

# The Mediating Role of Job Satisfaction between Leadership Style and Performance of Academic Staff

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**Abstract** -Leadership style (LS) has not been effectively examined in educational institution in developing countries. The **purpose** of this study is to examine the effect of LS on academic staff performance (ASP) in Iraq. Based on the review, the study proposed that LS and its components; transformational leadership (TFL) and transactional leadership (TSL) will affect ASP. In addition, the study proposed job satisfaction (JS) as a mediator between LS, TFL, TSL, and ASP. **Methodology** The population of this study is the Iraqi academic staff in Baghdad. A stratified sampling technique was deployed to collect 297 responses from nine universities in Baghdad. The **findings** showed that LS, TFL and TSL have significant effect on ASP. JS mediated partially the effect of LS, TFL and TSL on ASP. Decision makers are advised to implement the TFL and increase the JS among academic staff.

**Keywords:** Leadership Style; Academic Staff Performance; Job satisfaction; Transformational leadership; Higher education.

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## I. INTRODUCTION

Education is the most important strategy for countries to achieve economic and prosperous life for citizens. The importance of education increases in the university level because the graduates are the future workforce of the country and their level of knowledge has essential role in all the economic and social aspects of a society [43]. A key determinant to the performance of graduates and universities as well as the nation, is the performance of the academic staff who transfer the knowledge to the graduates and contribute to the nations' economic and social prosperities [39].

ASP is important for the performance of universities. However, it is more critical for the universities in developing countries due to the need to improve the educational level as well as the social and economic activities in these countries[51].Against this view, most of previous studies focused on the ASP in developed countries such as in United Kingdom (UK), US, and western countries [25,26,52,60] and few studies were conducted in developing countries such as Iraq [66,67] . Studies in developing countries focused on describing the population and conducted simple statistical analysis to identify the mean score value. In addition, the sample size of previous studies is limited and small[65].

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Previous studies also focused on the performance of employees in business organization which they are different from those in the educational institutions. Since the factors of business organizations differ from those of academic staff at universities, previous studies indicated that the leadership is an essential factors that affect the performance of employee in general [18,33,45] . However, the leadership was examined in business organization and few examined this variable in the context of educational institutions. Thus, there is a need to examine the effect of new styles of leadership such as the TFL and TSL on the performance of Iraqi academic staff [35].

The higher education in Iraq face many challenges such as employee morale or satisfaction, ranking of universities in the world and brain drain that bring an effect to the university performance [30]. Here, Iraq is in need for effective academic staff that are able to improve the performance of universities and contribute to the prosperity of the country. Therefore, there is a need to improve the ranks of the Iraqi universities and reduce the migration of students and academic staff to overseas universities. Iraqi public universities are among the lowest rank compared with other Arab countries [63].

Academic staff are migrating to other countries seeking better job opportunities. Iraqi Ministry of Higher Education estimated the number of professors who left the country only between February and August in 2006 to account to 3250 professors. Recent publication also showed that the rate of academic staff migration is in increasing trend[24,46,53,37,38]. Similarly, the outbound Iraqi degree students increased by 428% between 2005 and 2016, from 5,493 to 28,993-degree students [28,36,58,59].

Among the issues that contributed to the weak performance of academic staff is administrative authority is overcentralized, new students are poorly prepared, and the teaching staff is inadequately trained, which affected the job performance of academic staff [27]. Furthermore, other issues that have potential effect on the academic staff performance is the weak leadership of the educational institutions [13]. In addition, previous studies showed that the studies related to LS and JS are lacking in the higher education sector especially in the context of Arab world and Iraq [30]. Despite all these issues, there is a lack of studies that examine the performance of Iraqi academic staff [55].

Accordingly, this study aims to investigate the effect of leadership on the performance of academic staff at Iraqi public university. In addition, the study aims to investigate the mediating role of JS. The reminder of this paper discusses the literature review and conceptual model development as well as the research methodology, findings, and conclusion.

## **II. CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT**

### **A. Theoretical framework**

Leadership theories have emerged over the years starting from the theory of the great man and recently; theories such as the transformational and transactional theories. TFL is a relationship based theories in which the leader attempt to motivate the followers to achieve their objectives and the objectives of the organization. On the other hand, the TSL is based on transaction. Employees work hard to achieve their tasks so that they can be paid for their effort [14,15,19]. Despite the

wide use of the theories in business context, the theories have not been examined in the context of educational institutions in developing countries.

Few researchers have used the theory of TFL to examine the performance of academic staff. For example, Hussain et al. (2014) [40] deployed the theory to examine the ASP in Iraq. The findings indicated that the theory can explain the variation in ASP. Vatankhah et al. (2017) [61] used the theory to examine the performance of teaching staff at teaching hospital and found the theory is able to predict the ASP.

Several researchers are of the opinion that TFL has little impact on performance as compared to TSL[3,41]. Many researchers depicted that TFL has greater impact on employee performance as compared to TSL[20]. Accordingly, to solve this contradiction in the previous studies especially in the context of academic staff in Iraq, this study deploys the theory of TSL and TFL and examines and compares their effects on the ASP in Iraq.

Along the leadership theories, the study also deploys the Herzberg's two-factor theory. This theory is deployed in this study because JS is considered in this study as a mediating variable that mediates the effect of leadership on performance of academic staff. The theory is widely used to explain the JS and has been effectively explaining the variation in JS[12,29,34,56]. In higher education sector, De Vito, Brown, Bannister, Cianci, and Mujtaba, (2018) [21] examined the applicability of the theory using a qualitative approach. The authors interviewed six academic staff and found that the theory is partially able to explain the JS and its relationship with performance of academic staff. In this study, the two factors theory is deployed to explain the mediating effect of JS among the variables of this study.

## **B. Performance of Academic Staff**

The importance of performance is increasing due to its ability to increase the effectiveness and efficiency of organizations. The high job performance enables different organizations to achieve their objectives and ensure that these organizations survive and thrive. Due to the increasing competition among organizations, both educational and services, it has become imperative for the organizations to improve their performance and focus on their human component to ensure excellence and prosperity [6,8,42]. The job performance of employees is important in all organizations, but its importance increases in educational organizations in general and in universities in particular, because the pivotal role played by the academic staff of the universities in creating and nurturing future generations that are capable of advancing the country and the society. Thus, academic staff has important role and contributes to the society in term of teaching and conducting scientific research that increases the efficiency of the university and society [4,22,23]. Given the importance of the performance of academic staff, this study is devoted to examine this variable at Iraq public universities.

### III. CONCEPTUAL FRAMEWORK OF THE STUDY

Based on the theory of leadership and two factor theory as well as the existing models, this study proposes that the LS will affect directly and positively the performance of academic staff in Iraq. Further, the study proposes that the JS will mediate the effect of LS on the performance of academic staff in Iraq. Figure 1 shows the conceptual model of this study.

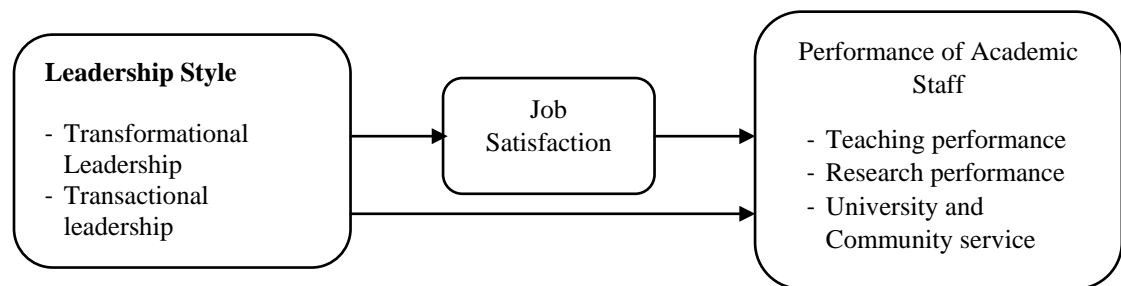


Figure 1: Conceptual Framework

#### A. Leadership Style and Performance of Academic Staff

LS have significant and substantial effects on the performance of individual and organizations [31]. Effective LS has always played a positive role in increasing the performance of employees while the ineffective LS led to negative performance of employees [1]. Iqbal et al. (2015) [31] investigated the effect of LS on the performance of employees in business organization and found that LS has a significant effect on performance of employees. Khan and Nawaz (2016)[32] reviewed the literature and concluded that the effect of LS on the performance of employees is significant. Similarly, Memon (2014)[50] proposed that the LS has a significant effect on employee performance. LiLin (2018) [77] found that the LS has positive effect on the performance of academic staff in China. Thus, the following is hypothesized:

H1: Leadership Style has a significant positive effect on the academic staff performance in Iraq.

#### Transformational leadership and Academic Staff Performance

Cheung and Wong (2011) found that TFL has a positive effect on performance. Similarly, a positive effect of TFL was found in the study of Wang, Tsai and Tsai (2014) in China. In academic context, the effect of TFL on ASP was investigated in few studies. In Iraq, Hussain et al. (2014) [40] found that TFL has a significant effect on the JS of Iraqi ASP. Vatankhah et al. [61] (2017) found that TFL has a significant effect on the ASP in Iran. Thus, it is hypothesized:

H2: Transformational leadership has a positive significant effect on the Academic Staff Performance in Iraq.

### **Transactional leadership and Academic Staff Performance**

Sundi (2013) [57] examined the effect of TSL on ASP in Indonesia. The findings indicated that there is a significant effect of TSL on ASP. On the other hand, some researchers found insignificant effect of TSL on ASP. In UAE, Cedwyn Fernandes and Raed Awamleh, (2004) [20] examined the effect of TSL effect on performance of employees working in the business sector and found the effect is insignificant. Accordingly, this study anticipates that the effect of TSL on performance of academic staff is positive and significant. Thus, the following is hypothesized:

H3: Transactional leadership has a significant positive effect on the Academic Staff Performance in Iraq.

### **B. Job Satisfaction as mediator**

JS is defined as “how people feel about their jobs and their different aspects” [78]. Few studies focused on the role of JS and its mechanism in developing countries [5]. Few studies examined the mediating effect of JS between LS and ASP. Wulandari, Mangundjaya and Utoyo (2015) [64] found that the effect of LS on organizational commitment is mediated by JS. Romle (2015) [54] also found that the effect of LS on organizational commitment is mediated by JS in Malaysia. Khan, Rao, Usman, and Afzal (2017) [44] found that JS mediated the effect of TFL on organizational commitment among SMEs in Pakistan. The JS also mediated the effect of TFL on quality of work life among accountant in Malaysia [62]. JS is one of the issues that face the academic staff in Iraq. This study proposes that the JS will have a mediating role between the LS and the ASP in Iraqi public universities. Accordingly, the following is hypothesized:

H4: Job Satisfaction mediates the effect of Leadership style on Academic Staff Performance in Iraq.

H5: Job Satisfaction mediates the effect of Transformational Leadership on Academic Staff Performance in Iraq.

H6: Job Satisfaction mediates the effect of Transactional Leadership on Academic Staff Performance in Iraq.

## **IV. RESEARCH METHODOLOGY**

The population of this study is the academic staff in Iraqi public universities. However, due to time and cost consideration, this study is focusing only on the public universities in Baghdad, the capital of Iraq. Based on the statistic of the MHESR, there are nine public universities out of 35 are located in Baghdad and these universities have more than 43% of academic staff. This makes the population of this study 14,690 academic staff working in the Iraqi public universities in Baghdad. Stratified random sampling was deployed in this study due to the differences in population of universities. The study collects data using a questionnaire.

The measurement was adopted from previous studies, translated and validated by experts. The measurement TFL (21 items) was adopted from Jyoti and Dev (2015) [40]. In addition, the measurement of TSL (eight items) was adopted from

Masa'deh, Yousef Obeidat, Shawqi Zyod and Hamdi Gharaibed, (2015)[47] . The measurement were also taken from the MLQ [16]. For JS, the measurement consists of six items and it was adopted from Mawoli and Babandako (2011) [49]. The ASP consists of three dimensions. The first dimension is the teaching performance measured using ten items adopted from Mawoli and Babandako (2011) [49]. The second measurement is the research performance and it consists of twelve items and it was adopted from Mawoli and Babandako (2011) [49]. Lastly, the community and university service consists of eleven items and it was adopted from Masron, Ahmad and Rahim (2012) [48].

A total of 374 questionnaire were distributed on the nine universities. After follow ups, a total of 324 responses were collected making the response rate of 86.6%. However, the data was examined for missing values and outliers. This has resulted in reduction of 27 responses making the complete and usable responses 297. These responses are sufficient for the use of AMOS [7,8,9,10]. The data is normally distributed and no multicollinearity issues among the variables. In addition, none response bias was examined. The early responses are not different from the late responses.

## **V. FINDINGS**

This section discusses the profile of the respondents as well as the analysis of the data using AMOS version 24.0.

### **A. Profile of respondents**

A total of 297 respondents have participated in this study. A total of 70% of the respondents are males older than 30 years (94.5%) and holders of PhD degree (65%) while those holder of master degree accounted to 35%. The majority of the respondents are lecturers with 79.1% have experience of more than 5 years.

### **B. Measurement Model**

The confirmatory factor analysis (CFA) was conducted on all the constructs. Following the suggestions of Awang (2014) [79] , a pooled CFA was conducted. Several items were deleted to improve the indices. Figure 2 shows the pooled CFA of LS. It shows that all the indices were acceptable except for the good fitness index (GFI) which is less than 0.90. However, Hair et al. (2010) [80] suggested that if at least three of the indices are acceptable, researchers are permitted to proceed with the analysis. In this study five of the indices were accepted.

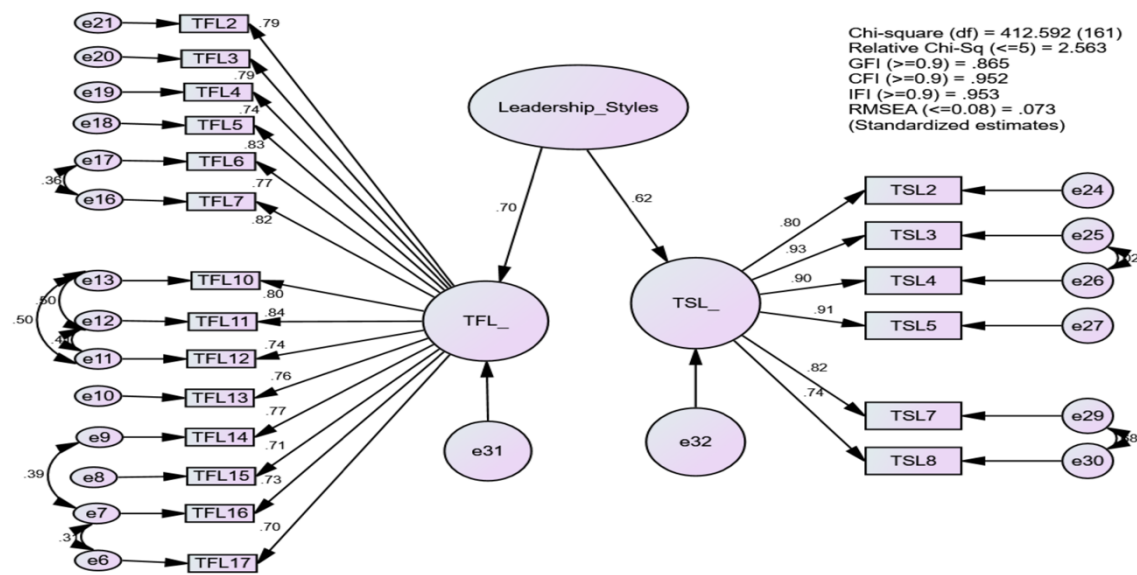


Figure 2: CFA of Leadership Style

After finalizing the CFA for all the constructs, the measurement model was conducted. The purpose of conducting the measurement model is to assess the factor loading, reliability, convergent validity and the discriminant validity. Factor loading of the items were greater than the suggested value of 0.60 [80] . For the reliability, the Cronbach's Alpha (CA) and Composite Reliability (CR) for all the variables were calculated and as shown in Table 1, all the CA and CR are greater than 0.70. Convergent validity is achieved if the average variance extracted (AVE) is greater than 0.50. The findings in Table 1 shows that the AVE for all variables are greater than 0.50.

Table 1: Results of Measurement Model

	CA	CR	AVE	TFL	TSL	JS	ASP
TFL	0.781	0.761	0.522	0.723			
TSL	0.802	0.799	0.599	0.581	0.706		
JS	0.879	0.882	0.604	0.469	0.421	0.783	
ASP	0.831	0.844	0.646	0.565	0.385	0.468	0.899

Note: TFL: Transformational leadership, TSL: transactional leadership, JS: Job satisfaction, ASP: academic staff performance

### C. Hypotheses Testing

The hypotheses are tested based on the outcome of the structural model. The hypotheses include the direct effect of LS on performance of academic staff. It also includes the mediating effect of JS. The direct effect hypotheses is given in Table 2.

**Table 2: The Effect of LS on ASP**

			Estimate	S.E.	C.R.	P
ASP	<---	LS	.411	.088	4.519	***
ASP	<---	TFL	.325	.060	4.722	***
ASP	<---	TSL	.214	.043	4.637	.008

It shows that the effect of leadership style (LS) on academic staff performance (ASP) is significant (Estimate =.411,  $P<.000$ ). Thus, H1 is supported. For the second hypothesis, the effect of transformational leadership (TFL) is positive and significant (Estimate=.325,  $P<.000$ ). Thus, H2 is supported. For H3, the effect of transactional leadership (TSL) on performance is positive and significant (estimate=.214,  $P=.008$ ). the direct effect model managed to explain 51% of the variation in academic staff performance. The second type of hypotheses is the mediating effect. The results of mediating effect is shown in Table 3.

**Table 3: Mediating Effect of JS between LS and ASP**

			Estimate	S.E.	C.R.	P
ASP	<---	LS	.275	.058	3.717	***
ASP	<---	TFL	.148	.047	3.054	.002
ASP	<---	TSL	.101	.070	4.330	***
JS	<---	LS	.475	.128	3.717	***
JS	<---	TFL	.448	.147	3.054	.002
JS	<---	TSL	.461	.107	4.330	***
ASP	<---	JS	.189	.043	4.402	***

To examine the mediating effect, Hair et al. (2010) [80] and Awang (2014) [79] suggested that the direct effect before entering the mediator should be significant and reduced after entering the mediator. In addition, the indirect effect should be greater than the direct effect. In Table 2, it can be seen that the direct effect of LS on ASP reduced from .411 to .275. Similarly, the direct effect of TFL and TSL on ASP were reduced. However, all the direct effect with mediator included stayed significant. The effect of LS, TFL, and TSL on JS is also significant. In addition, the effect of JS on ASP is significant. This leads to a conclusion that the mediation occurs because the direct effect reduce. However, this mediation is partial because the direct and indirect effect are significant. Accordingly, H4, H5, and H6 are partially supported.

## VI. DISCUSSION

This study investigated the effect of LS on ASP. The findings indicated that LS can predict positively the ASP. This shows that when the management of public universities in Iraq implement the LS, the performance of academic staff will increase. The TFL is more important than the TSL. This is because TFL has higher coefficient. Thus, implementing TFL in



universities will yield high performance of academic staff. These findings solves the argument among researchers regarding the suitability of the TFL in educational institution. In the context of this study, both TFL and TSL are important. However, TFL is more critical for the ASP. These findings are in agreement with the findings of previous studies. Researchers such as Iqbal et al. (2015) [31] , Khan and Nawaz (2016) [32] found that LS has a strong positive effect on the performance of business and educational employees.

Regarding the findings of TFL and TSL, the study of [30,81,82,]found that TFL has a significant effect on the job performance of employees. Findings of researchers such as Kalsoom et al. (2018)[41] , Advani and Abbas (2015)[2] , Bousbia, Ridic and Jukic (2015) [17] confirmed the importance of the TSL to improve the performance of employees.

The study also examined the mediating effect of JS between LS, TFL, and TSL and ASP. The findings indicates that there is a partial mediation effect of JS between LS, TFL, TSL and ASP. This indicates that part of the relationship of LS, TFL, TSL with ASP can be explained through JS. This finding is in line with the findings of previous studies. Wulandari, Mangundjaya and Utoyo (2015)[64] and Romle (2015) [54] found that JS mediated the effect of LS on organization commitment. Khan et al. (2017) [44] and (Vianne & Murcia, 2016)[62] indicated that JS has mediated the effect of TFL on organizational commitment and quality of working life respectively. Accordingly, universities in Iraq are advised to implement the TFL style of leadership and to increase the JS so that the performance of academic staff will increase and the rate of migration of staff and students will decrease.

## VII. CONCLUSION

This study was conducted to examine the LS and its effect of ASP mediated by JS. The study confirmed the proposed hypotheses and recommended the decision makers to implement the TFL style of leadership as well as to increase the JS. The study was limited to public universities in Baghdad. Further studies can include the private and public universities. The study also included only academic staff thus it is limited to their perception. However, the study deployed the stratified random sampling which allows the generalization of the findings on the public universities in Iraq. Nevertheless, future studies are recommended to examine the TFL and TSL in other developing countries. In addition, future studies are recommended to examine other variables such as the organizational justice, training, and income.

## References

- [1] Aboyassin, N. A., & Abood, N. (2013). The effect of ineffective leadership on individual and organizational performance in Jordanian institutions. *Competitiveness Review*, 23(1), 68–84.  
<https://doi.org/10.1108/10595421311296632>
- [2] Advani, A., & Abbas, Z. (2015). *Impact of Transformational and Transactional Leadership Styles on Employees' Performance of Banking Sector in Pakistan*". 15(5).

- [3] Afolabi, O. A., Obude, O. J., Okediji, A. A., & Ezech, L. N. (2008). Influence of gender and leadership style on career commitment and job performance of subordinates. *Global Journal of Humanities*, 7(1/2), 1.
- [4] Ahmad, M. A.-A., & Jameel, A. S. (2018). Factors Affecting on Job Satisfaction among Academic Staff. *Polytechnic Journal*, 8(2), 119–128. <https://doi.org/https://doi.org/10.25156/ptj.2018.8.2.161>
- [5] Al-Abdullat, B. M., & Dababneh, A. (2018). The mediating effect of job satisfaction on the relationship between organizational culture and knowledge management in Jordanian banking sector. *Benchmarking*. <https://doi.org/10.1108/BIJ-06-2016-0081>
- [6] Alaaraj, S. (2018). Knowledge Management Capability , Trust , and Performance of Manufacturing Companies in Emerging Economies. *International Journal of Management and Applied Science*, 4(8), 45–53.
- [7] Alaaraj, S. (2018). Knowledge Management Capability , Trust , and Performance of Manufacturing Companies in Emerging Economies. *International Journal of Management and Applied Science*, 4(8), 45–53.
- [8] Alaaraj, S., Mohamed, Z. A., & Ahmad Bustamam, U. S. (2018). External growth strategies and organizational performance in emerging markets: The mediating role of inter-organizational trust. *Review of International Business and Strategy*, 28(2), 206–222. <https://doi.org/10.1108/RIBS-09-2017-0079>
- [9] Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2016). Knowledge Management Capabilities, Environment Uncertainties; Their Influence on Organizational Performance. *The 2nd International Conference on Islamic Perspective of Accounting, Finance, Economics and Management (IPAFEM)*.
- [10] Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2016). The Mediating Role of Inter-Organizational Trust between External Growth Strategies and Organizational Performance of Malaysian Companies. *Advance in Global Business Research*, 13(1), 26–38.
- [11] Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2017). Do Knowledge Management Capabilities Reduce the Negative effect of Environment Uncertainties on Organizational Performance? A Study of Public Listed Companies in Malaysia. *International Journal of Economic Research*, 14(15), 443–456.
- [12] Alshmemri, M., Shahwan-Akl, L. & Maude, P. (2017). Herzberg's two-factor theory of job satisfaction. *Security*. <https://doi.org/10.7537/marslsj140517.03>
- [13] Arab, H. R., & Atan, T. (2018). Organizational justice and work outcomes in the Kurdistan Region of Iraq. *Management Decision*. <https://doi.org/10.1108/MD-04-2017-0405>

- [14] Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19–31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
- [15] Bass, B. M., & Avolio, B. J. (1990). Developing Transformational Leadership: 1992 and Beyond. *Journal of European Industrial Training*, 14(5), 21–27. <https://doi.org/10.1108/03090599010135122>
- [16] Bass, B. M., & Avolio, B. J. (1994). Transformational leadership, organizational culture. *International Journal of Public Administration*, 17(3–4), 541–554. <https://doi.org/10.1080/01900699408524907>
- [17] Bousbia, A. B., Ridic, O., & Jukic, T. (2015). The effect of Transactional Leadership on Employees' Performance- Case Study of 5 Algerian Banking Institutions. *Economic Review-Journal of Economics and Business. Economic Faculty University of Tuzla*, 13(2).
- [18] Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*. <https://doi.org/10.1111/joop.12041>
- [19] Burns, J. M. (1978). Leadership. In *Leadership* (pp. 66–75).
- [20] Cedwyn Fernandes, & Raed Awamleh. (2004). The Impact Of Transformational And Transactional Leadership Styles On Employee's Satisfaction And Performance: An Empirical Test In A Multicultural Environment. *International Business & Economics Research Journal*, 3(8), 65–76. <https://doi.org/10.19030/iber.v3i8.3715>
- [21] De Vito, L., Brown, A., Bannister, B., Cianci, M., & Mujtaba, B. G. (2018). Employee motivation based on the hierarchy of needs, expectancy and the two-factor theories applied with higher education employees. *IJAMEE*.
- [22] Dhillon, S. K., Ibrahim, R., & Selamat, A. (2015). Factors associated with scholarly publication productivity among academic staff: Case of a Malaysian public university. *Technology in Society*, 42, 160–166. <https://doi.org/10.1016/j.techsoc.2015.04.004>
- [23] Ghabban, F., Selamat, A., & Ibrahim, R. (2018). New model for encouraging academic staff in Saudi universities to use IT for knowledge sharing to improve scholarly publication performance. *Technology in Society*, 55(June), 92–99. <https://doi.org/10.1016/j.techsoc.2018.07.001>
- [24] Ghran, L. A. Z., Jameel, A. S., & Ahmad, A. R. (2019). The effect of organizational justice on job satisfaction among secondary school teachers. *International Review*, 3(4).
- [25] Graham, A. T. (2015). Academic staff performance and workload in higher education in the UK: the conceptual

- dichotomy. *Journal of Further and Higher Education*. <https://doi.org/10.1080/0309877X.2014.971110>
- [26] Graham, A. T. (2016). Role of academic managers in workload and performance management of academic staff. *Educational Management Administration & Leadership*. <https://doi.org/10.1177/1741143215587312>
- [27] Harb, I. (2009). Higher education and the future of Iraq. *The United States Institute of Peace, in Special Report No. 195*.
- [28] Hasoon, S. O., & Jasim, Y. A. (2013). Diagnosis windows problems based on hybrid intelligence systems. *Journal of Engineering Science and Technology*, 8(5), 566–577.
- [29] Hur, Y. (2018). Testing Herzberg's Two-Factor Theory of Motivation in the Public Sector: Is it Applicable to Public Managers? *Public Organization Review*. <https://doi.org/10.1007/s11115-017-0379-1>
- [30] Hussain, H. K., Talib, N. A., & Shah, I. M. (2014). *Transformational Leadership and Academic Staff in Iraqi Public Universities*. 3(7), 837–841.
- [31] Iqbal, N., Anwar, S., & Haider, N. (2015). Effect of leadership style on employee performance. *Arabian Journal of Business and Management Review*, 5(5), 1–6.
- [32] Irfanullah Khan, & Allah Nawaz. (2016). The leadership styles and the employees performance: A Review. *Gomal University Journal of Research [GUJR]*, 32(2), 144–150.
- [33] 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*. <https://doi.org/10.1016/j.ijhm.2015.07.002>
- [34] Jameel, A. S., & Ahmad, A. R. (2019). Leadership and Performance of Academic Staff in Developing Countries. *The 33rd International Business Information Management Association Conference*, 6101–6106. Granada, Spain: IBIMA.
- [35] Jameel, A. S., & Ahmad, A. R. (2019). The effect of Transformational Leadership on Job Satisfaction among Academic Staff. *In The 34th International Business Information Management Association (IBIMA) Conference: 13-14 November 2019, Madrid, Spain*.
- [36] Jameel, A. S., Mahmood, Y. N., & Jwmaa, S. J. (2020). Organizational Justice and Organizational Commitment among Secondary School teachers. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 4(1), 1–6. <https://doi.org/10.24086/cuejhss.vol4n1y2020.pp1-7>

- [37] Jameel, A., Abdul-Karem, M., & Mahmood, N. (2017). A Review of the Impact of ICT on Business Firms. *International Journal of Latest Engineering and Management Research*, 2(01), 15-19.
- [38] Jameel, A., & Ahmad, M. A. A. (2018). Determine some factors that affect to adoption of e-commerce among small and medium enterprises in Erbil. *Polytechnic Journal*, 8(1).
- [39] Johnson, L., Becker, S. A., Cummins, M., Estrada, V., Freeman, A., & Hall, C. (2016). NMC Horizon Report: 2016 Higher Education Edition. In *NMC Horizon Report*. <https://doi.org/ISBN 978-0-9883762-6-7>
- [40] Jyoti, J., & Dev, M. (2015). The impact of transformational leadership on employee creativity: The role of learning orientation. *Journal of Asia Business Studies*. <https://doi.org/10.1108/JABS-03-2014-0022>
- [41] Kalsoom, Z., Khan, M. A., & Zubair, S. S. (2018). *Impact of Transactional Leadership and Transformational Leadership on Employee Performance : A Case of FMCG Industry of Pakistan*. 8(3), 23–30.
- [42] Karem, M. A., Jameel, A. S., & Ahmad, A. R. (2019). The Impact of Organizational Justice Dimensions on Organizational Commitment among Bank Employees. *International Journal of Psychosocial Rehabilitation*, 23(02), 502–513.
- [34] Karem, M. A., Mahmood, Y. N., Jameel, A. S., & Ahmad, A. R. (2019). The Effect of Job Satisfaction and Organizational Commitment on Nurses' Performance. *Humanities and Social Sciences Reviews*, 7(6), 332–339. <https://doi.org/10.18510/hssr.2019.7658>
- [44] Khan, R. S., Rao, B., Usman, K., & Afzal, S. (2017). The Mediating Role of Job Satisfaction between Transformational Leadership and Organizational Commitment within the SMEs of Karachi. *Munich Personal RePEc Archive*, (21465). <https://doi.org/10.3109/15368378209040332>
- [45] Lam, C. S., & O'Higgins, E. R. E. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organization Development Journal*. <https://doi.org/10.1108/01437731211203465>
- [46] Mahmood, Y. N., Raewf, M. B., & Hamadany, Z. S. A.-. (2019). A Study on the Perceptual Relationship between Overtime and Output : Case Study of Knowledge. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 3(1), 27–31. <https://doi.org/10.24086/cuejhss.vol3n1y2019.pp27-31>
- [47] Masa'deh, R. (Moh'd T., Yousef Obeidat, B., Shawqi Zyod, D., & Hamdi Gharaibed, A. (2015). The Associations among Transformational Leadership, Transactional Leadership, Knowledge Sharing, Job Performance, and Firm Performance: A Theoretical Model. *Journal of Social Science*, 4(2), 848–866. <https://doi.org/10.17632/w3bg6vj29c.1>

- [48] Masron, T. A., Ahmad, Z., & Rahim, N. B. (2012). Key Performance Indicators vs Key Intangible Performance Among Academic Staff: A Case Study of a Public University in Malaysia. *Procedia - Social and Behavioral Sciences*, 56(Icthe), 494–503. <https://doi.org/10.1016/j.sbspro.2012.09.681>
- [49] Mawoli, M. A., & Babandako, A. Y. (2011). An Evaluation of Staff Motivation, Dissatisfaction and Job Performance in an Academic Setting. *Australian Journal of Business and Management Research*, 1(9), 01–13. <https://doi.org/10.2331/suisan.66.243>
- [50] Memon, K. R. (2014). Effects of leadership styles on employee performance: Integrating the mediating role of culture, gender and moderating role of communication. *International Journal of Management Sciences and Business Research*, 3(7), 63–80.
- [51] Mousa, T. S., Jameel, A. S., & Ahmad, A. R. (2019). The Impact of Attitude , Subjective Norm and Information Communications Technology on Knowledge Sharing among Academic Staff. *International Journal of Psychosocial Rehabilitation*, 23(02), 704–717.
- [52] Papadopoulos, A. (2017). The mismeasure of academic labour. *Higher Education Research and Development*. <https://doi.org/10.1080/07294360.2017.1289156>
- [53] Raewf, M. B., & Thabit, T. H. (2015). The Student ' s Satisfaction Influential Factors at Cihan University. *International Journal Of Advanced Research in Engineering & Management (IJAREM) |*, 01(02), 63–72. Retrieved from <http://ssrn.com/abstract=2638744>
- [54] Romle, A. R. (2015). The Mediating Effect of Job Satisfaction on The Link Between Leadership Style and Organizational Commitment. *Australian Journal of Basic and Applied Sciences*, 9(4), 45–49.
- [55] Siron, R. B., Muttar, A. K., & Ahmad, Z. A. (2015). Leader-Member Exchange and Academic Job Performance in the Iraqi Technical Colleges and institutes: The Mediating Role of Job Satisfaction. *International Review of Management and Business Research*, 4(3), 731–742. <https://doi.org/10.1166/asl.2015.6219>
- [56] Stello, C. M. (2014). Herzberg's Two-Factor Theory of Job Satisfaction: An Integrative Literature Review. *Herzberg's Two-Factor Theory of Job Satisfaction*, 32. <https://doi.org/10.7537/marslsj140517.03.Keywords>
- [57] Sundi, K. (2013). Effect of transformational leadership and transactional leadership on employee performance of Konawe Education department at Southeast Sulawesi province. *International Journal of Business and Management Invention*, 2(12), 50–58.
- [58] Thabit, Thabit H., & Raewf, M. B. (2018). The Evaluation of Marketing Mix Elements: A Case Study. *International*

*Journal of Social Sciences & Educational Studies*, 4(4), 100–109. <https://doi.org/10.23918/ijsses.v4i4p100>

- [59] Thabit, Thabit Hassan, & Raewf, M. B. (2016). The Impact of Voluntary Disclosure on Investor Reactions Master Thesis. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 4(5), 19–31.
- [60] Türk, K. (2016). Performance management of academic staff and its effectiveness to teaching and research – Based on the example of estonian universities. *Trames*. <https://doi.org/10.3176/tr.2016.1.02>
- [61] Vatankhah, S., Alirezaei, S., Khosravizadeh, O., Mirbahaeddin, S. E., Alikhani, M., & Alipanah, M. (2017). Role of transformational leadership on employee productivity of teaching hospitals: using structural equation modeling. *Electronic Physician*, 9(8), 4978–4984. <https://doi.org/10.19082/4978>
- [62] Vianne, J., & Murcia, B. (2016). Mediating Effect of Job Satisfaction on the Relationship between Transformational Leadership and Quality of Worklife of Certified Public Accountants. *University of Mindanao*, (September 2016).
- [63] Webometric. (2019). Webometric ranking of world universities. In *Webometric Website*.
- [64] Wulandari, P., Mangundjaya, W., & Utoyo, D. B. (2015). Is Job Satisfaction a Moderator or Mediator on the Relationship between Change Leadership and Commitment to Change? *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2015.01.342>
- [65] Yousif, M. K., & Shaout, A. (2018). Fuzzy logic computational model for performance evaluation of Sudanese Universities and academic staff. *Journal of King Saud University - Computer and Information Sciences*, 30(1), 80–119. <https://doi.org/10.1016/j.jksuci.2016.08.002>
- [66] Zwain, A. A., Teong, L. K., & Othman, S. N. (2012). Knowledge Management Processes and Academic Performance in Iraqi HEIs: An Empirical Investigation. *International Journal of Academic Research in Business and Social Sciences*. <https://doi.org/ISSN: 2222-6990>
- [67] Zwain, A. A., Teong, L. K., & Othman, S. N. (2017). TQM and academic performance in Iraqi HEIs: Associations and mediating effect of KM. *TQM Journal*. <https://doi.org/10.1108/TQM-08-2013-0096>
- [77] LiLin, W. S. (2018). Factors affecting the job performance of employees at work place in the higher education sector of China. *International Journal of Scientific and Research Publications*, 8(1), 219–223.
- [78] Spector, P. E. (1997). Job satisfaction: Application, assessment, causes, and consequences. Beverly Hills: Sage.
- [79] Awang, Z. (2014), “A handbook on SEM for academicians and practitioners: step by step practical guides for the beginners (Vol. 2 First)”, MPSW Rich Resources, Negara.
- [80] Hair, J., Black, W. C., J.Babin, B., & Anderson, R. E. (2010). Multivariate Data Analysis. In *Exploratory Data*

Analysis in Business and Economics (7th ed.). [https://doi.org/10.1007/978-3-319-01517-0\\_3](https://doi.org/10.1007/978-3-319-01517-0_3)

- [81] Liang, T. L., Chang, H. F., Ko, M. H., & Lin, C. W. (2017). Transformational leadership and employee voices in the hospitality industry. *International Journal of Contemporary Hospitality Management*.
- [82] Indrayanto, A., Burgess, J., & Dayaram, K. (2014). A case study of transformational leadership and para-police performance in Indonesia. *Policing: An International Journal of Police Strategies & Management*.
- [83] Vaibhav walia (2016) role of enzymes in the pathogenesis of depression. *Journal of Critical Reviews*, 3 (2), 11-16.
84. Paithankar, V., & Dr. Pawar, S. N. (2018). Survey on Reversible Image Data Hiding Techniques. *Journal of Computational Information Systems*, 14(01-SP), 60 - 66.
85. Varshini, M. R., Namratha, K., Susmitha, K., & Raja, K. (2018). Smart Health Care Using Internet of Things. *Journal of Computational Information Systems*, 14(01-SP), 77 - 80.
86. Zhang, K., Wang, D. The efficacy of a transactional analysis training program for married university students' spiritual intelligence: A randomized controlled study (2018) *NeuroQuantology*, 16 (6), pp. 105-111.
87. Kwon, M., Kim, Y., Kim, H., Kim, J. Does sport addiction enhance frontal executive function? The case of badminton (2018) *NeuroQuantology*, 16 (6), pp. 13-21.