Statistical Package for Social Science (SPSS) version 26 IBM is used to conduct various analyses.

**Reliability Analysis**

The study results illustrated in table 2 revealed that the transformational leadership scale with 20 items ( $\alpha=.963$ ) and the transactional leadership scale with 8 items ( $\alpha=.898$ ) were found reliable. Similarly, the employees’ job satisfaction scale with 17 items was also found reliable ( $\alpha=.763$ ). When it comes to the scales that measure the dimensions of transformational leadership, they were all reliable; the idealized influence attribute (IIA) scale with 4 items ( $\alpha=.841$ ), the idealized influence behavior (IIB) scale with 4 items ( $\alpha=.870$ ), the inspirational motivation (IM) scale with 4 items ( $\alpha=.920$ ), the intellectual stimulation (IS) scale with 4 items ( $\alpha=.897$ ), and individual consideration (IC) scale with 4 items ( $\alpha=.835$ ). When it comes to the scales that measure the dimensions of transactional leadership, they were all reliable; the contingent reward scale with 4 items ( $\alpha=.877$ ), and the active management by exception scale with 4 items ( $\alpha=.863$ ) were found reliable.

**Validity Analysis**

In this study, the researcher conducted Face validity. The researcher made academics look over the questionnaire to give their opinion and make adjustments to confirm the instrument’s effectiveness.

The researcher also tested the convergent validity, by using a Kaiser-Meyer-Olkin

(KMO) test to assess the sampling adequacy of data used for Factor Analysis (Sekaran, 2016). The result in table 3 showed KMO equal to .961 which is greater than 0.5, this refers to the fact that data is valid to use factor analysis. As is seen in table 4, the Average Variance Extracted (AVE) is greater than 0.5, which means that the factors should explain at least half the variance of their respective indicators.

**Table2.** KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.961
Bartlett’s Test of Sphericity	Approx Chi-Square	12598.288
	Df	990
	Sig.	.000

**Source:** Developed by the researcher

**Table3.** AVE Test

N	10
Average Variance Extracted (AVE)	10
Composite Reliability (CR)	0.5662

**Source:** Developed by the researcher

In this study, the researcher conducted another testing approach called the questionnaire's validity test, which was carried out using the Pearson Product Moment Correlation in SPSS or correlation value between the variables or the variable with a total score, which is also known as the p-value (2-tailed) to calculate the variable and if p-value < 0.01 then the question/instrument is valid while if the p-value > 0.01, then the question/instrument is not valid. In this study, the significant value was obtained by the p-value (2-tailed) of 0.000 < 0.01.

Based on the count value obtained for transformational leadership equal .962, transactional Leadership equal .879, and employees’ job satisfaction equal .809 higher

than the critical value at 386 DF (.01) Sig level\*\* = 0.128339 then the items are highly significant. It can also be calculated to be item 1 which is valid, thus the results show a significant correlation with the total score indicating that the items are valid.

**Multiple Regression Analysis**

The researcher used multiple regression to test the research hypothesis (Sekaran, 2016).

**Anova Analysis**

The results illustrated in table 5 show that when assessing the overall leadership styles of transactional leadership and transformational leadership, the model with these two leadership styles is significant, with an ANOVA of 0.000.

**Table4.** ANOVA <sup>a</sup> with Overall Leadership styles

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	46.972	2	23.486	151.637	.000 <sup>b</sup>
Residual	59.630	385	.155		
Total	106.602	387			

- a. Dependent Variable Employees’ Job Satisfaction (EJS)
- b. Predictors: (Constant) Transformational Leadership, Transactional Leadership

**Source:** Developed by the researcher

**Multiple Regression Adjusted R<sup>2</sup>**

The findings illustrated in table 6 show that the R<sup>2</sup>value is .441 which is greater than 0.5. The adjusted R<sup>2</sup> tells us that the model accounts for 43.8% of the overall leadership styles of transformational and transactional

leaders in job satisfaction. This means that the independent variable contributes to 43.8% of the dependent variable and the remaining percent is predicted by other factors other than the two leadership styles in this study.

Table5. Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.664a	.441	.438	.39355	1.946

a. Predictors: (Constant), Transactional Leadership, Transformational Leadership

b. Dependent Variable: Employees Job Satisfaction

Source: Developed by the researcher

**Multiple Regression P-Value**

The researcher used multiple regression to test the research hypothesis. In this study, the researcher conducted the multiple regression analysis twice. First, the researcher sought to identify if there is a positive significant relation between transformational leadership overall and employees’ job satisfaction in the ICT government sector in Egypt. In addition, it sought to identify if there is a positive significant relation between transactional leadership overall and employees’ job satisfaction in the ICT government sector in Egypt.

The findings of table 7, illustrate that both transformational and transactional leadership significantly impact employees’ job satisfaction as both p-values are below 0.05.

Table6. Co-efficients Analysis of Variables Overall

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.851	.085		21.867	.000
Transformational Leadership	.269	.037	.471	7.247	.000
Transactional Leadership	.133	.039	.222	3.419	.001

a. Dependent Variable: Employees’ Job Satisfaction

Source: Developed by the researcher

The researcher then moved on to assess each leadership style’s dimension individually to see which traits, attributes, characteristics, or behaviors found in leaders can be the cause of the employee’s level of job satisfaction. Therefore, each hypothesis (hypothesis one and hypothesis two) had several sub-hypotheses. Based on the findings illustrated in table 8, the outcome of the hypothesis testing shows the following:

**Hypothesis One:** There is a positive significant relationship between transformational leadership and employees’ job satisfaction in the ICT government sector in Egypt. This hypothesis is partially supported as some of the sub-hypotheses were significant and others were insignificant.

(Transformational leadership sig. value is 0.000, and Transactional leadership sig. value is 0.001). Nevertheless, due to the beta coefficient outcome, when both leadership styles are presented, transformational leadership (beta coefficient =0.471) is a stronger contribution to job satisfaction than transactional leadership (beta coefficient =0.222). Therefore, the following hypothesis is supported:

**Hypothesis One:** Transformational leadership has a positive effect on employees’ job satisfaction in the ICT government sector in Egypt.

**Hypothesis Two:** Transactional leadership has a positive effect on employees’ job satisfaction in the ICT government sector in Egypt.

**Hypothesis 1a:** There is a positive significant relationship between transformational leadership dimension intellectual stimulation (IS) and ICT governmental employees’ job satisfaction. This hypothesis is not supported with a p-value equal to .313. The results show that the relationship between the variables is insignificant with a p-value of more than 0.05 ( $\beta = .076, p > 0.05$ ).

**Hypothesis 1b:** There is a positive significant relationship between transformational leadership dimension individualize consideration (IC) and ICT governmental employees’ job satisfaction. This hypothesis is supported with a p-value equal to .009. The results show that the relationship between the variables is

significant with a p-value of less than 0.05 ( $\beta = 0.176, p < 0.05$ ).

**Hypothesis 1c:** There is a positive insignificant relationship between transformational leadership dimension inspirational motivation (IM) and ICT governmental employees' job satisfaction. This hypothesis is not supported with a p-value equal to .237. The results show that the relationship between the variables is insignificant with a p-value of more than 0.05 ( $\beta = 0.090, p > 0.05$ ).

**Hypothesis 1d:** There is a positive significant relationship between transformational leadership dimension Idealized Influence Attributes (IIA) and ICT governmental employees' job satisfaction. This hypothesis is supported with a p-value equal to .000. The results show that the relationship between the variables is significant with a p-value of less than 0.05 ( $\beta = 0.235, p < 0.05$ ).

**Hypothesis 1e:** There is a positive insignificant relationship between transformational leadership dimension Idealized Influence Behaviours (IIB) and ICT governmental employees' job satisfaction. This hypothesis is not supported with a p-value equal to .914. The results show that the

**Multiple Regression Beta Co-efficient**

**Table7.** Co-efficient<sup>a</sup> of Variables' Dimensions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.857	.089		20.774	.000
Idealized influence attributes (IIA)	.126	.032	.235	3.926	.000
Idealized influence Behaviours (IIB)	.005	.043	.009	.108	.914
Inspirational Motivation (IM)	.044	.038	.090	1.185	.237
Intellectual Stimulation (IS)	.038	.038	.076	1.011	.313
Individualized Consideration (IC)	.090	.034	.176	2.618	.009
Contingent Reward	.121	.036	.231	3.358	.001
Active Management by Exception	.066	.028	.119	2.394	.017

a. Dependent Variable: Employees' Job Satisfaction

**Source:** Developed by the researcher

According to the findings of this study the variables that have the highest effect on job satisfaction among employees in the Information and Communication Technology government sector in Egypt are; Idealized influence attributes (IIA) with  $\beta = .235$ , followed by Contingent Reward with  $\beta = .231$ ,

relationship between the variables is insignificant with a p-value of more than 0.05 ( $\beta = 0.009, p > 0.05$ ).

**Hypothesis Two:** There is a positive significant relationship between transactional leadership and employees' job satisfaction in the ICT government sector in Egypt. This hypothesis is supported and the sub-hypotheses were significant.

**Hypothesis 2a:** There is a positive significant relationship between transactional leadership dimension contingent reward and ICT governmental employees' job satisfaction. This hypothesis is supported with a p-value equal to .001. The results show that the relationship between the variables is significant with a p-value of less than 0.05 ( $\beta = 0.231, p < 0.05$ ).

**Hypothesis 2b:** There is a positive significant relationship between transactional leadership dimension active management by exception and ICT governmental employees' job satisfaction. This hypothesis is supported with a p-value equal to .017. The results show that the relationship between the variables is significant with a p-value of less than 0.05 ( $\beta = 0.119, p < 0.05$ ).

followed by Individualized Consideration (IC) with  $\beta = .176$ , and finally Active Management by Exception with  $\beta = .119$ .

**STUDY IMPLICATION AND RECOMMENDATIONS**

The results imply that job satisfaction is affected by transformational leadership and transactional leadership in the information and communication technology government sector. The study implies that if a leader is to use transformational leadership in the ICT government sector in Egypt, they must articulate a compelling vision, and instill pride and trust in followers to believe in what they do to get their work done. The managers should try to attend to each employee's needs and seek to mentor the employees while they work. In addition, leaders need to focus more on behaviors that are not of vitality to transformational leadership to increase the satisfaction level of employees in the ICT public sector. The managers should act like role models. The managers have to share the vision with their followers and explain important ideas in simple ways to help them to accomplish the organizational goals and encourage them to think outside the box to be creative and generate new ideas for solving work issues.

This study implies also that if a manager is to use transactional leadership in this sector, they should illustrate contingent reward and active management by exception to create job satisfaction among employees. The leaders make employees enjoy work when there is a motivation-based system that is used to reward those that meet their identified goals by providing positive reinforcement for a job well done. On the other hand, managers should monitor employees' performance and encourage them to bring any problems they might face at work to the leader so they can solve them together, allowing leaders to be proactive by taking corrective actions before it worsens. The findings of this revealed that transactional leadership practices are also necessary to attain employees' job satisfaction. Furthermore, the findings of this study recommend a need for training that focuses on transformational and transactional leadership behaviors that foster greater job satisfaction in the ICT sector in Egypt.

### STUDY PRACTICAL CONTRIBUTION

This study has contributed practically by illustrating various insights related to effective leadership as the following:

- Providing a guideline model to top management containing which behaviours of leadership should be

followed when hiring managers in the ICT government sector in Egypt.

- Top management must focus on specific behaviours related to both leadership styles: transformational and transactional leaders for managing this sector. Where the findings showed that the application of both leadership styles leads to enhancing the performance of the organization and increasing satisfaction among employees at work.
- Developing empirical evidence that can help decision-makers in this sector identify the required skills and traits for recruiting talented managers who should employ high-tech administrative systems to achieve high performance and productivity.
- Showing that organizations need to support adopting an appropriate leadership style that helps managers in government organizations to form a new government structure and minimize the public bureaucracy system to improve the quality of government employees, and productivity and enhance their job satisfaction.

### DIRECTIONS FOR FUTURE STUDY

Future researchers have to select other leadership styles that could affect the level of job satisfaction among employees. Future researchers should conduct more studies in this field to discover other independent variables that would affect the employees' job satisfaction such as; organization culture, human resource practices, digital transformation, organization voice, etc. In addition, future studies should focus on the ICT private sector in Egypt, by doing so, the results obtained can be used to do the comparison of findings between the ICT public and private sectors in Egypt.

### CONCLUSION

This study aimed to investigate the relationship between leadership style and employees' job satisfaction. Previous studies on transformational and transactional leadership and employees' job satisfaction give a mixture of outcomes. All empirical studies reported positive associations between transformational leadership and job

satisfaction whereas transactional leadership studies revealed positive or negative associations. Transactional leadership practices are also necessary to attain organizational goals (Aloysius, 2017). Based on the quantitative research of 388 respondents' analysis that emerged from the SPSS program, the hypothesis testing results showed that transformational and transactional leadership are deemed suitable for managing the ICT government sector in Egypt. Both leadership styles have a positive and significant effect on employees' job satisfaction in this sector. Multiple linear regression showed that leadership styles are causing a change in employees' job satisfaction by 43.8%. The aim of qualitative research analysis was to gain further elaboration between the concepts and practice of leadership style and job satisfaction. Ten themes emerged once the interviews were analyzed.

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