

# The Effect of Internal Control System (ICS) on Organizational Effectiveness (OE): Empirical investigation from Privat Universities in Palestine.

By

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## Abstract

This study aims investigate and understand the diverse effects of internal control system (ICS) on organizational effectiveness in the Palestinian Private Universities in Gaza Strip. A questionnaire was used to gather data from 136 respondents operating in Private Universities in Palestine. The proposed study's hypotheses are tested through multiple regression technique. The reliability study of the descriptive and inferential statistical study, T-Distribution, F-Test, Variance Inflation Factor, Durbin-Watson Test assess suitability, significance, and degree of error between internal control system against organizational effectiveness. Regression and Correlation test revealed the effect of internal control system including Control Environment, Control Activities, Risk Assessment, Information and Communication; Monitoring on the organizational effectiveness. ANOVA test also used to measure the disparity between Information and Communication and effectiveness in the universities. Also, R-square tests to assess the degree of universities control activities and risk Assessment over universities effectiveness. Results show substantial positive effect between Control Environment, Control Activities, Risk Assessment, Information and Communication; Monitoring and universities effectiveness  $\beta = .436; .406; .521; .343; .249$  respectively,  $P < 0.05$  against organisational effectiveness of private universities in Palestine.

**Keywords:** Control Environment, Control Activities, Risk Assessment, Information and Communication; Monitoring; Organizational Effectiveness.

## 1. Introduction

Internal control system is defined by Standards of Internal Control in New York State Government (2007) as the integration of efforts, operations, methods, plans, policies and procedures and attitudes of people of an organization to achieve a plausible affirmation that the organization will fulfill its mission and objectives with a minimal deviation. According to Committee of Sponsoring Organizations (COSO, 2012), an internal control system is a systematic process, effected by various entities such as management, board of directors, shareholders and personnel department, established to provide a sensible affirmation in order to achieve high operations efficiency and effectiveness, reliable financial analysis and reporting in addition to extreme compliance with governance laws and regulations. Just as

interesting, the internal control system are advanced technical strategies adopted by the corporations and organizations to guarantee the integrity of financial and accounting data, subtend operational and productivity targets, and transfer administration configurations all via the organization (Bett and Memba, 2017; Shokoochi et al., 2015; Alemu,2020). In essence, the internal control system can be called the life wire of an organization which, through check reliability and accuracy of information and data, promotes operational efficiency and encourage discipline (Raju, 2021). According to Bett and Memba (2017), internal control works better through connective strategy with the various divisions and departments and enhances the communication among the different business units and departments. By and large, organizations seek to use, encourage, and attract qualified employees for competitive advantages. In the present world related business, organizations have set several methods and approaches to improve their performance, sustainability, competitive advantage, profitability, efficiency and effectiveness. Globalization and deregulation forced organizations to confront tremendous threats, risks and dynamic environment. As a consequence, enterprises ought to spend a lot of money, resources, time and efforts to record an acceptable level of performance (Raju, 2021). Therefore, for organizations to come with a high performance, it requires adopting advanced performance strategies with a critical perspective as to determine accurately whether the internal and external factors can be important in their impact through enterprise performance. (Al-syaidh et al., 2015; El-Masri et al., 2015) asserted that the internal control system can perform as healthy cross check indicator for decision makers and top management to guarantee that the organization resources are conveniently assigned and employed (Polas *et al.*, 2020). Furthermore, tasks and operations are conducted appropriately as to fulfill organization's aimed mission and goals. Doubtless, effective internal control system is considered as a mainspring of prosperous and successful management, and thence the fingernail of the enterprise's performance (Badara, 2015). The internal control system strongly contributes to minimize management poor operations and decision-making uncertainty through providing a solid plan of organization, methods and measures adopted to enhance the soundness and stability (Raju, 2021). Evidently, we can notice that there is an increasing body of literature that tests, investigates, and examines if there is any impact on organizational performance due to the internal control system; the knowledge of illustrating and testing the internal control system tools on organizational effectiveness remains a gap (Raju, 2021). The internal control system comprises of dedicated variables that directly help in the accomplishment or setback of a corporation and through creating a solid internal control system the organization encourages effective and efficient operations to provide distinctive services and manufacture quality products that are harmonious with organization strategic goals and operational objectives (Almajali et al., 2016). This paper contemplates to have a vigorous internal control system framework depending on accurate control environment, risk assessment, control activities, information and communication and monitoring for the sake of achieving appropriate organizational effectiveness. This is considered the essential motivation to conduct this research. As a consequence, in line with the discussion above, two research objectives are examined in this study. These are:

- 1- Figuring out the status of adoption of internal control system practiced by the private universities in Palestine.
- 2- Examining the internal control system components and its relationship with the Palestinian private universities effectiveness.

The remnant of this research is constructed as explained below. The posterior part of the research reflects related literature and previous studies pursued by hypotheses development,

research methodology, results, discussion and eventually the conclusion of the study.

## **2. Review of Empirical Studies**

The questionnaire, a self-administrated one, was used by Mahadeen et al., (2016) to obtain answers from 151 Jordanian employees performing various managerial positions in Jordan. To achieve the main goals of this study, a theoretical framework was established and several hypotheses were created (Polas *et al.*, 2020). The researchers' principal goal was investigating if the Jordanian organization effectiveness is affected due to the internal control system. Through a statistical regression analysis, a positive significant relationship between communication, risk management and control activities on the organizational effectiveness has been disclosed. The multiple regression test results indicated a high positive R square result with 77.3%.

Based on the findings, the researchers provided several significant recommendations that help in enhancing awareness about the significance of internal control system components and techniques to ameliorate the Jordanian organizations' internal processes and procedures. The internal control system assists bring direction, discipline and consistency to any organization (Masa'deh et al, 2016).

As accurate and effective, internal control system admittedly gives managers the abilities to participate in monitoring and evaluation. This is in addition to providing accountability for their projects and programs (El-Masri et al., 2015; Al-Syaidh et al., 2015). Ershaid et al., (2017) researched the effect of environmental turbulence on companies performance in Jordan. Their study focused on the companies listed in Amman stock Exchange analysis. Achieved through 253 questionnaire survey collected from the respondents, several hypotheses were tested via Partial Least Square (PLS). The findings revealed that the internal control system, which mightily relies on the streamlined meeting styles, displays significant expectations in terms of the responsibilities (Polas *et al.*, 2020). Eventually, the study shows that the moderating effect of internal control system plays a significant role as regards the relationship between environment turbulence and firm performance in Jordan. Ahmed and Muhammed (2018) talked about the impact of internal control systems on the financial performance in Telecommunication companies in Iraq as a case study of Asiacell. The paper selected primary and secondary methods and approaches to collect information. The study implemented correlation matrix, anova test and coefficient of variation to measure the variance and connection between the variables. Results revealed that four independent variables come with a significant positive relationship with the firm financial performance; these are risk assessment, information and communication, control environment and control activities. However, the findings also showed that monitoring generated a negative relationship with financial performance. Evidently, Asiacell had focused on effective internal control systems methods and techniques; consequently, it had a solid and stable financial performance as compared to the related companies in the country. The authors recommended that the board of directors, i.e., governing body should guarantee that the internal control system is constantly evaluated and monitored via the top managers and specialists.

On the other hand, an investigation conducted by Wainaina (2011) tested the internal control system function. The researcher confirmed that, instead of protection and disclosure of fraud situation and scenarios, internal controls should concentrate and demonstrate the accuracy and quality of the general bookkeeping condition in the company. Predominantly, a tremendous chunk of corporation's losses and costs are caused by frauds and operational

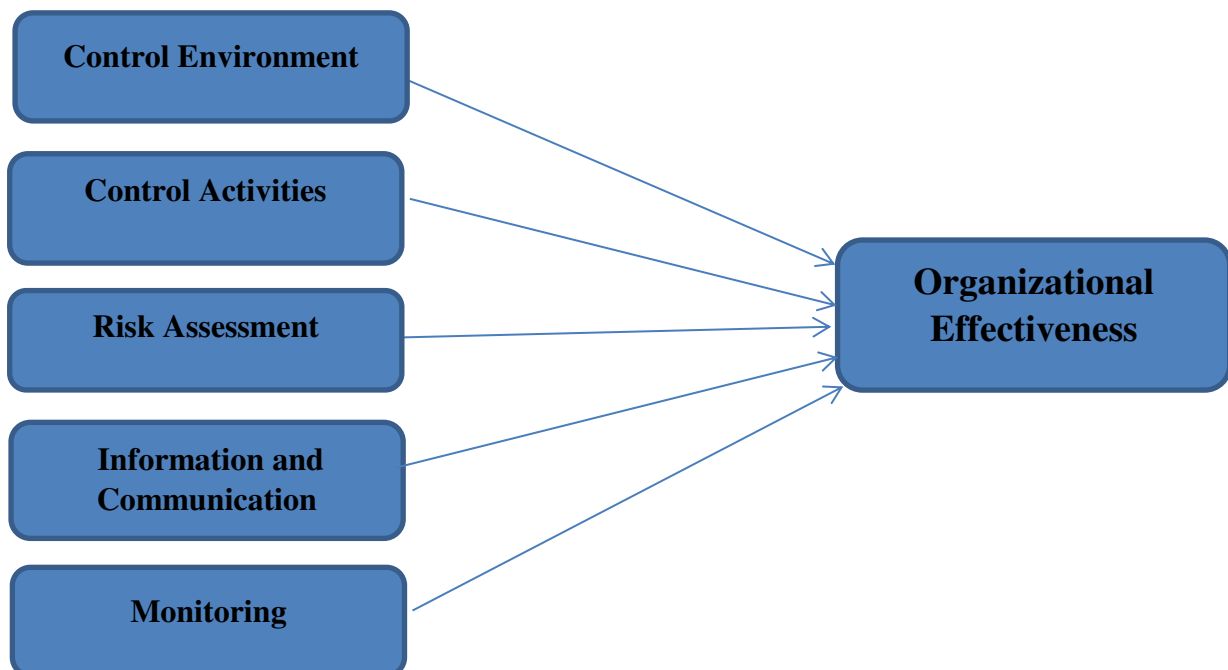
errors, keeping it in risk and threaten their stabilities and soundness. However, an appropriate implementation of internal control system will effectively decrease the probabilities of excesses, through establishing regular reviews on the activities and operations, adjusting accurate policies and procedures, and analyzing exceptionally the financial data and information to avoid any possible deviations (Andre and Augusto, 2017).

Alemu (2020) studied the organizational performance in Moha soft drinks company in Ethiopia to find out whether it is affected due to the internal control. The data of the study were collected from the respondents using a questionnaire and analyzed using descriptive statistical methods. The findings showed a positive significant relationship between the internal control system and organizational performance. As such, the internal control system is comparatively dynamic and efficient, and it can assist to guarantee administration, integrity and accuracy of accounting records. Therefore, top management should practice suitable recording of transactions and keep for references. In addition to that, the management should enhance several internal control systems, for instance, documentation of transactions that are compatible with the organization's operations.

### 3. Hypotheses Development and Research Methodology

The theoretical framework of the study is in line with what is mentioned in the literature review, and this is displayed in diagram (Figure 1). Through this theoretical framework, the relationship of the dependent variable of organizational effectiveness and the explanatory variables (control environment, control activities, risk assessment, information and communication and monitoring) is utilized.

**Figure 1: Research Model**



Following the work of: Alemu, (2020); Ahmed and Muhammed (2018); Andre and Augusto, (2017); Bett and Memba, (2017); Shokoohi et al., (2015); Alemu, (2020).

An apparent match among internal control system components definitely would lead to higher organizational effectiveness. Therefore, the following hypotheses are introduced.

H1: There is no positive significant relationship between control environment and Palestinian private universities effectiveness.

H2: There is no positive significant relationship between control activities and Palestinian private universities effectiveness.

H3: There is no positive significant relationship between risk assessment and Palestinian private universities effectiveness.

H4: There is no positive significant relationship between information and communication and Palestinian private universities effectiveness.

H5: There is no positive significant relationship between monitoring and Palestinian private universities effectiveness.

The instrument utilized in this study is the survey questionnaire. A survey method was adopted for the internal control system and organizational effectiveness for the sake of investigating the relationship and the correlation among the variables (Polas *et al.*, 2020). The study data concentrate on five independent variables toward one dependent variable. They were established with the aim of eliciting quantitative data from the practitioners such as dean, head of departments, academic staff and administrates of the Palestinian private universities. In this regard, a purposive sample technique was implemented in order to reach a specific group of respondents who are qualified and well acknowledged with regard to the objectives of this study. The questionnaire was sent to the Palestinian private universities located in Gaza strip. It decided by the researchers in this study that the survey questionnaire doled out to the universities in Gaza would be via online Google questionnaire form. Accordingly, and in relation to the research problem dimensions, the multivariate model (explained down) has been used to outline the connection among the independent variables that are set as “control environment, risk assessment, control activities, information and communication and monitoring” and the dependent variables which is "organizational effectiveness".

This mathematical equation explains the model used in the study:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + E$$

Standard	Our application
y- the value of dependent variable	Y: Organizational Effectiveness.
The constant term;	(X1): Control Environment.
X- The value of independent variable:	(X2): Control Activities
$\beta$ - The coefficient of the function;	(X3): Risk Assessment.
E- The disturbance or error term.	(X4): Information and Communication
	(X5): Monitoring

Thus, the regression equations become;

### Model I

$$OE = a + \beta_1(CE) + \beta_2(CA) + \beta_3(RA) + \beta_4(IC) + \beta_5(M) + E$$

The targets that SPSS was used for are:

Firstly, it was employed to analyze descriptive statistics, e.g., 'average and S.D.', reliability, and similar schedules with the use of data analysis methods. In addition, it was employed to study the impact of the variables on each other, i.e., dependent and independent, with the use of correlation analysis. Besides, since there are different independent variables, the Multi-linear regression was used. Moreover, several tests were used to examine the proposed hypothesis. Thus, T-Distribution was employed to identify the relation between the dependent and independent variables. F-test on the other hand was utilized to figure out the ideal resolution by testing the model suitability. Also, it was utilized to discuss the whole squares ratio of sequential variation of the other squares' total errors based on the statistics specified by Durbin-Watson test.

## 4. Data Analysis

One hundred thirty-six questionnaires were distributed to private universities in Gaza strip, Palestine. Table (1) below shows the respondents profile.

**Table (1)** Respondents Profile

Background variable	Frequency	Percent	Valid Percent	Cumulative Percent	
University Name	Palestine University	73	16.4%	53.7%	53.7%
	Issra University	33	7.4%	24.3	77.9%
	Gaza University	30	6.7%	22.1%	100.0
	<b>Total</b>	<b>136</b>	<b>100.0</b>	<b>100.0</b>	
Years of Experience	1-5 years	38	8.5	27.9	27.9
	5-10 Years	72	16.1	52.9	80.9
	11-15 years	16	3.6	11.8	92.6
	Above 15- Years	10	22	7.4	100.0

	<b>Total</b>	<b>136</b>	<b>100.0</b>	<b>100.0</b>	
<b>Position</b>	Dean	16	3.6	27.9	27.9
	Head of Department	17	3.8	12.5	24.3
	Academic Staff	55	12.3	40.4	64.7
	Administrative	48	10.8	35.3	
					100.0
	<b>Total</b>	<b>136</b>	<b>100.0</b>	<b>100.0</b>	

Respondents universities names, years of experience and positions are presented at table (1). The respondents whose work in Palestine university are 73 responded that account for 53.7%. The respondents whose work in Israa university are 33 responded that account for 24.3%. while, the respondents whose work in Gaza university are 30 responded that account for 22.1%. The respondents whose years of experience are between (1-5) responded on 38 questionnaires that account for 27.9%. The respondents whose years of experience are between (5-10) answered 72 questionnaires with a rate of 52.9 %. Moreover, 16 questionnaires were responded by the respondents whose years of experience are between (10-15) with a rate of 11.8%, while the respondents who are 15 years old and above answered 10 surveys with a proportion of 7.4%. In terms of the position that the respondents occupied in their universities, a rate of 11.8% is represented by 16 responses related to the respondents who operating Dean position. Moreover, 17 respondents, who worked as head of department at their universities compose a percentage of 12.5%. In addition, there are 55 responses for those who worked in academic positions with a proportion of 40.4 %. Finally, the respondents who conducting administrative jobs are 48 respondents with a percentage of 35.3%.

*Reliability Test:*

Reliability test is utilized to examine the instruments' reliability. Furthermore, it is used to show the stability and consistency of a specific group of clauses implemented in measuring some variables. Each variable in this study is tested to obtain the Cronbach's Alpha Coefficients. According to (De Vaus, 2002), in any study the reliable scale should record an alpha of a least 0.7. The reliability test results are presented in table (2). From the findings, it is seen that the value of alpha exceeds ( $> 0.7$ ). This illustrates that each scale is related to the questions applied to measure one concept. The finding show strong internal stability and consistency between the study items.

**Table 2: Reliability Analysis of Items**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted

Control Environment	9.8647	2.911	.719	.800
Control Activities	9.9765	3.010	.647	.816
Risk Assessment	9.9779	3.196	.672	.810
Information & Communication	9.9265	2.990	.728	.798
Monitoring	9.9191	3.518	.498	.842
Operational Effectiveness	9.9603	3.700	.502	.841

## 5. Results and Discussion:

Before anything else we examined the first five hypotheses (H1, H2, H3, H4 and H5). Accordingly, the organizational effectiveness was applied as the dependent variable. Coefficient  $\beta$ , Std., error and Significant statistic results for regression analysis are shown in the regression results in this following model:

$$OE = a + \beta_1(\text{Control Environment}) + \beta_2(\text{Control Activities}) + \beta_3(\text{Risk Assessment}) + \beta_4(\text{Information \& Communication}) + \beta_5(\text{Monitoring}) + E$$

The findings illustrate that OE is positively affected by CE, CA, RA, IC and M. The coefficient results of the independent variables were (.436, .406, .521, .343, .249 respectively). Thus, the coefficient of RA  $\beta$  was .521. This indicates that OE is increased up to 52.1 % if OE is increased by one unite forward, while the other variables are fixed. Beyond that, the level of significance-statistic of the RA on OE is .001. This result reveals that the level is below than 0.05. As such, this illustrates that RA is directly affected by OE with a possibility of 100%. Just as interesting CE, CA, IC and M, they are seen to have positive impact and statistical significance levels by (.000, .000, .000 and .003, respectively). Goodness-of-Fit tests demonstrates the level of statistical significance between the dependent variables and dependent variable. The F- distribution depends on a critical value which recorded as 2.545 when the significant was 5%. In table (3) F statistic value is seen as 11.857 which exceeds the F- critical value (2.545). In relation to this, the regression among the variables is strongly significant. On the whole, the significance is 0.000. This reveals that the independent variables (CE, CA, RA, IC and M) predict the dependent variable OE with 100%. In the same way, Durbin – Watson (DW) confirms that the errors raise in the regression model are generated through the first order autoregressive process. The Durbin-Watson critical value is seen (above 2) according to Montgomery, Peck and Vining (2001). The Durbin – Watson (DW) statistic is 1.889 and is lower than 2 This evinces that serial correlation among independent variables and OE is seen. Simultaneously, with these revealed results, R square analysis shows that the level of prediction of variance in the dependent variable  $R^2$  is seen to be 0.313. We thoroughly can realize that an amount of OE at 31.3 % can be predicted with respect to the independent variables aforementioned. Summarizing the results of this study model appears in this following table (3).



**Table 3:** *Dependent Variable (OE)*

Variable	Coefficients $\beta$	Std.Error	Significant-Statistic
<b>Control Environment</b>	.436	.051	.000
<b>Control Activities</b>	.406	.052	.000
<b>Risk Assessment</b>	.521	.057	.001
<b>Information &amp; Communication</b>	.343	.057	.000
<b>Monitoring</b>	.249	.069	.003
<b>R<sup>2</sup></b>	.313	<b>Durbin Wat-son =</b>	<b>F-statistics=</b>
<b>Adjusted R<sup>2</sup></b>	.287	1.889	11.857

A further essential step is to establish a bivariate correlation matrix for all the variables. Table (4) reveals a significant correlation between the internal control system variables and operational effectiveness. There is a sort of solid positive correlation that is seen between the risk assessment and the operational effectiveness which has been tested statistically, where the result is (.521). Such findings illustrate that OE is increased once RA is increased. Meanwhile, other variables (CE, CA, IC & M) show a positive correlation with the dependent variable (OE).

**Table 4:** *Correlation of independent variables and the dependent variable*

	Control Environment	Control Activities	Risk Assessment	Information & Communication	Monitoring
Operational Effectiveness	.436	.406	.521	.343	.249
** Correlation is significant at the 0.01 level (2-tailed).					

**Table 5:** *Summarizing the Model Results*

Hypotheses	Research Hypotheses	Probability	Finding
H1	<b>There is no positive significant relationship between control environment and Palestinian private universities effectiveness.</b>	.000	Significant
H2	<b>There is no positive significant relationship between control activities and Palestinian private universities effectiveness.</b>	.000	Significant
H3	<b>There is no positive significant relationship between risk assessment and Palestinian private universities effectiveness.</b>	.001	Significant
H4	<b>There is no positive significant relationship between information and communication and Palestinian private universities effectiveness.</b>	.000	Significant
H5	<b>There is no positive significant relationship between monitoring and Palestinian private universities effectiveness.</b>	.003	Significant

## **6. Discussion and Conclusion:**

The area of organizational performance effectiveness has gained formidable experimental attention over the last decade, especially in the corporation management literatures due to the global instability performance of organizations and recent international financial distress and global crisis. Recently, organizations through the world show weak financial performance and prosaic financial reports. Consequently, the internal control system has become

increasingly significant to assist toward suitable comprehension of the methods and ways that firms adopt to enhance their performance efficiency. There are two essential aims of this study. In the first place, the study attempts to determine the status of adoption of internal control system practiced by the private universities in Palestine. Secondly, it endeavors to examine the relationship between the internal control system components and the Palestinian private universities effectiveness. The following conclusion is made from the questionnaire data regression analysis of the impact of internal control system on the Palestinian Private universities effectiveness. The results revealed that the relationship between control environment, control activities, risk assessment, information and communication and monitoring towards organizational effectiveness is significantly positive ( $\beta = .436; .406; .521; .343$  and  $.249; P < 0.05$ ). Therefore, the results indicate that the internal control system variables have positively affected the Palestinian Private universities effectiveness. According to the study findings, it is recommended that university management needs to acquire a lot of information and data that assist in analyzing situations and making decisions in a timely manner before the information loses its accuracy and validity. It needs also to adopt solid operating methods and management philosophy related to trends and activities environment. In addition, regulating and supervising the correct recording of events and deals and support them with timely information are important. Moreover, there is a need to establish an organization's structure depending on centralization and decentralization of daily operation processing. Besides, the management needs to have control over the appropriate documentation of deals and internal control. Eventually, implementing monitoring activities according to continuous assessment to ensure high quality of control performance is a must. The study Recommends that further studies must be done to investigate the interaction effect of mediator or moderator variable, such as management accounting system, corporate governance or technological and market turbulence, in increasing the relationship between the internal control system and organizational performance effectiveness.

## References

- Al-Syaidh, N. H. J., & Al-Zu'bi, Z. (2015). Transformational Leadership and its Impact on the Effectiveness of Employees' Behavior in the Public and Private Jordanian Hospitals. *Jordan Journal of Business Administration*, 11(1), 33-47
- Ali, A. A. A. (2022) The Relationship Between Islamic Work Ethics And Employee Performance Among Medical Staff In The Public Health Sector In Bahrain: Employee Commitment As Mediating Variable. (Doctoral dissertation, Universiti Sains Islam Malaysia).
- Al-Maamari, Q. A., Alkadash, T., Al-Absy, M. S., Nagi, M., & Abdullah, M. A. (2021). THE MEDIATION IMPACT OF ORGANIZATIONAL COMMITMENT ON THE TOTAL QUALITY MANAGEMENT PRACTICES AND INDIVIDUAL READINESS FOR TQM IMPLEMENTATION WITHIN YEMENI OIL UNITS. *International Journal for Quality Research*, 15(2).
- Al-Maamari, Q. A., & Raju, V. (2020). Does Organizational Commitment affect Individual Readiness for Total Quality Management (TQM) Implementation.
- Almaamari, Q. A., & Alaswad, H. I. (2021). FACTORS INFLUENCING EMPLOYEES' PRODUCTIVITY-LITERATURE REVIEW. *Academy of Entrepreneurship Journal*, 27(3), 1-7.
- Alkadash, T. M., Almaamari, Q., Mohsen Al-Absy, M. S., & Raju, V. (2020). Theory of transformational leadership towards employee performance as sequence of supply chain model: the mediating effect of job autonomy in Palestine banks during Covid-19 pandemic. *International Journal of Supply Chain Management (IJSCM)*[ISSN 2050-

- 7399 (Online), 2051-3771 (Print)].
- Almaamari, Q. A., Ali, B. M., & Almeer, S. (2022). Factors Influencing Organizational Performance at Petroleum Products Distribution Company in Yemen. *Specialusis Ugdymas*, 1(43), 2071-2083.
- Al-Maamari, Q. A., Kassim, R. N. M., Raju, V., Al-Tahitah, A., Ameen, A. A., & Abdulrab, M. (2018). Factors affecting individual readiness for change: A conceptual framework. *International Journal of Management and Human Science (IJMHS)*, 2(1), 13-18.
- Al-Maamari, Q. A. (2020). The effect of Total Quality Management (TQM) practices on individual readiness for change with in yemeni oil units. *Test Engineering and Management*, 83, 13640-13661.
- Alsaad, L. H., & Almaamari, Q. A. (2020). A SEMI LITERATURE REVIEW OF FACTORS INFLUENCING EMPLOYEE'S PERFORMANCE AT BANKING SERVICE. *International Journal of Management (IJM)*, 11(8).
- Al-Zoriqi, M. S. M. F. (2019). The Mediating Effect of Organizational Teachers' Commitment on the Relationship Between Transformational Leadership and Teachers' Performance: A Study in Yemeni Public Schools (Doctoral dissertation, Universiti Sains Islam Malaysia).
- Basu, E., Pradhan, R. K., & Tewari, H. R. (2017) 'Impact of organizational citizenship behavior on job performance in Indian healthcare industries', *International Journal of Productivity and Performance Management*, 66(6), pp. 780–796. doi: <https://doi.org/10.1108/IJPPM-02-2016-0048>.
- Cohen, J. (1988) *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. . London: Routledge.
- Ćulibrk, J., Delić, M., Mitrović, S., & Ćulibrk, D. (2018) 'Job satisfaction, organizational commitment and job involvement: The mediating role of job involvement', *Frontiers in psychology*, 9(139).
- Farh, J. L., Podsakoff, P. M., & Organ, D. W. (1990) 'Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction', *Journal of management*, 16(4), pp. 705–721.
- Fogaça, N., Rego, M. C. B., Melo, M. C. C., Armond, L. P., & Coelho, F. A. (2018) 'Job performance analysis: scientific studies in the main journals of management and psychology from 2006 to 2015', *Performance Improvement Quarterly*, 30(4), pp. 231–247. doi: <https://doi.org/10.1002/piq.21248> Fong,.
- Frisdiantara, C. et al. (2018) 'Islamic Work Performance of Muslim Employees', *Proceedings of Social Sciences, Humanities and Economics Conference (SoSHEC 2017)*, 108(SoSHEC 2017), pp. 111–115. doi: <https://doi.org/10.2991/soshec-17.2018.22>.
- Furnham, A. (2021) *The Protestant work ethic: The psychology of work-related beliefs and behaviours*. Routledge.
- Hair Jr, J. F. (2006). Black, WC, Babin, BJ Anderson, RE & Tatham, R. . (2010) *Multivariate Data Anlysis*:Prentice Hall.
- Johari, J., & Yahya, K. K. (2016) 'Job characteristics, work involvement, and job performance of public servants', *European Journal of Training and Development*, 40(7), pp. 554–575. doi: <https://doi.org/10.1108/EJTD-07-2015-0051>.
- Khan, H. S. U. D., Zhiqiang, M., Musah, A. A. I., & Udimal, T. B. (2019) 'Impact of perceived organisational politics on job attitudes in health sector of Pakistan: the moderating role of Islamic work ethic', *Middle East Journal of Management*, 6(6), pp. 767–791.
- Kim, S. J., Song, M., Hwang, E., Roh, T., & Song, J. H. (2020) 'The mediating effect of individual regulatory focus in the relationship between career commitment and job satisfaction', *European Journal of Training and Development*. doi:

- <https://doi.org/https://doi.org/10.1108/EJTD-02-2020-0030> Mahfoudh, Kurniawaty, K., Ramly, M., & Ramlawati, R. (2019) 'The effect of work environment, stress, and job satisfaction on employee turnover intention', *Management science letters*, 9(6), pp. 877-886.
- Miswanto, M., Arifin, R., & Murniyati, D. (2020) 'Does work commitment mediates the effect of Islamic work ethic on performance and turnover intention?. JEMA', *Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 17(2), pp. 169-187.
- Mohammad, J. et al. (2018) 'The relationship between Islamic work ethic and workplace outcome: A partial least squares approach', *Personnel Review*, pp. 1-24. doi: 10.1108/PR-05-2017-0138.
- M. E., & Alzoraiki, M. (2022). Do Leadership, Organizational Communication, and Work Environment Impact Employees' Psychosocial Hazards in the Oil and Gas Industry?. *International Journal of Environmental Research and Public Health*, 19(8), 4432.
- Naji, G. M. A., Isha, A. S. N., Alazzani, A., Brough, P., Saleem, M. S., Mohyaldinn, M. E., & Alzoraiki, M. (2022). Do Leadership, Organizational Communication, and Work Environment Impact Employees' Psychosocial Hazards in the Oil and Gas Industry?. *International Journal of Environmental Research and Public Health*, 19(8), 4432.
- Nasution, F. N., & Rafiki, A. (2019) Islamic work ethics, organizational commitment and job satisfaction of Islamic banks in Indonesia', *RAUSP Management Journal*, 55(2), pp. 195-205.
- Poulose, S., & Dhal, M. (2020) 'Role of perceived work-life balance between work overload and career commitment', *Journal of Managerial Psychology*, 35(3), pp. 169-183.
- Purba, P., Dalimunthe, R. F., & Absah, Y. (2020) 'The effect of work skills and employee's job involvement on employee performance through job satisfaction in manpower office of Medan, Indonesia', *European Journal of Human Resource Management Studies*, 4(2).
- Qasim, M., Irshad, M., Majeed, M., & Rizvi, S. T. H. (2021) Examining Impact of Islamic Work Ethic on Task Performance: Mediating Effect of Psychological Capital and a Moderating Role of Ethical Leadership., *Journal of Business Ethics*,
- Raja, U., Haq, I. U., De Clercq, D., & Azeem, M. U. (2020) 'When ethics create misfit: Combined effects of despotic leadership and Islamic work ethic on job performance, job satisfaction, and psychological well-being.', *International Journal of Psychology*, 55(3), pp. 332-341.
- Van Steenbergen, E. F., & Ellemers, N. (2009) 'Feeling Committed to Work: How Specific Forms of Work-Commitment Predict Work Behavior and Performance Over Time', *Human Performance*, 22(5), pp. 410-431. doi: <https://doi.org/10.1080/08959280903248385>.
- Tang, W.-G., & Vandenberghe, C. (2020) 'Is affective commitment always good? A look at within-person effects on needs satisfaction and emotional exhaustion.', *Journal of Vocational Behavior*, 119, 103411. doi: <https://doi.org/10.1016/j.jvb.2020.103411>.
- Taufail, M., Hussain, S., & Shahzad, K. (2018) 'Combined effects of job insecurity and islamic work ethics on job satisfaction and job performance', *Journal Of Business & Economics*, 10(2), pp. 1-24.
- Polas, M. R. H. et al. (2020) 'Customer's revisit intention: Empirical evidence on Gen-Z from Bangladesh towards halal restaurants', *Journal of Public Affairs*. doi: 10.1002/PA.2572.
- Tolentino, R. C. and Ng Lungsod Ng Maynila, P. (2013) 'Organizational Commitment and Job Performance of the Academic and Administrative Personnel', *International Journal of Information Technology and Business Management*, 29(1), pp. 51-59. doi: ISSN 2304-0777.

- Widyarini, Y. Y., & Muafi, M. (2021) 'The influence of work-family conflict and Islamic work ethics on employee performance: The mediation role of work motivation', *International Journal of Research in Business and Social Science*, 10(3), pp. 177–188.
- Raju, V. (2021) 'Implementing Flexible Systems in Doctoral Viva Defense Through Virtual Mechanism', *Global Journal of Flexible Systems Management*, 22(2), pp. 127–139. doi: 10.1007/S40171-021-00264-Y.
- Zahrah, N. et al. (2016) 'International Review of Management and Marketing Enhancing Job Performance through Islamic Religiosity and Islamic Work Ethics', *International Review of Management and Marketing*, 6(S7), pp. 11–13. Available at: <http://www.econjournals.com>.
- Zaim, H., Demir, A., & Budur, T. (2021) 'Ethical leadership, effectiveness and team performance: An Islamic perspective', *Middle East Journal of Management*, 8(1), pp. 42-66.
- Zia, M. Q., Naveed, M., Fasih, S. T., Aleem, M. U., & Ramish, M. S. (2022) 'The interactive effect of Islamic work ethics and leader-member exchange on workplace deviance behaviour and adaptive performance', *Journal of Ethics and Systems*.
- Almajali, D. A., Masa'deh, R., & Tarhini, A. (2016). Antecedents of ERP Systems Implementation Success: A Study on Jordanian Healthcare Sector. *Journal of Enterprise Information Management*, 29(4), 549-565.  
<http://dx.doi.org/10.1108/JEIM-03-2015-0024>
- Ahmed, M.A., & Muhammed, A.A. (2018). Internal Control Systems & Its Relationships With The Financial Performance In Telecommunication Companies —A Case Study Of Asiacell. *International Journal of Scientific & Technology Research* Volume 7, Issue 11, November 2018.
- Andre, F., & Augusto, B. (2017). Internal Control on the Private Sector. *Academia Militar*
- Alemu, A.A. (2020). The Effect of Internal Control on Organization Performance in Reference to Moha Soft Drinks Company, Ethiopia: A Case Study in Hwassa Pepsi Cola Factory. *International Journal of Research in Business Studies and Management*. Volume 7, Issue 3, 2020, PP 10-19
- Bett, J. C. and Memba, F. S. (2017), Effects of Internal Control on the Financial Performance of Processing Firms in Kenya: A Case of Menengai Company, *International Journal of Recent Research in Commerce Economics and Management*, Vol. 4, No. 1, pp. 105-115
- Committee of Sponsoring Organizations of the Treadway Commission, 2012. Internal Control Integrated Framework. Update Project.
- El-Masri, M., Orozco, J., Tarhini, A., & Tarhini, T. (2015). The Impact of IS-Business Alignment Practices on Organizational Choice of IS-Business Alignment Strategies. *The 19th Pacific Asia Conference on Information Systems (PACIS 2015)*, Paper 215, Singapore, 6-9 July 2015
- Ershaid, J. D, Abdullah, A., & Bin Mohamed, M., (2017). Moderating Effect of Internal Control System on the Relationship between Environmental Turbulence and Firm Performance in Jordanian listed Companies. *Journal of Accounting and Finance in Emerging Economies*, Vol. 3, No 1, June 2017.
- Masa'deh, R., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian Empirical Study of the Associations Among Transformational Leadership, Transactional Leadership, Knowledge Sharing, Job Performance, and Firm Performance: A Structural Equation Modelling Approach. *Journal of Management Development*, 35(5), 681-705.

<http://dx.doi.org/10.1108/JMD-09-2015-0134>.

- Mahadeen, B., Al-Dmour, H.R., Obeidat, Y.S., & Tarhini, A. (2016). Examining the Effect of the Organization's Internal Control System on Organizational Effectiveness: A Jordanian Empirical Study. *International Journal of Business Administration*. Vol. 7, No 6: 2016.
- Montgomery, P. and Vining, G. (2001). *Introduction to Linear Regression Analysis*: Wiley. ISBN: 978-0-470-54281-1.
- Shokoohi, M, Saeidi, P. and Malekmahmoudi, S. K. (2015), Investigating the Relation Between Internal Control System and Financial Performance of Telecommunication Company of Golestan Province, *Multidisciplinary International Peer Reviewed Journal*, Vol. 3(2), pp. 206-211. Received from <http://saussurea.org>.
- Wainaina, S. W. (2011), *An Evaluation of the Internal Control Function: The Case of Kenya Polytechnic University College*, Unpublished MBA Thesis, University of Nairobi. Kenya Wee..