

# IMPACT OF TRANSFORMATIONAL LEADERSHIP ON LEARNING AND GROWTH: TRAINING AS A MEDIATING VARIABLE

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## ABSTRACT:

In the quest to improve organizational performance, attention has been directed at new innovative ideas. It must be emphasized that the dire need for better training and leadership has led to extensive research effort. The public sector in the United Arab Emirates is the focus of this paper, where an innovative approach is applied to assess the impact of transformational leadership on training which in turn influences learning & growth, in addition to the mediating role of training. The data was collected from 344. The data was analyzed using structural equation modeling (SEM) via SmartPLS 3.0. The results proved that there is a significant impact of transformational leadership on training which in turn significantly impacted learning & growth as well, and it also proved the significant mediating role of training in the model. The proposed model explained 21.7% of learning & growth variance.

**KEYWORDS:** Transformational leadership, training, learning & growth

## I. INTRODUCTION

The concept of leadership has garnered a lot of interest amongst the various practitioners and scholars, as it played a vital role in the organisational performance and offered a competitive advantage. However, researchers are still determining if the leadership fosters a higher performance and if the earlier performance was influenced by leadership and innovation. Thus, many studies have attempted to determine the relationship between leadership and organisational performance (Samad 2012).

Since the existing environment is seen to be innovative and competitive, the relationship between the TL and organisational performance is not clear. The competitive advantage is based on the innovativeness which enables the organisations to improve their results (Aragón-Correa et al., 2007; Donate and Sánchez de Pablo 2015). In these scenarios, the managers need to motivate their employees to participate in the innovative process and gain new knowledge which allows the companies to introduce novel products into the markets (Andriopoulos and Lewis 2010). The TL and human resource activities were regarded as triggers of innovation and competence (Fındıklı et al., 2015). Heffernan et al. (2016) stated that there was a higher need to investigate the variables which mediated between the organisational performance and the human resource activities.

Researcher Tizard (2012) in an in-depth critical study on contemporary leadership in the public sector notes that contemporary public sector leaders are being compelled to work with less assets and constantly find better approaches to handle difficulties. Tizard further notes that leadership in the public sector is particularly significant; it not only impacts the activity execution and fulfilment of representatives' expectations, but also plays a significant role in how government and public organizations perform. This position finds support from further evidence of research which notes that leadership is cogent to great public governance, including great service provision, productivity, ethical practice and accountability (Schofield & Pegg, 2010). They moved further to indicate that public sector leaders face more challenges than private sector leaders including increasing dynamism, perception changes, rapid technological developments and increasing citizenry expectations just to mention a few. As a result, Schofield notes that these numerous challenges that leaders in the public sector face and the fact that it is expected of them to be the model of the application and implementation of all changes in the business environment requires the development and or dependence on different competencies among the leaders concerned. Therefore, public sector senior leaders are ordinarily inclined to pursue and monitor rules and methods and give clear directions about the manner in which things should be finished.

Research indicates that the leadership style of a transformational leader is similar to the coaching approach or description of a leader (Rebelo, Dimas, Lourenço, & Palácio, 2018). This implies a superiorly intelligent and inspiring figure that can immediately notice and recognize his/her team members, and determine from the onset of

interaction the specific qualities of his/her team members. Then within the next few interactions take note of each of the team member's aspirations, motivations, strengths and weaknesses and capitalize on these to help each individual improve. (Jaiswal & Dhar, 2015) note however, while each employee has individual goals that s/he would want to fulfil for the organization in his/her capacity, the transformational leader takes this opportunity to encourage a zeal for goal pursuit by painting a clear compelling common vision and goal and setting overall objectives which serve as a guide for employees when performing their tasks (A. H. Aldholay, Isaac, Abdullah, & Ramayah, 2018).

## **II. LITERATURE REVIEW**

### **2.1 Transformational Leadership (TL)**

Many researchers have accepted TL as the ideal style of leadership in various contemporary organisations. This leadership style has garnered a lot of recognition because of its effect on the different organisational outcomes like organisational innovation (Wang et al., 2011) and employee satisfaction (Voon et al., 2011; Ngadiman et al. 2013). It was noted that the TL could instigate a need for higher order (Rowold and Schlotz 2009). In their study, Aldholay et al., (2018) mentioned that the TL could motivate all the employees and generate positive emotions, which further created an inspirational vision and directed the employees to work towards fulfilling the objectives. Based on the proposed dimensions of the TL which were described earlier, Aydogdu and Asikgil (2011) derived 4 TL dimensions, which were used in this study. These included the Inspirational Motivation, Intellectual Stimulation, Idealised Influence and Individualised Consideration. The above arguments and other supporting results led to the following hypothesis:

*H1: Transformational Leadership has a positive effect on training.*

### **2.2 Training (TR)**

The subject of training human resources and their promotion is considered to be one of the important matters in the work of modern organizations (Jaworski, Ravichandran, Karpinski, & Singh, 2018). The human element represents the basic motor of the resources of the organization, particularly when it enjoys skilful quality and cognitive abilities that tally with the nature of work of the organization (Hanaysha, 2016). Training is an operation of active effect on the performance and skills of the human element in the organization, which is necessary for the preservation of the high efficiency of work strength whereas it raises the standard of skills and helps to implant confidence in the spirits of workers and improves business quality (Afroz, 2018). Training is considered to be one of the strategic and basic axes for the support and diversification of the skills, experiences and knowledge of the personnel in the organization (Sharma & Taneja, 2018). Training contributes in the fertilization of brains of trainees and expands their horizons and perceptions in such a way to help in deepening thought and make them gain the enlightened discernment in order to disclose the circumstances and consequences incumbent upon their conducts (Otuko, Kimanichege, & Douglas, 2013). Consequently, the following hypothesis is proposed:

*H2: Training has a positive effect on Learning & Growth.*

*H3: Training mediates the relationship between Transformational Leadership and Learning & Growth .*

### **2.3 Learning & Growth (LG)**

Organizational performance is among the foremost vital factors within the administration field and seemingly the foremost imperative pointer in deciding the in general organizational performance (Gavrea, Ilies, & Stegorean, 2011). It is the degree of standard or endorsed pointers of adequacy, effectiveness, and natural obligation such as cycle time, efficiency, and administrative compliance. Organizational performance is the extreme subordinate variable of intrigued by analysts whose concern for management study. This wide variable is basic in allowing analysts and directors to assess organizations over time and compare them to rivals (J. Richard, Devinney, Yip, & Johnson, 2009). This paper will look at performance in terms of learning & growth. which alludes to how staff are prepared and taught, pick up and capture information (Hannabarger, Buchman, & Economy, 2011). Kaplan & Norton (1996) mentioned that learning and growth come from three central sources: individuals, procedures and systems

## **III. RESEARCH METHOD**

### **3.1 Overview of the Proposed Conceptual Framework**

Figure 1 shows the main variables of this study (Transformational Leadership, Training, and Learning & Growth) and the relationship between them.

- Transformational Leadership as independent variable

- Training as mediating variable
- Learning & Growth as dependent variable

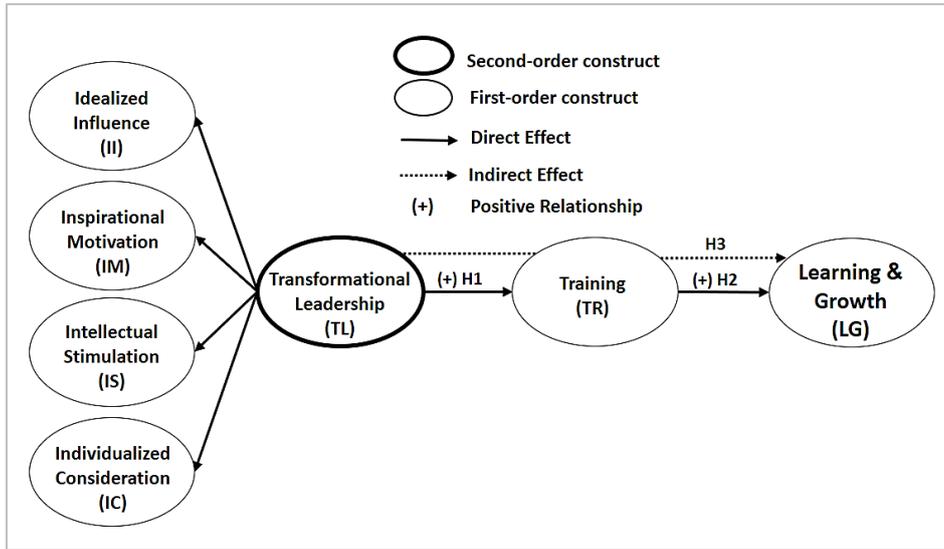


Figure 1: The proposed conceptual framework

3.2. Development of Instrument and Data collection

In this study, the researchers developed the questionnaire tool which consisted of 25 questions. All parameters were assessed using the Likert scale as shown in earlier studies (Isaac, Aldholay, Abdullah, & Ramayah, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2018). This information was collected by delivering the self-managed questionnaire ‘in-person’ to the employees in public sector in UAE, in the period between March 2019 and January 2020. 600 questionnaires were distributed, out of which 372 were returned. From the 372 questionnaires, 344 responses were suitable for data analysis. The total response rate in this study was 62%, which was regarded as acceptable.

IV. DATA ANALYSIS AND RESULTS

PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilizing the software SmartPLS 3.0 (Ringle, Wende, & Becker, 2015). PLS-SEM recommended by related studies (Isaac, Abdullah, Aldholay, & Ameen, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2017; Mutahar, Daud, Thurasamy, Isaac, & Abdulsalam, 2018).

4.1 Measurement Model Assessment

The individual Cronbach’s alpha, the composite reliability (CR), The average variance extracted (AVE), and the factor loadings exceeded the suggested value (Kline, 2010; Hair, Black, Babin, & Anderson, 2010) as illustrated in Table 1.

Table 1: Measurement model assessmen

Constructs	Item	Loading (> 0.7)	M	SD	$\alpha$ (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Idealized Influence (II)	II1	0.926	3.22	1.19	0.940	0.957	0.847
	II2	0.927					
	II3	0.914					
	II4	0.915					
Inspirational Motivation (IM)	IM1	0.914	3.06	1.11	0.931	0.951	0.828
	IM2	0.919					
	IM3	0.909					
	IM4	0.898					
Intellectual Stimulation (IS)	IS1	0.921	3.07	1.12	0.923	0.951	0.867
	IS2	0.936					
	IS3	0.937					
	IS4	Deleted					
Individualized	IC1	0.928	3.34	1.20	0.883	0.921	0.747

Consideration (IC)	IC2	0.930					
	IC3	0.670					
	IC4	0.902					
Training (TR)	TR1	0.953	3.77	1.13	0.954	0.966	0.878
	TR2	0.953					
	TR3	0.940					
	TR4	0.901					
Learning & Growth (LG)	LG1	0.755					
	LG2	0.825					
	LG3	0.815	3.38	1.04	0.865	0.903	0.650
	LG4	0.844					
	LG5	0.790					

Note: M=Mean; SD=Standard Deviation,  $\alpha$ = Cronbach's alpha; CR = Composite Reliability, AVE = Average Variance Extracted.

**Key:** II: Idealized Influence, IM: Inspirational Motivation, IS: Intellectual Stimulation, IC: Individualized Consideration, TR: Training, LG: Learning & Growth

Fornell-Larcker was used to test the discriminant validity, table 2 shows that all constructs of model fulfilled satisfactorily, it was discovered that the AVEs' square root on the diagonals is bigger than the correlations among constructs (Fornell & Larcker, 1981; Chin, 1998; Hair et al., 2017).

**Table 2: Fornell-Larcker criterion**

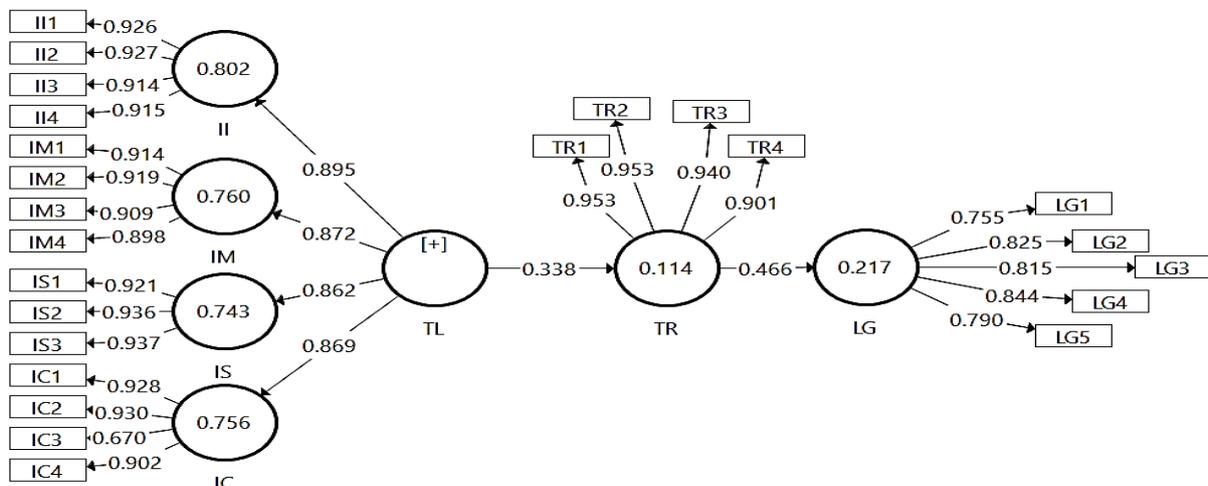
	IC	II	IM	IS	LG	TR
IC	<b>0.865</b>					
II	0.706	<b>0.921</b>				
IM	0.657	0.696	<b>0.910</b>			
IS	0.691	0.700	0.676	<b>0.931</b>		
LG	0.346	0.215	0.245	0.211	<b>0.806</b>	
TR	0.322	0.263	0.328	0.267	0.466	<b>0.937</b>

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.

**Key:** II: Idealized Influence, IM: Inspirational Motivation, IS: Intellectual Stimulation, IC: Individualized Consideration, TR: Training, LG: Learning & Growth

**4.2 Structural Model Assessment**

The structural model can be tested by computing beta ( $\beta$ ),  $R^2$ , and the corresponding  $t$ -values via a bootstrapping procedure with a resample of 5,000 (Hair, Hult, Ringle, & Sarstedt, 2017).



**Key:** TL: Transformational Leadership, II: Idealized Influence, IM: Inspirational Motivation, IS: Intellectual Stimulation, IC: Individualized Consideration, TR: Training, LG: Learning & Growth

**Figure 2: PLS algorithm results**

**4.2.1 Direct Effect Hypotheses**

Figure 2 and Table 3 showing the results of the hypothesis tests. Transformational leadership positively influences Training. Hence, H1 is accepted with ( $\beta = 0.338, t= 5.884, p <0.001$ ). Training positively influences learning & growth. Hence, H2 is accepted with ( $\beta = 0.466, t= 8.502, p <0.001$ ).

Transformational leadership explains eleven percent of the variance in training, and training explains twenty-two percent of the variance in learning & growth. The values of  $R^2$  have an acceptable level of explanatory power, indicating a substantial model (Cohen, 1988; Chin, 1998).

**Table 3: Result of Direct Effect Hypotheses**

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision	R <sup>2</sup>
H1	TL→TR	0.338	0.057	5.884	0.000	Supported	0.11
H2	TR→LG	0.466	0.055	8.502	0.000	Supported	0.22

Key: TL: Transformational Leadership, TR: Training, LG: Learning & Growth

**4.2.2 Indirect Effect Hypotheses**

The researchers applied the Preacher and Hayes (2004; 2008) method for bootstrapping all indirect effects for testing the mediation hypotheses, H3. The results showed (see table 4) that the training mediated the relationship between the transformational leadership and learning & growth. Thus, the H3 was accepted and showed the values of ( $\beta = 0.157, t=4.115, p <0.001$ ).

**Table 4: Result of Indirect Effect Hypotheses**

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision
H3	TL→TR→LG	0.157	0.038	4.115	0.000	Supported

Key: TL: Transformational Leadership, TR: Training, LG: Learning & Growth

**V. DISCUSSION**

In this study, it was noted that TL positively affected the organisational innovation amongst the employees of public sector, UAE, as shown in earlier reports (García-Morales et al., 2012; Heffernan et al., 2016). This was based on the fact that the organisational leaders instilled a sense of pride amongst their subordinates, placed their group before their own interest, acted admirably, mentioned the important beliefs and values, were optimistic about the future, were enthusiastic about what had to be accomplished, presented a vision for the future, were confident about achieving the organisational objectives, re-examined the critical presumptions, sought multiple perspectives regarding the problem-solving, offered new options with regards to the completion of an assignment, treated other employees as individuals instead of only group members, understood that every employee has different abilities, needs and aspirations, helped other employees develop their skills and presented a different perspective while tackling the organisational issues. As a result, the employees tend to think that they received adequate training, have improved understanding after my training programs, enhanced their confidence in the new system because of the training, and perceived trainers as well informed and proactive in providing assistance to the system.

Similarly the results showed that training significantly influenced learning & growth. In line with previous studies in literature (Afacan Findikli et al., 2015; Samad, 2012). It can be understood by the fact that the more employees think that they received adequate training, have improved understanding after my training programs, enhanced their confidence in the new system because of the training, and perceived trainers as well informed and proactive in providing assistance to the system. The more the organization seeks to see what is new in the business world and apply it to their work, focuses on the department's ability to adapt to changing circumstances, tries to facilitate the use of new technology to take advantage of its services, employs scientific research to solve problems faced by Organization, and focuses on human resource development and performance.

Lastly, the results revealed that training significantly mediates the relationship between transformational leadership and learning & growth (Aldholay, Isaac, Abdullah, & Ramayah, 2018; Isaac, Abdullah, Ramayah, & Mutahar, 2018; García-Morales et al., 2012; Heffernan, Harney, Cafferkey, & Dundon, 2016; Aydogdu & Asikgil, 2011; Gavrea et al., 2011). Whereby based on the fact that the organisational leaders instilled a sense of pride amongst their subordinates, placed their group before their own interest, acted admirably, mentioned the important beliefs and values, were optimistic about the future, were enthusiastic about what had to be accomplished, presented a vision for the future, were confident about achieving the organisational objectives, re-examined the

critical presumptions, sought multiple perspectives regarding the problem-solving, offered new options with regards to the completion of an assignment, treated other employees as individuals instead of only group members, understood that every employee has different abilities, needs and aspirations, helped other employees develop their skills and presented a different perspective while tackling the organisational issues. The more the organization seeks to see what is new in the business world and apply it to their work, focuses on the department's ability to adapt to changing circumstances, tries to facilitate the use of new technology to take advantage of its services, employs scientific research to solve problems faced by Organization, and focuses on human resource development and performance, given that the employees tend to think that they received adequate training, have improved understanding after my training programs, enhanced their confidence in the new system because of the training, and perceived trainers as well informed and proactive in providing assistance to the system. Longitudinal studies recommended for future work (Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2017; Isaac, Abdullah, Ramayah, & Mutahar Ahmed, 2017; Isaac, Abdullah, Ramayah, & Mutahar, 2017a; Isaac, Masoud, Samad, & Abdullah, 2016).

**VI. IMPLICATIONS AND CONCLUSION**

Apart from the academic undertaking, the researcher conducted the research out of need to help in the development of more advanced and high performing public service in the UAE. This can be justified by the fact that as a member of the public service in Dubai, the researcher received authorizations to collect data from many governmental institutions and agencies for the sole purpose of coming up with deductions that can help in improving the functioning and service offerings of the public sector in UAE. The paper proposed a novel model, which included the independent variable of the 2<sup>nd</sup>-order TL construct (i.e., individualised consideration, idealised influence, intellectual stimulation, and inspirational motivation) and the dependent variable included learning and growth. training was the mediating variable. The results showed that all hypotheses were significant, and the independent variable could explain 21.7% of the variance noted in the learning & growth.

**Appendix**

**Appendix A**

*Instrument for variables*

<i>Variable</i>	<i>Measure</i>	<i>Source</i>	
Idealized Influence (II)	II1: Leaders talk optimistically about the future. II2: Leaders talk enthusiastically about what needs to be accomplished. II3: Leaders articulate a compelling vision of the future. II4: Leaders express confidence that goals will be achieved.	(A. Aldholay, Abdullah, Isaac, & Mutahar, 2019)	
Inspirational Motivation (IM)	IM1: Leaders talk optimistically about the future. IM2: Leaders talk enthusiastically about what needs to be accomplished. IM3: Leaders articulate a compelling vision of the future. IM4: Leaders express confidence that goals will be achieved.		
Intellectual Stimulation (IS)	IS1: Leaders re-examine critical assumptions to question whether they are appropriate. IS2: Leaders seek differing perspectives when solving problems. IS3: Leaders get others to look at problems from many different angles. IS4: Leaders suggest new ways of looking at how to complete assignments.		
Individualized Consideration (IC)	IC1: Leaders treat others as individuals rather than just as a member of a group. IC2: Leaders consider an individual as having different needs, abilities, and aspirations from others. IC3: Leaders seek differing point of view when dealing with the organizational issues. IC4: Leaders help others to develop their strengths.		
Training (TR)	TR1: The quality of the training I got is considered adequate. TR2: My understanding has improved mainly after my training programs. TR3: I felt confident in the new system because of the training. TR4: The trainers are well informed and proactive in providing assistance to the system.		
Learning & Growth (LG)	LG1: Organization seeks to see what is new in the business world and apply it to their work. LG2: Besides growth and education focuses on the department's ability to adapt to changing circumstances. LG3: The Organization is trying to facilitate the use of new technology to take		(Osama Isaac, Masoud, Samad, & Abdullah,

	advantage of its services. LG4: The Organization based foundations of scientific research to solve problems faced by Organization. LG5: The Organization focuses on human resource development and performance.	2016)
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**REFERENCES**

1. Afacan Fındıklı, M., Yozgat, U., & Rofcanin, Y. (2015). Examining Organizational Innovation and Knowledge Management Capacity The Central Role of Strategic Human Resources Practices (SHRPs). *Procedia - Social and Behavioral Sciences*, 181, 377–387. <https://doi.org/10.1016/j.sbspro.2015.04.900>
2. Afroz, N. N. (2018). Effects of Training on Employee Performance : A Study on Banking Sector, Tangail Bangladesh. *Global Journal of Economic and Business*, 4(1), 111–124. <https://doi.org/10.12816/0048158>
3. Aldholay, A., Abdullah, Z., Isaac, O., & Mutahar, A. M. (2019). Perspective of Yemeni students on use of online learning Extending the information systems success model with transformational leadership and compatibility. *Information Technology & People*, 1(1), 0959–3845. <https://doi.org/10.1108/ITP-02-2018-0095>
4. Aldholay, A. H., Isaac, O., Abdullah, Z., & Ramayah, T. (2018). The role of transformational leadership as a mediating variable in DeLone and McLean information system success model : The context of online learning usage in Yemen. *Telematics and Informatics*, 35(5), 1421–1437. <https://doi.org/10.1016/j.tele.2018.03.012>
5. Andriopoulos, C., & Lewis, M. W. (2010). Managing Innovation Paradoxes: Ambidexterity Lessons from Leading Product Design Companies. *Long Range Planning*, 43(1), 104–122. <https://doi.org/10.1016/j.lrp.2009.08.003>
6. Aragón-Correa, J. A., García-Morales, V. J., & Cordón-Pozo, E. (2007). Leadership and organizational learning’s role on innovation and performance: Lessons from Spain. *Industrial Marketing Management*, 36(3), 349–359. <https://doi.org/10.1016/j.indmarman.2005.09.006>
7. Aydogdu, S., & Asikgil, B. (2011). The Effect of Transformational Leadership Behavior on Organizational Culture : An Application in Pharmaceutical Industry. *International Review of Management and Marketing*, 1(4), 65–73.
8. Chin, W. W. (1998a). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), 7–16.
9. Chin, W. W. (1998b). *The partial least squares approach to structural equation modeling*. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-358). New Jersey: Lawrence Erlbaum Associates. Mahwah, NJ: Lawrence Erlbaum.
10. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). London: Routledge.
11. Donate, M. J., & Sánchez de Pablo, J. D. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360–370. <https://doi.org/10.1016/j.jbusres.2014.06.022>
12. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
13. García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65(7), 1040–1050. <https://doi.org/10.1016/j.jbusres.2011.03.005>
14. Gavrea, C., Ilies, L., & Stegorean, R. (2011). Determinants of organizational performance: The case of Romania. *Management & Marketing*, 6(2), 285–300.
15. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). New Jersey: Pearson.
16. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). London: Thousand Oaks: SAGE.
17. Hanaysha, J. (2016). Examining the Effects of Employee Empowerment, Teamwork, and Employee Training on Organizational Commitment. *Procedia - Social and Behavioral Sciences*, 229, 298–306. <https://doi.org/10.1016/j.sbspro.2016.07.140>
18. Hannabarger, C., Buchman, F., & Economy, P. (2011). *Balanced Scorecard Strategy For Dummies*. Wiley.
19. Heffernan, M., Harney, B., Cafferkey, K., & Dundon, T. (2016). Exploring the HRM-performance relationship: the role of creativity climate and strategy. *Employee Relations*, 38(3), 438–462. <https://doi.org/10.1108/ER-06-2015-0110>
20. Isaac, O., Masoud, Y., Samad, S., & Abdullah, Z. (2016). The mediating effect of strategic implementation between strategy formulation and organizational performance within government

- institutions in Yemen. *Research Journal of Applied Sciences*, 11(10), 1002–1013. <https://doi.org/10.3923/rjasci.2016.1002.1013>
21. Isaac, Osama, Abdullah, Z., Aldholay, A. H., & Ameen, A. (2019). Antecedents and outcomes of internet usage within organisations in Yemen : An extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) model. *Asia Pacific Management Review*, 24(1), 335–354. <https://doi.org/10.1016/j.apmrv.2018.12.003>
  22. Isaac, Osama, Abdullah, Z., Ramayah, T., & Mutahar, A. (2017a). Internet usage , user satisfaction , task-technology fit , and performance impact among public sector employees in Yemen. *The International Journal of Information and Learning Technology*, 34(3), 210–241. <https://doi.org/10.1108/IJILT-11-2016-0051>
  23. Isaac, Osama, Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2017b). Internet Usage and Net Benefit among Employees Within Government Institutions in Yemen: An Extension of Delone and Mclean Information Systems Success Model (DMISM) with Task-Technology Fit. *International Journal of Soft Computing*, 12(3), 178–198. <https://doi.org/10.3923/ijscmp.2017.178.198>
  24. Isaac, Osama, Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2018). Factors determining user satisfaction of internet usage among public sector employees in Yemen. *International Journal of Technological Learning, Innovation and Development*, 10(1), 37–68. <https://doi.org/10.1504/IJTLID.2018.10012960>
  25. Isaac, Osama, Abdullah, Z., Ramayah, T., Mutahar, A. M., & Alrajawy, I. (2017). Towards a Better Understanding of Internet Technology Usage by Yemeni Employees in the Public Sector: An Extension of the Task-Technology Fit (TTF) Model. *Research Journal of Applied Sciences*, 12(2), 205–223. <https://doi.org/10.3923/rjasci.2017.205.223>
  26. Isaac, Osama, Abdullah, Z., Ramayah, T., & Mutahar Ahmed, M. (2017). Examining the Relationship Between Overall Quality, User Satisfaction and Internet Usage: An Integrated Individual, Technological, Organizational and Social Perspective. *Asian Journal of Information Technology*, 16(1), 100–124. <https://doi.org/10.3923/ajit.2017.100.124>
  27. Isaac, Osama, Aldholay, A., Abdullah, Z., & Ramayah, T. (2019). Online learning usage within Yemeni higher education: The role of compatibility and task-technology fit as mediating variables in the IS success model. *Computers & Education*, 136(1), 113–129. <https://doi.org/https://doi.org/10.1016/j.compedu.2019.02.012>
  28. Isaac, Osama, Masoud, Y., Samad, S., & Abdullah, Z. (2016). The Mediating Effect of Strategic Implementation Between Strategy Formulation and Organizational Performance Within Government Institutions in Yemen. *Research Journal of Applied Sciences*, 11(10), 1002–1013. <https://doi.org/10.3923/rjasci.2016.1002.1013>
  29. J. Richard, P., Devinney, T., Yip, G., & Johnson, G. (2009). *Measuring Organizational Performance: Towards Methodological Best Practice*. *Journal of Management* (Vol. 35). <https://doi.org/10.1177/0149206308330560>
  30. Jaiswal, N. K., & Dhar, R. L. (2015). Transformational leadership, innovation climate, creative self-efficacy and employee creativity: A multilevel study. *International Journal of Hospitality Management*, 51(1), 30–41. <https://doi.org/10.1016/j.ijhm.2015.07.002>
  31. Jaworski, C., Ravichandran, S., Karpinski, A. C., & Singh, S. (2018). The effects of training satisfaction, employee benefits, and incentives on part-time employees' commitment. *International Journal of Hospitality Management*, 74(February 2017), 1–12. <https://doi.org/10.1016/j.ijhm.2018.02.011>
  32. Kaplan, R. S., & Norton, D. P. (1996). strategic learning & the balanced scorecard. *Strategy & Leadership*, 24(5), 18–24. <https://doi.org/10.1108/eb054566>
  33. Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
  34. Mutahar, A. M., Daud, N. M., Thurasamy, R., Isaac, O., & Abdulsalam, R. (2018). The Mediating of Perceived Usefulness and Perceived Ease of Use : The Case of Mobile Banking in Yemen. *International Journal of Technology Diffusion*, 9(2), 21–33. <https://doi.org/10.4018/IJTD.2018040102>
  35. Ngadiman, Eliyana, A., & Ratmawati, D. (2013). Influence of Transformational Leadership and Organization Climate to the Work Satisfaction , Organizational Commitment and Organizational Citizenship Behavior on the Educational Personnel of. *European Journal of Business and Management*, 5(10), 97–115.
  36. Otuko, A. H., Kimanichege, G., & Douglas, M. (2013). Effect Of Training Dimensions On Employee ' s Work Performance : A Case Of Mumias Sugar Company In Kakamega County. *International Journal of Business and Management Invention*, 2(9), 138–149.
  37. Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, 36, 717–731.

38. Rebelo, T., Dimas, I. D., Lourenço, P. R., & Palácio, Â. (2018). Generating team PsyCap through transformational leadership: A route to team learning and performance. *Team Performance Management*, 24(7–8), 363–379. <https://doi.org/10.1108/TPM-09-2017-0056>
39. Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. Bonningstedt: SmartPLS.
40. Rowold, J., & Schlotz, W. (2009). Transformational and transactional leadership and followers' chronic stress. *Leadership Review*, 9(1), 35–48.
41. Samad, S. (2012). The Influence of Innovation and Transformational Leadership on Organizational Performance. *Procedia - Social and Behavioral Sciences*, 57, 486–493. <https://doi.org/10.1016/j.sbspro.2012.09.1215>
42. Schofield, C. P., & Pegg, M. (2010). *The Challenge of Change for Public Sector Leaders*. London: Palgrave Macmillan.
43. Sharma, S., & Taneja, M. (2018). The effect of training on employee performance. *International Journal of Recent Technology and Engineering*, 7(4), 6–13.
44. Tizard, J. (2012). The challenges and opportunities in contemporary public sector leadership. *International Journal of Leadership in Public Services*, 8(4), 182–190.
45. Voon, M. L., May-Chiun, L., Ngui, K. S., & Ayob, N. (2011). The Influence of Leadership Styles on Employees' Job Satisfaction in Public Sector Organizations in Malaysia. *International Journal of Business, Management and Social Sciences*, 2(1), 24–32.
46. Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). Transformational Leadership and Performance Across Criteria and Levels: A Meta-Analytic Review of 25 Years of Research. *Group & Organization Management*, 36(2), 223–270. <https://doi.org/10.1177/1059601111401017>