

“Impact of e-government maturity on public servants’ job satisfaction”

AUTHORS

Emad Waladali 



Abdelbaset Rabaiah 



ARTICLE INFO

Emad Waladali and Abdelbaset Rabaiah (2022). Impact of e-government maturity on public servants’ job satisfaction. *Problems and Perspectives in Management*, 20(3), 501-515. doi:[10.21511/ppm.20\(3\).2022.40](https://doi.org/10.21511/ppm.20(3).2022.40)

DOI

[http://dx.doi.org/10.21511/ppm.20\(3\).2022.40](http://dx.doi.org/10.21511/ppm.20(3).2022.40)

RELEASED ON

Friday, 30 September 2022

RECEIVED ON

Sunday, 17 April 2022

ACCEPTED ON

Thursday, 08 September 2022

LICENSE



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

JOURNAL

"Problems and Perspectives in Management"

ISSN PRINT

1727-7051

ISSN ONLINE

1810-5467

PUBLISHER

LLC “Consulting Publishing Company “Business Perspectives”

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

55



NUMBER OF FIGURES

1



NUMBER OF TABLES

18

© The author(s) 2022. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 17th of April, 2022

Accepted on: 8th of September, 2022

Published on: 30th of September, 2022

© Emad Waladali, Abdelbaset Rabaiah,
2022

Emad Waladali, Ph.D., Faculty
of Administrative and Financial
Sciences, Department of Business
Administration, Arab American
University, Palestine. (Corresponding
author)

Abdelbaset Rabaiah, Ph.D., Faculty
of Administrative and Financial
Sciences, Department of Management
Information Systems, Arab American
University, Palestine.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:

Author(s) reported no conflict of interest

Emad Waladali (Palestine), Abdelbaset Rabaiah (Palestine)

IMPACT OF E-GOVERNMENT MATURITY ON PUBLIC SERVANTS' JOB SATISFACTION

Abstract

While most e-government literature focuses on citizen satisfaction, that of public servants is widely ignored. The purpose of this study is to test the impact of e-government maturity level on public servants' job satisfaction. Factors shaping the maturity level of e-government were investigated as well as those contributing to government employees' satisfaction. Government employees working at Palestinian ministries were the target group of this study. They were the closest to the strategic use of e-government facilities. A questionnaire was designed and distributed via e-mails to a random sample of 159 employees; the survey questionnaire was divided into three parts. A 5-point Likert scale was adopted in this study. SPSS v26 was used to test the study hypotheses. The results reveal a significant impact of e-government maturity on the job satisfaction of public servants ($R^2 = 0.386$, $p = 0.000$). Moreover, all dimensions of e-government maturity have a positive impact on job satisfaction. The results show the impact of e-government maturity dimensions on job satisfaction as follows: internal efficiency ($R^2 = 0.254$, $p = 0.000$), external efficiency ($R^2 = 0.343$, $p = 0.000$), good governance ($R^2 = 0.364$, $p = 0.000$), and leadership ($R^2 = 0.261$, $p = 0.000$). The findings also show no differences in job satisfaction levels among public servants due to demographic characteristics.

Keywords

public servants, internal efficiency, external efficiency,
good governance, leadership, satisfaction, model

JEL Classification

J28, H19

INTRODUCTION

To date, most scientists mainly study the level of satisfaction of citizens with the work of the government, but it is worth looking at this issue from another angle. Namely, one should consider the interests of public servants and factors affecting their activities and job satisfaction.

Job satisfaction is one of the most critical job attitudes in the workplace (Robbins & Judge, 2013, p. 70). Due to the importance of job satisfaction, many researchers have tried to address the impact of job satisfaction on other constructs. Job satisfaction has a strategic impact on organizations. A positive relationship was found between job satisfaction and performance (Judge et al., 2001; Ahmad et al., 2010). This means that satisfied public servants will induce satisfaction in the end-users (citizens). Moreover, job satisfaction has a positive impact on job engagement (Im, 2022) and organizational citizenship behavior (Purwanto et al., 2021).

According to Al-Zu'bi (2010), employees with high job satisfaction enable their organization to attract and recruit qualified employees. In addition, job satisfaction promotes organizational citizenship behavior (Sesen & Basim, 2012) and organizational commitment (Markovits et al., 2007). It also decreases employee turnover (Grimpe, 2007). Moreover, the relationship between an employee and his supervisor is

strongly related to job satisfaction (Robbins & Judge, 2013). More benefits, better salaries, managerial support, working conditions, and organizational and social support (including that of coworkers) result in healthy career development (Munir & Abdul Rahmana, 2016).

On the other hand, e-government has witnessed great strides worldwide. Governments aimed to achieve higher maturity levels through state-of-the-art strategies and cutting-edge technologies. As a result, some governments have achieved higher maturity levels than others. Most literature, however, focuses on citizen satisfaction. The satisfaction of public servants, on the other hand, is widely ignored.

1. LITERATURE REVIEW AND HYPOTHESES

During the last two decades, many e-government maturity models have been developed. Each model has had a different perspective on the maturity of e-government and portrays mature e-government. In other words, there is no common understanding of e-government maturity. According to Fath-Allah et al. (2014), while having similar constructs in the stages, many models use different nomenclatures to describe the stage.

To measure e-government maturity, different authors suggested different models. For example, some models focus on data availability (i.e., web presence and cataloging) and transaction (Layne & Lee, 2001; Andersen & Henriksen, 2006; Kim & Grant, 2010; Fath-Allah et al., 2014). Other models emphasize transparency (Shahkooh et al., 2008; Lee & Kwak, 2012). Finally, some models emphasize the integration (horizontal and vertical) between government units and data portability (Layne & Lee, 2001; Kim & Grant, 2010; Fath-Allah et al., 2014).

Some e-government models suggest measuring e-government maturity through government value (Das et al., 2017), automated services and wiser governance (Almarabeh & Abu Ali, 2010; Rabaiah, 2009), client-centricity (Shareef et al., 2011; Kachwamba & Hussein, 2009), or by the maturity of its plans and e-services (Safari et al., 2004). Nguyen and Tran (2022) argue that three factors (perceived e-government service value, citizen e-empowerment, and fear of Covid-19) positively influence citizen adoption of e-government services.

Various models are used in different countries to assess e-government maturity with few levels. The United Nations Member States calculate the E-Government Development Index (EGDI), which

includes three essential dimensions of e-government: provision of online services, telecommunication connectivity, and human capacity (UN E-Government Knowledgebase, n.d.).

An insightful overview of the last ten years of digital government development in Europe is presented in the eGovernment factsheets: 10-year anniversary report (EC, 2019). The conclusions demonstrate that all European countries have adopted strategies to foster the digitalization of the public sector. Some countries have focused more on delivering e-government services at the local level, making the digitalization of smaller offices a vital priority. In addition, citizen- and business-focused public service provision is an ever-growing priority in all EU Member States.

This study considers the maturity model of strategic objectives developed by Rabaiah (2009) for measuring e-government maturity. The model describes four distinct levels of maturity in public institutions: achieving internal efficiencies, achieving external efficiencies (vis-à-vis government constituents), realizing better governance, and finally accomplishing leadership in e-government. This model was chosen because it best fits the objective of measuring aspirations toward higher e-government maturity and its potential impact on public servants' satisfaction. In other words, it expresses maturity in terms of the governmental strategic objectives. Furthermore, it classifies the objectives into four levels.

Security was mainly mentioned as a specific issue in the transaction stage (Karokola & Yngström, 2009). Later, Concha et al. (2012), analyzing the e-GPO model, suggested that security should be achieved in the technological functionalities dimension of e-government.

Besides job involvement and organizational commitment, job satisfaction is a significant part of employ-

ees' attitudes. Certain attitudes can predict specific behaviors. Job satisfaction, in particular, can predict general behavior. Akhter et al. (2021) indicated that "emotional intelligence, employee empowerment, and cultural intelligence positively and significantly impact employee job satisfaction in a developing country." According to Robbins and Judge (2013, p. 74), job satisfaction is about one's positive feelings toward his or her job. This feeling stems from job attributes. If an employee enjoys a high job satisfaction level, he or she will have positive feelings about the job. Conversely, he or she will have negative feelings if he or she experiences a low level of job satisfaction. It is a person's feeling of happiness (or unhappiness) that one experiences (Mostot, 1988).

Job satisfaction is important because a low level of job satisfaction has negative consequences, such as a lack of job loyalty and increased absenteeism (Spector, 1997). On the other hand, job satisfaction affects employee performance (Subarto et al., 2021) and reduces employee turnover (Pratama et al., 2022).

While job satisfaction affects other variables, it is also affected by respective variables. Perceived justice, for example, has a positive effect on job satisfaction (Waladali, 2017; Elamin & Alomaim, 2011; Sareshkeh et al., 2012). Job satisfaction and employee performance have a bidirectional relationship (Berghe, 2011). According to Yang et al. (2011), there are five factors affecting job satisfaction: promotion, pay, job nature, supervisor, and colleagues. On the other hand, job satisfaction is negatively affected by sexual harassment (Avery et al., 2009). Enriched job design (high degree of autonomy and multitasking) amplify job satisfaction regardless of job characteristics (Fahr, 2011). Job perception and job satisfaction are reciprocally related (Wong et al., 1998). Huang et al. (2016) link job satisfaction to safety climate.

As seen in the literature review, many models tried to provide premises for maturity in e-government. Other models defined the factors involved in measuring job satisfaction. Two of the most relevant models from the literature were chosen as a basis for this study.

The purpose of this study is to test the impact of e-government maturity on employee job satisfaction in Palestinian ministries.

Thus, the following hypotheses were formulated:

H01: There is no statistically significant impact at $\alpha \leq 0.05$ of the e-government maturity level a government pursues on job satisfaction.

H01.1: There is no statistically significant impact of internal efficiency on job satisfaction.

H01.2: There is no statistically significant impact of external efficiency on job satisfaction.

H01.3: There is no statistically significant impact of good governance on job satisfaction.

H01.4: There is no statistically significant impact of leadership on job satisfaction.

H02: There are no significant differences in job satisfaction in sample responses due to demographic variables.

H02.1: There are no significant differences in job satisfaction in sample responses due to gender.

H02.2: There are no significant differences in job satisfaction in sample responses due to education level.

H02.3: There are no significant differences in job satisfaction in sample responses due to the ministry variables.

2. METHODOLOGY

A data collection instrument was devised to assess each variable and then draw a conclusion about the correlation thereof. The questionnaire in Table A1, Appendix A, served as the data collection instrument.

The online questionnaire targeted employees working at Palestinian ministries. They were invited by e-mails to participate. It yielded 159 valid responses from 280. The questionnaire was initially prepared in English. It was then translated into Arabic by professional linguists. A 5-point Likert scale was adopted.

The survey questionnaire was divided into three parts. The first part included various assessment

questions to measure e-government maturity level (the independent variable). The second part measured job satisfaction – the dependent variable adapted from Spector (1997) and DeVellis (2003). Finally, the third part solicited sociodemographic information to analyze the participants’ profiles, classification, and relevant characteristics.

The model developed by Rabaiah (2009) was adapted to assess the independent variable. Similarly, the scale by Spector (1997) was adopted to assess the dependent variable. The e-government scale consisted of 33 items, while the scale to measure the independent variable comprised 17 items. In addition, a 5-point Likert scale was anchored by “Strongly Disagree” and “Strongly Agree” for both scales. Finally, the questionnaire contained a series of questions regarding the demographic characteristics or users’ behavior (e.g., gender, job type, educational qualifications, ministry, age, contract type, etc.).

3. RESULTS

Table 1 shows the means and standard deviation of the study variables. It shows that the mean of job satisfaction is 3.51 and SD is .64, and the mean of government maturity is 3.26 with SD = .65. Moreover, work nature shows the highest mean (M = 4.03, SD = .787), and training has the lowest scores (M = 2.74, SD = .969). In e-government maturity, the leadership dimension shows the lowest scores (M = 2.94, SD = .856).

Table 1. Means and standard deviations of study variables

Variable	N	Mean	Std. deviation
Internal efficiency	159	3.4256	.75814
External efficiency	159	3.3805	.71732
Good governance	159	3.1242	.64848
Leadership	159	2.9413	.85646
Supervision	159	3.2730	.89850
Work nature	159	4.0330	.78762
Training	159	2.7390	.96920
Work conditions	159	3.4906	.90265
Coworker relations	159	3.9371	.68659
e-government maturity	159	3.2556	.65068
Job satisfaction	159	3.5124	.64102
Valid N (listwise)	159	–	–

Note: Bold numbers concern dependent and independent study variables.

Table 2 summarizes the descriptive statistics for participants’ characteristics.

Table 2. Descriptive statistics of participants’ characteristics

Variable	Category	Frequencies	Percentage
Gender	Male	102	64.2
	Female	57	35.8
Age	Under 30	15	9.4
	30-less than 40	53	33.3
	40-less than 50	55	34.6
	Over 50	36	22.6
	Diploma and below	19	11.9
Qualification	Bachelor’s degree	98	61.6
	Master’s degree	37	23.3
	Ph.D.	5	3.1
	Under 5 years	18	11.3
Experience	5-less than 10 years	34	32.7
	11-less than 15	27	17.0
	Over 16 years	80	50.3
	Field	48	30.2
Job Type	Managerial	104	65.5
	consultant	7	4.4
Contract type	Yearly contract	11	6.9
	Unlimited contract	148	93.1

Table 2 shows that the male gender group occupies the most significant percentage with 64.2%, whereas the female gender group spans 35.8% of the sample. These results may be attributed to the fact that length of service has not provided a motive for females to pursue government jobs.

Regarding age groups, the vast majority of staff in the Palestinian ministries are between 40 and 50 (34.6%), followed by 30 to 40 years old (33.3%). Employees over 50 years old constituted 22.6%, while those under 30 amounted to 9.4%.

Concerning staff qualifications, the overwhelming majority of public servants in the Palestinian ministries have a Bachelor’s degree (61.6 %). Master’s degree holders come next with 23.3%. Staff with a diploma or less qualification encompass 11.9%. Finally, Ph.D. holders were merely 3.1% of the sample.

For the experience construct, those with sixteen years and above constituted the majority (50.3%). Those with five to ten years scored 32.7%, followed by the group with eleven to fifteen (17.0 %), and lastly, staff with less than eleven years of experience marked 11.3%.

Regarding job type, 65.5% of public servants managed administrative jobs. About 30.2% designated field jobs, while 4.4% were identified as consultants. Finally, 93.1% have unlimited contracts, and some (6.9%) are employed with yearly contracts.

Cronbach's α indicator was first used to measure the reliability of the scales with 0.7 as the reference value (Nunnally, 1978; Hair et al., 1995). All the variables obtained indicative values in the two groups or subsamples ($\alpha > 0.7$) except for the training dimension. The reliability of this study was calculated using Cronbach's Alpha equations. It was found to be 0.970 for e-government maturity and 0.709 for job satisfaction. The combined total was 0.920. Table 3 shows the results of Cronbach's α test.

Table 3. Cronbach's α test

Dimension	Cronbach α value
Internal efficiency	0.846
External efficiency	0.954
Good governance	0.924
Leadership	0.916
Total (e-government maturity)	0.970
Supervision	0.880
Work environment	0.867
Training	0.605
Work conditions	0.803
Work coworkers	0.724
Total (job satisfaction)	0.709
Combined Total	0.920

The values in Table 4 show the Pearson correlation and significance of each item of the e-government dimension. The item is said to be valid if the significance is less than 0.05. Therefore, one can conclude that all items measuring e-government maturity are valid.

Table 4. Pearson correlation test for e-government

Fields	Coefficient of correlation	Level of significance
Networked government	.566**	.000
Simplifying procedure	.581**	.000
Distributed government	.714**	.000
Better decision-making	.775**	.000
Result-oriented government	.725**	.000
Government transformation/digitalization	.569**	.000
Enhancing public services	.770**	.000
Enhancing accessibility	.768**	.000
E-commerce/e-business/market based	.633**	.000

Fields	Coefficient of correlation	Level of significance
Simplifying/enhancing life	.773**	.000
Increasing public value	.741**	.000
Building trust/confidence	.825**	.000
Increasing responsiveness	.821**	.000
Encouraging innovation	.756**	.000
Providing more choices for interaction	.818**	.000
Satisfying customers	.787**	.000
Personalizing services	.784**	.000
Enhancing public services	.826**	.000
Increasing citizens' participation	.694**	.000
Reducing bureaucracy/increasing transparency	.706**	.000
Human capacity building	.737**	.000
Creating a networked society	.750**	.000
Creating a knowledge-based society	.751**	.000
Promoting development/attract foreign investment	.735**	.000
Protecting privacy	.478**	.000
Promoting democracy	.601**	.000
Bridging the digital divide	.732**	.000
Increasing global readiness	.629**	.000
Increasing the per capita income	.797**	.000
Increasing citizens' participation	.667**	.000
Leadership in the government	.726**	.000
Leadership at the local level	.743**	.000
Leadership globally	.768**	.000

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Likewise, the values in Table 5 show the Pearson correlation and significance of each item in the job satisfaction dimensions. As can be seen, all items measuring job satisfaction are valid.

Table 5. Person correlation test for job satisfaction

Fields	Coefficient of correlation	Level of significance
My supervisor praises me for a well-done job	.733**	.000
I am satisfied with the support and guidance of my supervisor	.794**	.000
My supervisor treats me/ everybody fairly	.715**	.000
I am satisfied with the way performance evaluation done	.665**	.000
Organizations evaluate employee performance systematically	.651**	.000
I like doing the things I do at work	.603**	.000
My work gives me a feeling of personal accomplishment	.627**	.000
I feel a sense of pride in doing my job	.627**	.000

Table 5 (cont.). Person correlation test for job satisfaction

Fields	Coefficient of correlation	Level of significance
My work allows me to use my skills and ability optimally	.585**	.000
I have the opportunity to attend training courses	.585**	.000
Selection for training is made fairly/equitably	.619**	.000
I have the opportunity to learn new skills	.626**	.000
I have a sufficient workspace to do my job	.627**	.000
Staffing levels at my workplace are adequate	.584**	.000
I have the equipment I need to do my job properly	.667**	.000
I have a good relationship with my colleagues	.460**	.000
Team spirit is the predominant feature among my colleagues	.684**	.000
If I need help, my colleagues will help me	.641**	.000
I am satisfied with the salary I receive	.373**	.000

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Data were checked for entry errors. Pearson correlation was used for the analysis of the relationship between e-government

maturity and job satisfaction. It was also used to investigate the impact of e-government maturity on job satisfaction.

3.1. Hypothesis testing results

Table 6 shows $R = 0.621$, which means there is a relatively high correlation between e-government maturity aspirations and job satisfaction. Thus, the study concludes that the e-government maturity level a government pursues plays a significant role in job satisfaction in the public sector in the case of Palestine. The results also show that $R^2 = 0.386$, which means that e-government explains 38.6% of the variance in employee satisfaction. Finally, there were no significant differences in job satisfaction due to any demographic characteristics.

Table 7 shows that the p-value is (0.00), and the F-value is (39.80) which is greater than the tabulated F value. Thus, there is a significant effect of e-government maturity on job satisfaction.

Table 8 shows that $B = 0.621$, which means as e-government maturity increases by 1 standard unit, job public servants' satisfaction will increase by 0.612 units.

Table 6. Results of simple linear regression for H01

Model summary				
Model	R	R ²	Adjusted R square	Std. error of the estimate
1	0.621 ^a	0.386	.382	.50388

Note: a. Predictors: (Constant), E_GOV.

Table 7. ANOVA analysis for H01

ANOVA ^a						
	Model	Sum of squares	df	Mean square	F	Sig.
1	Regression	25.061	1	25.061	98.706	.000 ^b
	Residual	39.862	157	.254	–	–
	Total	64.923	158	–	–	–

Note: a. Dependent variable: job satisfaction; b. Predictors: (Constant), e-government maturity.

Table 8. Coefficients of the impact of e-government on job satisfaction

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.520	.205	–	7.431	.000
	E_GOV	.612	.062	.621	9.935	.000

Note: a. Dependent variable: job satisfaction.

Table 9. Simple linear regression results for H01.1

Model summary		ANOVA			Coefficients			
R	R ²	df	F	Sig.	Factor	Beta	t	Sig.
.504	.254	1	53.3555	.000	Internal efficiency	0.504	7.304	0.000

Table 10. Simple linear regression results for H01.2

Model summary		ANOVA			Coefficients			
R	R ²	df	F	Sig.	Factor	Beta	t	Sig.
.586	.343	1	81.967	.000	External Efficiency	0.586	9.054	0.000

Table 11. Simple linear regression results for H01.3

Model summary		ANOVA			Coefficients			
R	R ²	df	F	Sig.	Factor	Beta	t	Sig.
.603	.364	1	89.89	.000	better governance	.596	9.481	.000

As shown in Table 9, $R = 0.504$ means a moderate correlation between internal efficiency and job satisfaction. The model summary shows that $R^2 = 0.254$, which again means that internal efficiency explains 25.4% of the variance in job satisfaction. As such, hypothesis H01.1 cannot be rejected, and so there is a statistically significant impact of internal efficiency on job satisfaction.

In Table 10, $R = 0.586$ means there is a relatively high correlation between external efficiency and job satisfaction. The model summary reveals that $R^2 = 0.343$, meaning that external efficiency explains 34.3% of the variance in job satisfaction. One cannot reject H01.2, and so there is a statistically significant impact of external efficiency on job satisfaction.

In Table 11, $R = 0.603$ means a relatively high correlation between good governance and job satisfaction. As seen, $R^2 = 0.364$, which entails that good governance explains 36.4% of the variance in job satisfaction. One accepts H01.3, and thus, there is a statistically significant impact of good governance on job satisfaction.

In Tables 12 and 13, $R = 0.511$, $P = .000$, which means there is a relatively high correlation between the leadership dimension of e-government and job satisfaction. As shown, $R^2 = 0.261$, which means that leadership explains 26.1% of the variance in job satisfaction. Therefore, H01.4 is accepted, and one concludes that there is a statistically significant impact of leadership on job satisfaction.

Table 12. Model summary of simple linear regression between leadership and job satisfaction

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.511 ^a	.261	.256	.55273

Note: a. Predictors: (Constant), leadership.

Table 13. Analysis of variance between leadership and job satisfaction

		ANOVA				
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	16.957	1	16.957	55.503	.000 ^b
	Residual	47.966	157	.306	–	–
	Total	64.923	158	–	–	–

Note: a. Dependent Variable: job satisfaction; b. Predictors: (Constant), leadership.

Table 14. Independent sample T-test

		Group statistics			
Gender	N	Mean	Std. deviation	Std. error mean	
JOB_SAT	1	3.5014	.62427	.06732	
	2	3.5094	.70062	.09908	

Table 15. One-way ANOVA test for education level

ANOVA					
JOB_SAT					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.149	3	.050	.115	.951
Within Groups	57.032	132	.432	–	–
Total	57.181	135	–	–	–

Table 16. One-way ANOVA test for ministry variable

ANOVA					
JOB_SAT					
	Sum of squares	df	Mean square	F	Sig.
Between Groups	4.505	5	.901	2.223	.056
Within Groups	52.676	130	.405	–	–
Total	57.181	135	–	–	–

Results in Table 14 show that the mean for male satisfaction is 3.5014 and for female it is 3.5094, with a significance level of 0.974. Therefore, H02.1 is accepted, and it is concluded that there is no difference in job satisfaction due to gender differences.

Table 15 shows the average job satisfaction for different education levels. The mean for Ph.D. level is 3.5882, 3.4540 for Master’s level, 3.5238 for Bachelor’s level, and 3.4816 for the diploma and below, with a significance level of 0.951. Thus, H02.2 cannot be rejected, and a conclusion is reached that there are no differences in job satisfaction due to education level.

Table 16 shows the average job satisfaction for employees in different ministries. The significant level is 0.056. As a result, H02.3 cannot be rejected and one concludes that there are no differences in job satisfaction due to ministry variables.

The correlation matrix of all variables was built based on Table A2, Appendix A. The hypotheses testing results, for clarity, are presented in Figure 1.

4. DISCUSSION

Job satisfaction is one of the major job attitudes in the workplace (Robbins & Judge, 2013, p. 116). Many studies have investigated the antecedents and consequences of job satisfaction. This paper tested the impact of e-government maturity on public employees’ job satisfaction. The results of the study indicate a positive impact of maturity aspects of e-government on the job satisfaction of public servants ($R^2 = 0.386$, $p = 0.000$). This is aligned with Karlinda and Sari (2022) and Sweis et al. (2022), where information technology has a positive impact on job satisfaction. This study also supports Aziz (2003), where accounting information system positively correlates with job satisfaction.

The findings also show that all dimensions of e-government maturity positively affect job satisfaction. Specifically, the good governance dimension has the highest impact ($R^2 = 0.364$, $p = 0.000$). Good governance means increas-

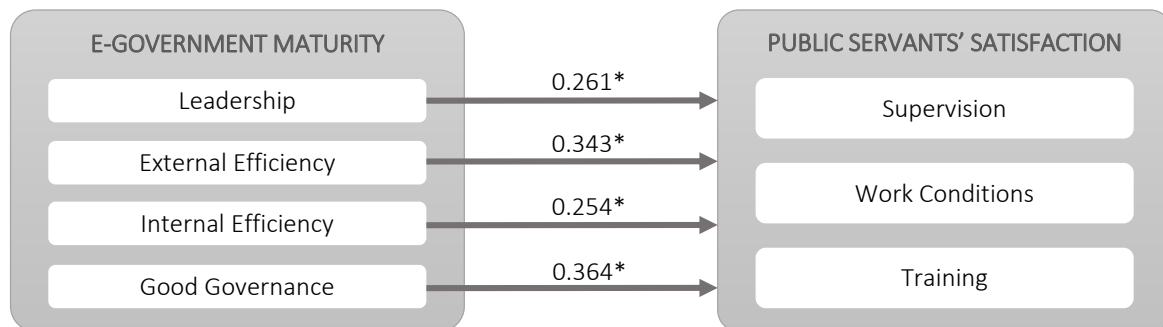


Figure 1. Hypotheses testing results

ing transparency and decreasing bureaucracy, which both have a positive impact on job satisfaction. According to Kang et al. (2022), a high bureaucracy level negatively affects job satisfaction.

On the contrary, Ton et al. (2021) indicated that perceived transparency positively affects employee engagement and life satisfaction. Good governance is followed by external efficiency ($R^2 = 0.343$, $p = 0.000$). External efficiency enhances employee innovation, which positively affects job satisfac-

tion (Demircioglu, 2021). The third place is taken by leadership ($R^2 = 0.261$, $p = 0.000$), the fourth – by internal efficiency ($R^2 = 0.254$, $p = 0.000$). This impact can be due to the work automation in the e-government processes. According to Bhargava et al. (2021), work automation can enhance job satisfaction if an employee sees the automation as an opportunity, not a threat.

Future research may test the impact of e-government maturity on public trust in government, citizen satisfaction, or service quality.

CONCLUSION

This study aimed to investigate whether e-government could impact public servants' satisfaction in Palestine. As demonstrated by the findings of this study, pursuing a higher maturity level has an impact on public servants' satisfaction. The reliability of this study was calculated using Cronbach's Alpha equations: 0.970 for e-government maturity and 0.709 for job satisfaction.

The analysis results show that leadership explains 26.1% of the variance in job satisfaction, external efficiency explains 34.3%, internal efficiency explains 25.4%, and good governance explains 36.4%. This was expected as the more advanced the e-government program in a nation, the simpler the public servant's life. A more effective government brings in more satisfaction from its employees. Consequently, the paper calls for governments to seek as much maturity as possible, especially in the good governance dimension, such as decreasing bureaucracy, capacity building, and increasing transparency, since good governance has the highest impact on job satisfaction. Moreover, governments should seek external efficiency, i.e., enriching government services to citizens through their implementation of e-government.

The developed model can be used to investigate new theories. Practitioners can also use it to make informed decisions toward achieving higher satisfaction levels among government employees while implementing e-government techniques.

AUTHOR CONTRIBUTIONS

Conceptualization: Emad Waladali, Abdelbaset Rabaiah.

Data curation: Emad Waladali, Abdelbaset Rabaiah.

Formal analysis: Emad Waladali, Abdelbaset Rabaiah.

Investigation: Emad Waladali, Abdelbaset Rabaiah.

Methodology: Emad Waladali, Abdelbaset Rabaiah.

Project administration: Emad Waladali, Abdelbaset Rabaiah.

Resources: Emad Waladali.

Software: Emad Waladali, Abdelbaset Rabaiah.

Supervision: Emad Waladali, Abdelbaset Rabaiah.

Validation: Emad Waladali, Abdelbaset Rabaiah.

Visualization: Emad Waladali, Abdelbaset Rabaiah.

Writing – original draft: Emad Waladali, Abdelbaset Rabaiah.

Writing – review & editing: Emad Waladali, Abdelbaset Rabaiah.

REFERENCES

1. Ahmad, H., Ahmad, K., & Shah, I. A. (2010). Relationship between job satisfaction, job performance attitude towards work and organizational commitment. *European Journal of Social Sciences*, 18(2), 257-267. Retrieved from https://www.academia.edu/35552173/Relationship_between_Job_Satisfaction_Job_Performance_Attitude_towards_Work_and_Organizational_Commitment
2. Akhter, A., Karim, Md. M., & Islam, K. M. A. (2021). The impact of emotional intelligence, employee empowerment and cultural intelligence on commercial bank employees' job satisfaction. *Banks and Bank Systems*, 16(4), 11-21. [https://doi.org/10.21511/bbs.16\(4\).2021.02](https://doi.org/10.21511/bbs.16(4).2021.02)
3. Almarabeh, T., & Abu Ali, A. (2010). A General Framework for E-Government: Definition Maturity Challenges, Opportunities, and Success. *European Journal of Scientific Research*, 39(1), 29-42.
4. Al-Zu'bi, H. A. (2010). A Study of Relationship between Organizational Justice and Job Satisfaction. *International Journal of Business and Management*, 5(12), 102-109. <https://doi.org/10.5539/ijbm.v5n12p102>
5. Andersen, K. V., & Henriksen, H. Z. (2006). E-government maturity models: Extension of the Layne and Lee model. *Government Information Quarterly*, 23(2), 236-248. <https://doi.org/10.1016/j.giq.2005.11.008>
6. Avery, D. R., Richeson, J. A., Hebl, M. R., & Ambady, N. (2009). It does not have to be uncomfortable: The role of behavioral scripts in black-white interracial interactions. *Journal of Applied Psychology*, 94(6), 1382-1393. <https://doi.org/10.1037/a0016208>
7. Aziz, K. A. (2003). Accounting information system satisfaction and job satisfaction among Malaysian accountants. *7th Pacific Asia Conference on Information Systems* (pp. 786-802). Retrieved from <https://aisel.aisnet.org/pacis2003/54/>
8. Berghe, J. V. (2011). *Job Satisfaction and Job Performance at the Work Place* (Degree Thesis). ARCADIA. Retrieved from https://www.theseus.fi/bitstream/handle/10024/28669/Vanden_Berghe_Jae.pdf
9. Bhargava, A., Bester, M., & Bolton, L. (2021). Employees' perceptions of the implementation of robotics, artificial intelligence, and automation (RAIA) on job satisfaction, job security and employability. *Journal of Technology in Behavioral Science*, 6, 106-113. <https://doi.org/10.1007/s41347-020-00153-8>
10. Concha, G., Astudillo, H., Porrúa, M., & Pimenta, C. (2012). E-Government procurement observatory, maturity model and early measurements. *Government Information Quarterly*, 29(1), S43-S50. <https://doi.org/10.1016/j.giq.2011.08.005>
11. Das, A., Harminder, S., & Joseph, D. (2017). A longitudinal study of e-government maturity. *Information & Management*, 54(4), 415-426. <https://doi.org/10.1016/j.im.2016.09.006>
12. Davison, R. M., Wagner, C., & Ma, L. C. (2005). From government to e-government: a transition model. *Information Technology & People*, 18(3), 280-299. <https://doi.org/10.1108/09593840510615888>
13. Demircioglu, M. D. (2021). Sources of innovation, autonomy, and employee job satisfaction in public organizations. *Public Performance & Management Review*, 44(1), 155-186. <https://doi.org/10.1080/15309576.2020.1820350>
14. DeVellis, R. F. (2003). *Scale Development: Theory and Applications* (2nd ed.). Thousand Oaks: Sage.
15. Elamin, A. M., & Alomaim, N. (2011). Does organizational justice influence job satisfaction and self-perceived performance in Saudi Arabia work environment? *International Management Review*, 7(1), 38-49, 94. Retrieved from <https://www.proquest.com/openview/4b51843522d653b4f09bc0992a86f417/1>
16. European Commission (EC). (2019). *eGovernment Factsheets 10-year Anniversary Report*. Retrieved from https://joinup.ec.europa.eu/sites/default/files/custom-page/attachment/2019-03/10egov_anniv_report.pdf
17. Fahr, R. (2011). Job design and job satisfaction – empirical evidence for Germany? *Management Revue. Socio-economic Studies*, 22(1), 28-46. Retrieved from https://econpapers.repec.org/article/raimamere/1861-9908_5fmrev_5f2011_5f1_5ffahr.htm
18. Fath-Allah, A., Cheikhi, L., Al-Qutaish, R. E., & Idri, A. (2014). E-Government Maturity Models: A Comparative Study. *International Journal of Software Engineering & Applications (IJSEA)*, 5(3), 71-91. Retrieved from <https://airccse.org/journal/ijsea/papers/5314ijsea06.pdf>
19. Gottschalk, P. (2009). Maturity levels for interoperability in digital government. *Government Information Quarterly*, 26(1), 75-81. <https://doi.org/10.1016/j.giq.2008.03.003>
20. Grimpe, C. (2007). Retaining innovative capacities: the impact of job satisfaction on employee turnover during postmerger integration. *International Journal of Technology Intelligence and Planning*, 3(2), 107-125. <https://doi.org/10.1504/IJTIP.2007.015646>
21. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis* (3rd ed.). New York: Macmillan Publishing Company.
22. Huang, Y.-H., Lee, J., McFadden, A. C., Murphy, L., Robertson, M. M., Cheung, J. H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of

- safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics*, 55, 248-257. <http://dx.doi.org/10.1016/j.apergo.2015.10.007>
23. Im, H. (2022). Come work with us: Inclusivity, performance, engagement, and job satisfaction as correlates of employer recommendation. *Journal of Personnel Psychology*. <https://doi.org/10.1027/1866-5888/a000305>
 24. Izvercian, M., Potraa, S., & Ivascu, L. (2016). Job satisfaction variables: A grounded theory approach. *Procedia – Social and Behavioral Sciences*, 221, 86-94. <https://doi.org/10.1016/j.sbspro.2016.05.093>
 25. Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407. <http://dx.doi.org/10.1037/0033-2909.127.3.376>
 26. Kachwamba, M., & Hussein, A. (2009). Determinants of e-government maturity: Do organizational specific factors matter? *Journal of US-China Public Administration*, 6(7), 1-8.
 27. Kang, J. K., Tay, J., & Gan, S. K. (2022). The effect of perceived workplace bureaucracies on self-evaluated efficacy, job satisfaction and motivation in the workplace during the COVID-19 pandemic. *SocArXiv Papers*. <https://doi.org/10.31235/osf.io/y83ze>
 28. Karlinda, A. E., & Sari, S. (2022). Implementation of information technology and job flexibility on driver performance through job satisfaction as an intervening variable for Gojek (Go-Ride) partners in Bukittinggi City. *Journal of Information System, Applied, Management, Accounting and Research*, 6(1), 136-148.
 29. Karokola, G., & Yngström, L. (2009). Discussing e-government maturity models for developing world – security view. *Proceedings of the Information Security South Africa Conference* (pp. 82-98). Johannesburg. Retrieved from <https://cite-seerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.232.2174>
 30. Kim, D.-Y., & Grant, G. (2010). E-government maturity model using the capability maturity model integration. *Journal of Systems and Information Technology*, 12(3), 230-244. <https://doi.org/10.1108/13287261011070858>
 31. Layne, K., & Lee, J. (2001). Developing Fully Functional e- Government: A Four Stage. *Government Information Quarterly*, 18(2), 122-136. [https://doi.org/10.1016/S0740-624X\(01\)00066-1](https://doi.org/10.1016/S0740-624X(01)00066-1)
 32. Lee, G., & Kwak, Y. H. (2012). An Open Government Maturity Model for social media-based public engagement. *Government Information Quarterly*, 29(4), 492-503. <https://doi.org/10.1016/j.giq.2012.06.001>
 33. Markovits, Y., Davis, A. J., & van Dick, R. V. (2007). Organizational commitment profiles and job satisfaction among Greek private and public sector employees. *International Journal of Cross Cultural Management*, 7(1), 77-99. <https://doi.org/10.1177/1470595807075180>
 34. Mostot, D. U. (1988). *Understanding Organizational Behavior*. New York: West Publishing Company.
 35. Munir, R. I., & Abdul Rahmana, R. (2016). Determining dimensions of job satisfaction using factor analysis. *Procedia Economics and Finance*, 37, 488-496. [https://doi.org/10.1016/S2212-5671\(16\)30156-3](https://doi.org/10.1016/S2212-5671(16)30156-3)
 36. Nguyen, H. N., & Tran, M. D. (2022). Stimuli to adopt e-government services during Covid-19: Evidence from Vietnam. *Innovative Marketing*, 18(1), 12-22. [https://doi.org/10.21511/im.18\(1\).2022.02](https://doi.org/10.21511/im.18(1).2022.02)
 37. Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
 38. Pratama, E. N., Suwarni, E., & Handayani, M. A. (2022). The effect of job satisfaction and organizational commitment on turnover intention with person organization fit as moderator variable. *Aptisi Transactions on Management (ATM)*, 6(1), 74-81. <https://doi.org/10.33050/atm.v6i1.1722>
 39. Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2021). Effect of transformational leadership, job satisfaction, and organizational commitments on organizational citizenship behavior. *Jurnal Inovasi Bisnis*, 9(1), 61-69. <https://doi.org/10.35314/inovbiz.v9i1.1801>
 40. Rabaiah, A. (2009). *Best-Practice Framework for Developing and Implementing E-Government*. Brussels: Vubpress.
 41. Robbins, S. P., & Judge, T. A. (2013). *Organizational Behavior* (15th ed.). Pearson.
 42. Safari, H., Moslehi, A., Mohammadian, A., Farazmand, E., Haki, K., & Khoshsim, G. (2004). EGovernment Maturity Model (EGMM). *Proceedings of the Sixth International Conference on Enterprise Information Systems* (pp. 471-474). Porto, Portugal. <https://doi.org/10.5220/0002607404710474>
 43. Sareshkeh, S. K., Ghaziani, F. G., & Tayebi, S. M. (2012). Impact of organizational justice perceptions on job satisfaction and organizational commitment: the Iranian sport federations perspective. *Annals of Biological Research*, 3(8), 4229-4238. Retrieved from <https://www.scholarresearchlibrary.com/articles/impact-of-organizational-justice-perceptions-on-job-satisfaction-and-organizational-commitment-the-iranian-sport-federat.pdf>
 44. Sesen, H., & Basim, N. H. (2012). Impact of satisfaction and commitment on teachers' organizational citizenship. *Educational Psychology*, 32(4), 475-491. <https://doi.org/10.1080/01443410.2012.670900>
 45. Shahkooh, K. A., Saghafi, F., & Abdollahi, A. (2008). A Proposed Model for E-government Maturity. *3rd International Conference on*

- Information and Communication Technologies: From Theory to Applications*. Damascus. <https://doi.org/10.1109/ICT-TA.2008.4529948>
46. Shareef, M. A., Kumar, V., Kumar, U., & Dwivedi, Y. K. (2011). e-Government Adoption Model (GAM): Differing service maturity levels. *Government Information Quarterly*, 28(1), 17-35. <https://doi.org/10.1016/j.giq.2010.05.006>
47. Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. SAGE Publications, Inc.
48. Subarto, S., Solihin, D., & Qurbani, D. (2021). Determinants of job satisfaction and its implications for the lecturers performance. *Jurnal Pendidikan Ekonomi & Bisnis*, 9(2), 163-178. <https://doi.org/10.21009/JPEB.009.2.7>
49. Sweis, R., Abed, S., AlZu'bi, Z. M., Suifan, S., AlBalkh, W., & Jaradat, M. (2022). The relation between information technology adoption and the pharmacists' job satisfaction in the chain community pharmacy in Amman. *International Journal of Business Innovation and Research*, 27(3), 297-314. <https://doi.org/10.1504/IJBIR.2022.121733>
50. Ton, H. N., Nguyen, P. V., & Vuong, L. T. (2021). Employee engagement and best practices of internal public relations to harvest job performance in organizations. *Problems and Perspectives in Management*, 19(3), 408-420. [https://doi.org/10.21511/ppm.19\(3\).2021.33](https://doi.org/10.21511/ppm.19(3).2021.33)
51. UN E-Government Knowledgebase. (n.d.). *E-Government Development Index (EGDI)*. Retrieved from <https://publicadministration.un.org/egovkb/en-us/About/Overview/-E-Government-Development-Index>
52. Waladali, E. (2017). The perceived organizational justice and job satisfaction. *Journal of The Arab American University*, 3(1), 1-21. Retrieved from <https://digitalcommons.aaru.edu.jo/aaup/vol3/iss1/4>
53. Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601-617. <https://doi.org/10.1177/014920639101700305>
54. Wong, C.-S., Chun, H., & Law, K. S. (1998). A longitudinal study of the job perception-job satisfaction relationship: A test of the three alternative specifications. *Journal of Occupational and Organizational Psychology*, 71(2), 127-146. <https://doi.org/10.1111/j.2044-8325.1998.tb00667.x>
55. Yang, S. B., Brown, G. C., & Moon, B. (2011). Factors Leading to Corrections Officers' Job Satisfaction. *Public Personnel Management*, 40(4), 359-369. Retrieved from <https://static1.squarespace.com/static/5ffe87e43f3741656f96246d/t/600c85dd4a649f209ff/470/1611433437876/Factors.pdf>

APPENDIX A

Table A1. Questionnaire (Translated from Arabic)

Part I	
<i>Upon your perception of e-government aspirations in Palestine, please choose the proper answer with an "X" inside the box</i>	
Internal Efficiency	
1. Data exchange across all departments is electronic	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
2. Data exchange with other government entities is electronic	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
3. Work procedures inside the department have been simplified	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
4. Decision-making was simplified	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
5. More focus is put on the basic objectives of the department	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
6. Work procedures were automated inside the department	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
External Efficiency	
7. Level of service toward citizens has matured	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
8. Citizens have better access to department services	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
9. More facilitation for business and e-commerce has been achieved	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
10. Peoples' lives have been simplified and enhanced	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
11. Government services to citizens have been enriched	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
12. I observe more trust from the side of the citizens of department operation	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
13. Response time of service offering is decreased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
14. Innovation inside the department is enhanced	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
15. More service delivery channels are created	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
16. Client satisfaction is increased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
17. Service accuracy is increased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
18. The department relationship with citizens became stronger	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
Better Governance	
19. Citizen participation in decision-making in the department is increased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
20. Bureaucracy inside the department is decreased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
21. Transparency inside the department is decreased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
22. Capacity building at the department is enhanced	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
23. Societal connection is prompted	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
24. We became closer to an information society	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
25. Foreign investment in Palestine increased	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree
26. Citizen privacy is enhanced	<input type="checkbox"/> Strong agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree

Table A1 (cont.). Questionnaire (Translated from Arabic)

27. Democracy is enhanced	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
28. Digital divide among citizens is narrowing	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
29. Global readiness is increased	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
30. GDP per capita is increased	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
Leadership Aspirations					
31. The department is now in a leading position in comparison to corresponding institutions in other countries	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree

Part II

*This part includes questions about employee satisfaction in your department.
Please choose the proper answer with an "X" inside the box*

32. My boss praises me when I do my work well	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
33. I am satisfied with the level of support and guidance I receive from my boss	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
34. My boss treats my colleagues and me fairly	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
35. Employee performance is evaluated fairly	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
36. Employees' performance evaluation is systematic	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
37. I like my work in the department	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
38. I feel personal achievement through the work I do in the department	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
39. I feel proud while doing my work	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
40. My work enables me to utilize my skills and abilities to the max	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
41. I have enough freedom to do my work	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
42. The department provides me with all the tools and equipment to do my work	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
43. The department provides training and development to do my work properly	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
44. Career development abroad is selected fairly	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
45. Teamwork aspiration is the central theme in the department	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
46. My relationship with my colleagues is good	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
47. There is somebody to turn to in the department if I need assistance	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree
48. I am satisfied with the salary I receive	<input type="checkbox"/> Strong agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly disagree

Table A2. Correlation matrix

Factors of the study variables		inside_eff	outside_eff	good_gov	leadership	supervision	Work nature	TRAINING	worker	Coworker relation	E_GOV	JOB_SAT
inside_eff	Pearson Correlation	1	-	-	-	-	-	-	-	-	-	-
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	-	-
outside_eff	Pearson Correlation	.787**	1	-	-	-	-	-	-	-	-	-
	Sig. (2-tailed)	.000	-	-	-	-	-	-	-	-	-	-
good_gov	Pearson Correlation	.720**	.727**	1	-	-	-	-	-	-	-	-
	Sig. (2-tailed)	.000	.000	-	-	-	-	-	-	-	-	-
leadership	Pearson Correlation	.627**	.692**	.760**	1	-	-	-	-	-	-	-
	Sig. (2-tailed)	.000	.000	.000	-	-	-	-	-	-	-	-
supervision	Pearson Correlation	.435**	.563**	.569**	.479**	1	-	-	-	-	-	-
	Sig. (2-tailed)	.000	.000	.000	.000	-	-	-	-	-	-	-
Work nature	Pearson Correlation	.396**	.394**	.384**	.326**	.415**	1	-	-	-	-	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	-	-	-	-	-	-
TRAINING	Pearson Correlation	.341**	.399**	.441**	.350**	.556**	.338**	1	-	-	-	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	-	-	-	-	-
Work_Condition	Pearson Correlation	.400**	.417**	.440**	.332**	.554**	.513**	.462**	1	-	-	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	-	-	-	-
Coworker relation	Pearson Correlation	.307**	.380**	.375**	.364**	.645**	.463**	.352**	.569**	1	-	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	-	-	-
E_GOV	Pearson Correlation	.864**	.950**	.938**	.805**	.581**	.420**	.434**	.451**	.397**	1	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-
JOB_SAT	Pearson Correlation	.504**	.586**	.603**	.511**	.866**	.719**	.684**	.764**	.757**	.621**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-

Note: ** Correlation is significant at the 0.01 level (2-tailed).