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Effect of Organizational Excellence and Employee Performance on Organizational Productivity Within Healthcare Sector in the UAE

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Abstract: In the quest to improve performance, attention has been directed at organizational excellence to remain competitive through creativity and innovation. It must be emphasized that the dire need for excellence has led to several quality frameworks in various global regions. Health Authority Abu Dhabi (HAAD) is the focus of this study where an innovative approach is applied to assess the impact of organizational excellence in terms of principles and practices along with employee performance on organizational productivity. The data was collected from 256 employees of the Health Authority Abu Dhabi (HAAD) and analyzed using Structural Equation Modeling (SEM) via. SmartPLS 3.0. There were two main results: first, organizational excellence (excellence principles and excellence practices) have a positive impact on organizational productivity, second, employee performance significantly, predicting organizational productivity. The proposed model explained 64% of the variance in organizational productivity. Theoretical and practical implications are also provided.

Key words: Organizational excellence, employee performance, organizational productivity, HAAD, UAE, quality

INTRODUCTION

Developing countries are faced with fierce competition and survival on organization due to globalization pressures. For that to remain competitive, there is a growing need for organizations in such countries to evolve by embracing excellence attributes using creativity and innovation tools (Khandwalla and Mehta, 2004). The academic research and debate in the concept of organizational excellence dates back to Peters and Waterman (1982). Continuously and in the last 20 years excellence evaluations have witnessed frequent changes in terms of definition and sustainability (Antony and Bhattacharyya, 2010).

The need for improved employee performance has directed massive attention towards employee performance planning, management and performance evaluation (Ahmed *et al*., 2015; Ahmed *et al*., 2013; Saleem and Amin, 2013; Abou-Shouk and Khalifa, 2017). Further, in the quest to improve performance, attention has been directed at organizational excellence to remain competitive through creativity and innovation (Khandwalla and Mehta, 2004). There has therefore been an abundance of research in recent decades that investigate the implementation of organizational excellence frameworks and how they influence or are influenced by organizational performance (Ringrose, 2013; Morsy *et al*., 2016; Khalifa and Ali, 2017). Ringrose add that thorough investigations in the area have led to results that support the assertion that organizations that implement an organizational excellence framework enjoy better performance than those companies that do not implement any framework in the area of excellence. Lee (2014) supports this assertion that organizations that strive to achieve excellence observe better returns on their investments and productivity.

According to Siddique (2012) the UAE is among the Middle Eastern nations experiencing a rapid economic development. With the nation undergoing massive growth in numerous sectors for instance, tourism, trade and agriculture, most of UAE's organizations have extended in business activities across the world (Siddique, 2012). The country employs the expertise and skills of many individuals, including natives as well as foreigners (Moullin, 2007). The accessibility of diverse knowledge and skills has generated competent managements and, ultimately, remarkable employee performance in most organizations within the UAE (Khalifa and Abou-Shouk, 2014; Aldholay *et al*., 2018a-c; Mutahar *et al*., 2018).

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The context of this study is Health Authority Abu Dhabi (HAAD) where the challenge of working with different nationalities remains a major issue to multinational organizations and the UAE at large. Investigating the characteristics of organizational excellence would be of tremendous benefit to the UAE government organization, multi-national businesses and other global enterprises at large. The objective of this study is to examine the impact of organizational excellence (excellence principles and excellence practices) and employee performance on organizational productivity in Health Authority Abu Dhabi (HAAD).

Literature review

Organizational Excellence (OE): Moullin (2007) defined organizational excellence as outstanding management practices of managers in managing their organizations and the delivery of value to their stakeholders. Whereas Anonymous (2016) defined organizational excellence as an ongoing effort to establish an internal framework of standards and processes intended to engage and motivate employees to deliver products and services that fulfill customer requirements within business expectations. The combined terms of "organizational excellence" have taken over numerous concepts and applications of quality systems, creating the foundation for organizational participation in continuous improvement (Anonymous, 2016). Spady (1986) signal the commencement of organizational excellence literature as a major paradigm shift; key aspects of this paradigm were discussed as: removal of bias for action through tests and retests drawing closer to consumers, entrepreneurship through innovation and adaptation, productivity through people, hands-on, value-driven, sticking to the knotting, simple form, lean staff, simultaneous loose-tight properties. After close to four decades, the main aspects of the excellence model have not changed much as most of these qualities are in line with popular models of organizational excellence such as the (European Foundation for Quality Management (Anonymous, 2012). Organizational excellence has remained an output that can best be achieved through collaboration and teamwork. Rao (2016) elaborate on the synergy that accompanies teamwork in event of driving efforts towards the achievement of organizational excellence. For this study, the empirically established definition of Antony and Bhattacharyya (2010) is adapted and presented which is excellence can perhaps also be redefined as the ability or capacity of one performance variable to affect or influence the other performance variables in an organization.

Ringrose conceptualize organizational excellence based on the five-main global regional excellence models of EFQM, Baldridge National Quality Program, Australian Business Excellence Award Program and the Canada Awards of Excellence models of excellence and proposed the Organizational Excellence Framework (OEF) that is divided into principles and practices. Consequently, the following hypotheses are proposed:

- H_1: excellence principles has a positive effect on organizational productivity
- H_2: excellence Practices has a positive effect on organizational productivity

Employee Performance (EPF): The elements of creativity, innovation, productivity, competitiveness, profitability, effectiveness and efficiency exist at all levels at which performance may be defined that is whether organizational level, process level or employee/work unit level (Antony and Bhattacharyya, 2010). These dimensions and constituents of performance are not essentially applicable to all business processes and work unit measurement of performance. Nonetheless, they represent lagging indicators that can be considered as the output of any action performed within the work environment. For the purpose of this study, employee performance is evaluated from this perspective of these seven main items as adopted by Antony and Bhattacharyya (2010) including creativity, productivity, profitability, effectiveness, efficiency, innovation and competitiveness. Consequently, the following hypotheses are proposed:

- H_3: employee performance has a positive effect on organizational productivity

Organizational Productivity (OP): Antony and Bhattacharyya (2010) defined organizational productivity as the rate at which goods and services are produced by a standard population of workers. Others such as Bernolak (1997) defined productivity as the quantity of goods produced and in the most efficient and effective manner from a limited amount of resources. The European Association of National Productivity Centres (EANPC) also defined productivity as the effectiveness and efficiency of processes used to produce goods and services (Pekuri *et al*., 2011). Keywords noteworthy in the definition of productivity include the "efficient" and "effective" process of transforming "inputs" into

"outputs". Thus, clearly implies productivity is a process and an output as established in the case of performance.

The efficiency of the process implies the ability to employ inputs or resources in the right way where a minimal amount of resources is employed to achieve an optimum outcome or performance (Grunberg, 2004; Shamsi *et al*., 2018). Neely *et al*., (1995) the effectiveness of the process of productivity refers to the ability of the production process to achieve desired goals. In specific terms, Pekuri *et al*. (2011) term efficiency as "doing things right and effectiveness as "doing the right thing". The terms effectiveness and efficiency define productivity and has remained inseparable. Effectiveness refers to the ability to reach a unique objective whereas efficiency depicts the achievement of this objective in an economical and resourceful manner. Further, according to Burke and Black (1990) in order to improve organizational productivity, certain steps need to be taken by the organization. They mention that it is important to make efforts to enhance the effectiveness of managers in hopes of improving product or service quality. It is also critical to reducing cases of waste, absenteeism and rejects or work resistance in operational processes of the organization. Others including Pekuri *et al*. (2011) build on the notion that the concept of productivity has not exactly been easy to define and remains highly ambiguous.

MATERIALS AND METHODS

Overview of the proposed research model: For this study, the hypothesized variables and their relationships in the model have been derived from the available literature of the models and theories that have been prescribed in the literature mentioned above. The proposed model can be seen in Fig.1. While examining the proposed model, it can be seen that organizational excellence including excellence principles and excellence practices along with employee performance predicts organizational productivity. These relationships are derived from Antony and Bhattacharyya (2010). The proposed extended model examines the relationship between organizational excellence and employee Performance as antecedent variables that explain organizational productivity as an output variable among employees in health authority Abu Dhabi in the United Arab Emirates. The proposed model has three hypotheses to test.

Development of instrument: A 30-item questionnaire was developed for this study and in line with existing literature

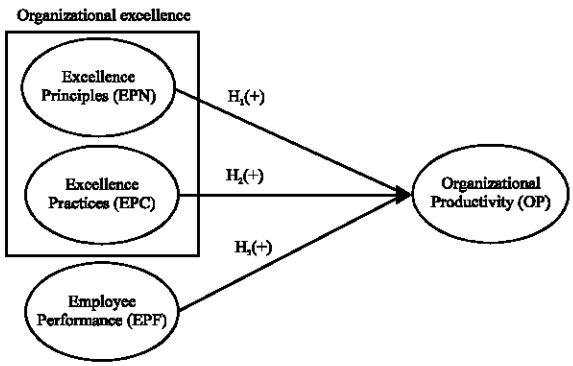

Fig. 1: The proposed model

in the organizational excellence field, a multi-item Likert scale was applied (Lee *et el*., 2014). Variables were measured using a Likert Scale which recommended in the previous studies (Isaac *et el*., 2017a-e; Badran and Khalifa 2016) with 7 being 'Strongly agree' and 1 being 'Strongly Disagree'. Because respondents were Arabic-speakers, it was vital that the questionnaire be precisely translated from English to Arabic. Therefore, a back translation was performed, a procedure extensively applied to test the precision of the translation in a cross-cultural survey (Brislin, 1970). Validated instruments were adapted from related previous studies to measure the variables of this study as shown in appendix A. With regard to item count for every construct, this study followed the directions by Hayduk and Littvay (2012) who suggested using the few best items and that many items are rarely warranted because additional redundant items provide less research benefit.

Data collection: Data collection was conducted using a self-administered paper questionnaire which was delivered 'in-person' from April 2017 until August 2017 to employees. The employees were approached while in main facilities at Health Authority Abu Dhabi (HAAD). A total of 400 questionnaires were distributed with 290 sets returned of which 278 responses were useful for the analysis. The final sample size was considered as adequate (Krejcie and Morgan, 1970; Tabachnick and Fidell, 2012). The 69% response rate is considered very good and above average (Baruch and Holtom, 2008) by comparison with other studies found in the relevant literature. A total of 22 questionnaires were deleted of which 15 cases were removed due to missing data for more than 15% of the questions and 7 cases involving straight lining (Table 1).

Table 1: Summary of demographic profile of respondents

Variables	Frequency	Valid (%)
Gender		
Male	121	47.451
Female	134	52.549
Age		
18-24	19	7.451
25-34	83	32.549
35-44	112	43.922
45-54	40	15.686
55 and above	1	0.392
Education		
Senior high school	30	11.765
University or 1st degree	126	49.412
Postgraduate or PhD	88	34.510
Other	11	4.314
Position		
Nurse	35	13.672
Midwife	35	13.672
Physician	39	15.234
Dentist	43	16.797
Pharmacist	39	15.234
Alternative medicine	22	8.594
AHP	43	16.797
Class		
SEHA (public)	133	52.157
Non-SEHA (private)	122	47.843
Total		256

M = Mean; SD = Standard Deviation, α = Cronbach's alpha; CR = Composite Reliability, AVE = Average Variance Extracted; The measurement used is 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree); All the factor loadings of the individual items are statistically significant ($p<0.01$); EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

RESULTS AND DISCUSSION

Data analysis and results: Employing SmartPLS 3.0 software (Ringle and Sarstedt, 2016) as an analysis tool, this study used Structural Equation Modeling-Variance Based (SEM-VB) through the Partial Least Squares (PLS) method to analyze the research model beginning with a descriptive analysis. Following the recommendation of Anderson and Gerbing (1988) and Hairan *et el.* a two-stage analytical technique was used, beginning with a measurement model assessment (validity and reliability). This was later followed by a structural model assessment (testing the hypothesized relationships). The two-step assessment, including both a measurement model and a structural model, is also recommended by Schumacker and Lomax (2004) and Hair *et al.* (2010) because of the advantages it gives over a one-step assessment procedure. Hair *et al.* (2017) further explained that while the measurement of each construct is specified, it is also important to know how the variables are related to each other structurally. The main reasons for choosing PLS as a statistical method for this study that for both measurement and structural model PLS offer simultaneous analysis which leads to more accurate estimates (Barclay *et al.*, 1995). The main reasons for choosing SEM as a statistical method for this study is that SEM offers a simultaneous analysis which leads to more accurate estimates (Isaac *et al.*, 2016, 2017a-e; Khalifa and Abou-Shouk 2014).

Descriptive analysis: Table 1 presents the mean and standard deviation of each variable in the current study. The respondents were asked to indicate their opinion in relation to their online learning usage based on a 7-point scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Excellence principles mean score of 4.644 out of 7.0 with a standard deviation of 0.899, indicating that the respondents agreed that leadership are committed to establishment of direction in their facility, ultimate focus is on meeting the economic needs of the institution, institution nurture and reinforce cooperation and teamwork, there is always consistency in work processes and how things are done around here, Value-added relationships are developed with suppliers and partners and the institution made decisions based on results of performance evaluation. Excellence practices recorded mean score of 4.727 out of 7.0 with a standard deviation of 0.784, indicating that the respondents agreed that core values, policies and regulations are communicated to stakeholders including internal and external stakeholders, governance system of leadership, decision making and accountability are generally effective, the selection and recruitment process in the institution is in the best interest of both the department and the workers, a strategy is installed to manage resources effectively and constant improvement of each management criteria (finance, HR, Marketing etc.) is always ongoing. Employee performance recorded mean score of 4.560 out of 7.0 with a standard deviation of 1.015, indicating that the respondents agreed that workers are required to produce new ideas as part of their performance management, the department encourages competition among employees in order to offer rewards and profitability is part of my performance objectives. Organizational productivity recorded mean score of 4.736 out of 7.0 with a standard deviation of 1.042, indicating that the respondents agreed that optimal quality is achieved in the department service deliveries, all quantity benchmarks are met by the department, the resource is used in the most efficient way by the department, timeliness is met at all times in the department and the institution has mastered itself in the performance if its duties.

Measurement model assessment: Construct reliability and validity (including convergent and discriminant validity) were both used to assess the measurement

Table 2: Mean, standard deviation, loading, Cronbach's alpha, CR and AVE

Constructs/item	Loading (>0.5)	M	SD	α (>0.7)	CR (>0.7)	AVE (>0.5)
Excellence Principles (EPN)						
EPN1	0.769	-	-	-	-	-
EPN2	0.780	-	-	-	-	-
EPN3	0.757	-	-	-	-	-
EPN4	0.685	-	-	-	-	-
EPN5	0.702	-	-	-	-	-
EPN6	0.774	-	-	-	-	-
EPN7	0.759	-	-	-	-	-
EPN8	0.773	-	-	-	-	-
EPN9	0.750	4.644	0.899	0.903	0.921	0.563
Excellence Practices (EPC)						
EPC1	0.784					
EPC2	0.741					
EPC3	0.733					
EPC4	0.721					
EPC5	0.755					
EPC6	0.748					
EPC7	0.747					
EPC8	0.741					
EPC9	0.759	4.727	0.784	0.901	0.919	0.559
Employee Performance (EPF)						
EPF1	0.798					
EPF2	0.786					
EPF3	0.787					
EPF4	0.812					
EPF5	0.802					
EPF6	0.817					
EPF7	0.844	4.560	1.015	0.910	0.929	0.651
Organizational Productivity (OP)						
OP1	0.842					
OP2	0.862					
OP3	0.849					
OP4	0.867					
OP5	0.856	4.736	1.042	0.908	0.932	0.732

model. For construct reliability and to examine the reliability of each core variable in the measurement model, individual Cronbach's alpha coefficients were tested. Kannana and Tan (2005)suggest a value of 0.7 to fulfil construct reliability. Following testing, all the individual Cronbach's alpha coefficients ranged from 0.901-0.908, much higher than this suggested value. Werts *et al.* (1974), Kline (2010) and Gefen *et al.* (2000) also, suggest 0.7 as the value for testing construct reliability. Since the Composite Reliability (CR) values ranged from 0.919-0.932, construct reliability is also fulfilled and Cronbach's alpha and CR for all constructs are regarded as sufficiently error-free (Table 1).

Indicator reliability was tested using factor loading. According to Hair *et al.* (2017) a high loading on a construct shows an apparent commonality among the associated indicators. They consider a factor loading >0.50 to be very significant (Hair *et al.*, 2010). As shown in Table 2, all loadings were greater than the recommended value of 0.5 and therefore, all these items fulfilled all the requirements.

Convergent validity measures the extent of positive correlation of one measure in a construct with others in the same construct. Using Average Variance Extracted (AVE), this study found that the suggested value of 0.50 as recommended by Hair *et al.* (2010) was exceeded in a range from 0.559-0.732. Thus as Table 1 shows, all constructs have adequate convergent validity and therefore convergent validity is successfully shown.

The extent that items differentiate among constructs or measure distinct concepts is shown by discriminant validity. Cross-loadings fornell-Larcker and Heterotrait-Monotrait ratio (HTMT) were used to assess the discriminant validity of the measurement model. Usually, cross-loadings are used as the first step in testing discriminant validity of the indicators (Hair *et al.*, 2017). In this study, the indicator's outer loadings on a construct exceeded all its cross-loadings with other constructs and hence, the cross loading criterion had satisfied the requirements (Table 3).

Table 4 displays the results for discriminant validity by using the Fornell-Larcker criterion. It was found that the square root of the AVEs on the diagonals (shown in bold) are greater than the correlations between constructs (corresponding row and column values), indicating strong correlation between the constructs and their respective indicators as compared to the other constructs in the

Table 3: Results of discriminant validity by the cross loading

Items	EPN	EPC	EPF	OP
EPN1	0.769	0.562	0.547	0.566
EPN2	0.780	0.569	0.547	0.523
EPN3	0.757	0.604	0.571	0.565
EPN4	0.685	0.485	0.438	0.425
EPN5	0.702	0.512	0.483	0.512
EPN6	0.774	0.587	0.535	0.530
EPN7	0.759	0.538	0.537	0.552
EPN8	0.773	0.570	0.535	0.529
EPN9	0.750	0.534	0.515	0.514
EPC1	0.575	0.784	0.512	0.520
EPC2	0.532	0.741	0.517	0.537
EPC3	0.531	0.733	0.428	0.531
EPC4	0.519	0.721	0.498	0.492
EPC5	0.535	0.755	0.496	0.539
EPC6	0.588	0.748	0.558	0.574
EPC7	0.549	0.747	0.465	0.508
EPC8	0.548	0.741	0.482	0.530
EPC9	0.571	0.759	0.506	0.548
EPF1	0.618	0.563	0.798	0.621
EPF2	0.511	0.483	0.786	0.599
EPF3	0.505	0.550	0.787	0.583
EPF4	0.597	0.516	0.812	0.597
EPF5	0.556	0.519	0.802	0.591
EPF6	0.595	0.571	0.817	0.583
EPF7	0.562	0.545	0.844	0.591
OP1	0.603	0.612	0.625	0.842
OP2	0.603	0.601	0.627	0.862
OP3	0.599	0.595	0.646	0.849
OP4	0.623	0.630	0.625	0.867
OP5	0.570	0.603	0.634	0.856

EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

Table 4: Results of discriminant validity by Fornell-larcker criterion

	1	2	3	4
Factors	EPF	EPC	EPN	OP
EPF	**0.807**	-	-	-
EPC	0.664	**0.748**	-	-
EPN	0.699	0.736	**0.751**	-
OP	0.738	0.711	0.701	**0.855**

Diagonals represent the square root of the average variance extracted while the other entries represent the correlations; EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

model (Fornell and Larcker, 1981; Chin, 1998a, b). According to Hair *et al*. (2017) this indicates a good discriminant validity. Furthermore, the exogenous constructs have a correlation of less than 0.85 (Awang, 2014). Therefore, all constructs had their discriminant validity fulfilled satisfactorily.

The Fornell-Larcker criterion has been subjected to debate. because it does not have the ability to determine precisely the lack of discriminant validity in normal research situations (Henseler *et al*., 2015). Therefore, another technique has been suggested, namely the Heterotrait-Monotrait ratio (HTMT) of correlations based on the multitrait-multimethod matrix. HTMT has been used to test discriminant validity in this study. The discriminant validity poses certain issues when the HTMT value is higher than the $HTMT_{0.90}$ value of 0.90

Table 5: Results of discriminant validity by HTMT

	1	2	3	4
Factors	EPF	EPC	EPN	OP
EPF	-	-	-	-
EPC	0.732	-	-	-
EPN	0.768	0.814	-	-
OP	0.811	0.785	0.771	0

EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

(Gold *et al*., 2001) or $HTMT_{0.85}$ value of 0.85 (Kline, 2010) but Table 5 shows that all the HTMT values were less than the 0.85, hence, fulfilling the discriminant validity requirement.

Structural model assessment: The structural model can be tested by computing beta (β) R^2 and the corresponding t-values via a bootstrapping procedure with a resample of 5,000 (Hair *et al*., 2017). They also, suggested looking at the effect sizes (F^2) and the predictive relevance (Q^2). While p-value ascertains the existence of the effect, the effect size is not shown (Sullivan and Feinn, 2012).

Hypothesis tests: Figure 2 and Table 4 depict the structural model assessment, showing the results of the hypothesis tests with 3 out of the 3 hypotheses are supported. Excellence principles, excellence practices and employee performance significantly predict organizational productivity. Hence, H_1-H_3 are accepted with ($\beta = 0.204$, $t = 2.869$, $p<0.01$) ($\beta = 0.296$, $t = 3.511$, $p<0.001$) and ($\beta = 0.399$, $t = 3.727$, $p<0.001$) respectively.

The strength of the relationship between exogenous and endogenous constructs are measured by the standardised path coefficients which in this case show that the direct effects of employee performance on organizational productivity are much stronger than the influence of other variables.

About 65% of the variance in organizational productivity is explained by excellence principles, excellence practices and employee performance. The values of R^2 have an acceptable level of explanatory power, indicating a substantial model (Cohen, 1988; Chin, 1998a, b).

Effect sizes (F^2) was examined in this research. According to Gefen *et al*., (2000) the effect size f^2 ascertains the impact of an exogenous latent construct (whether substantial, moderate or weak) on an endogenous latent construct. It is suggested that the change in R^2 value is assessed (Hair *et al*., 2017). The f^2 value of 0.35 indicates large effects, 0.15 indicates medium effects and 0.02 indicates small effects (Cohen, 1988). Table 4 displays the F^2 results, indicating four medium effect sizes relationships and one small effect size relationship.

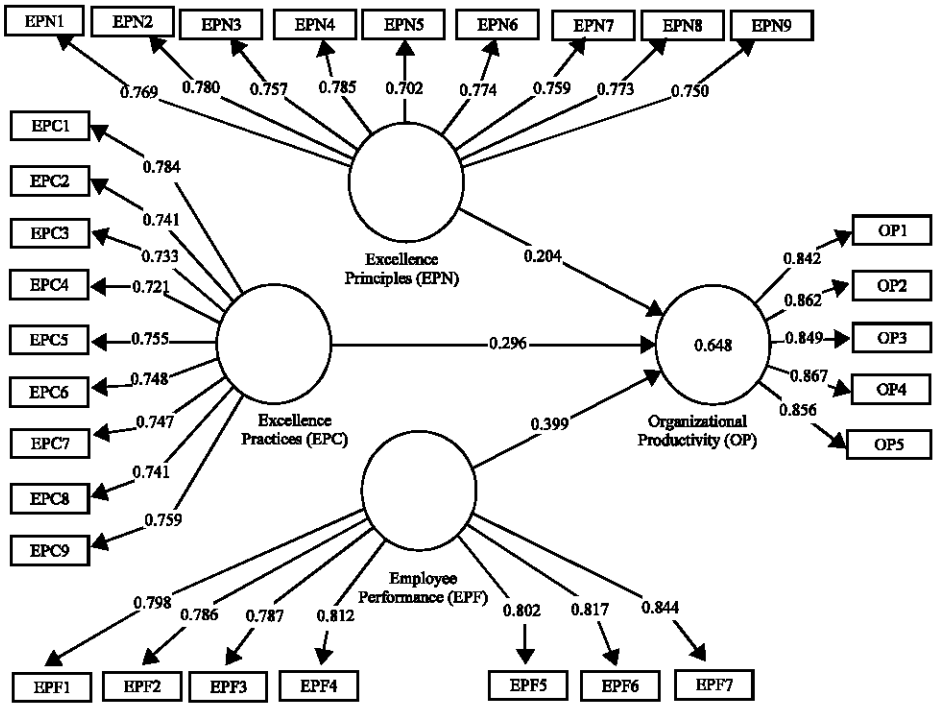

Fig. 2: PLS algorithm results; EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

Table 6: Structural path analysis result

Hypothesis	Relationship	Std. beta	SE	t-values	p-values	Decision	R^2	F^2	Q^2	VIF
H_1	EPN→OP	0.204	0.071	2.869	0.002	Supported	0.65	0.045	0.443	2.639
H_2	EPC→OP	0.296	0.084	3.511	0.000	Supported	-	0.103	-	2.410
H_3	EPF→OP	0.399	0.107	3.727	0.000	Supported	-	0.162	-	2.162

EPN: Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance, OP: Organizational Productivity

In assessing the predictive relevance of the proposed research model, this study had applied the blindfolding procedure. This procedure should be employed on endogenous constructs with a reflective measurement only (Hair *et al*., 2017). According to Fornell and Cha and Hair *et al.* (2017) a particular endogenous construct of the proposed model has predictive relevance if the value of Q^2 exceeded 0. In this study, all Q^2 values were greater than 0 and hence, it can be concluded that the proposed model has an adequate predictive relevance (Table 4). Relative measure of predictive relevance is indicated by Q^2 values of 0.35 for large, 0.15 for medium and 0.02 for small. All exogenous constructs in this study were found to have large predictive relevance.

According to O'Brien (2007), the existence of multicollinearity poses a problem as it indicates overlapping of the variance that the exogenous constructs explain in the endogenous construct. Therefore, it cannot justify each variance in the endogenous variable. Variance Inflation Factor (VIF) is commonly used as a measurement of the degree of multicollinearity (O'Brien, 2007). A value exceeding 10 for the largest VIF indicates a problem (Bowerman and O'Connell, 1990; Myers, 1990). Meanwhile, Hair *et al.* (2017) suggested that a value exceeding 5 for the largest VIF indicates a multicollinearity problem. The VIF values in this study are between 2.162-2.639 (i.e., <5) and hence, there is no significant multicollinearity issue among the exogenous constructs. In other words, there is no overlapping of the variance that the exogenous constructs explained in the endogenous construct (Table 6).

Importance-Performance Map Analysis (IPMA): Importance-Performance Matrix Analysis (IPMA) was employed as a post-hoc PLS procedure in this study with the actual usage of online learning used as the outcome construct. According to Hair *et al.* (2017) the IPMA provides an estimation of the total effects corresponding to the importance of predecessor constructs in affecting the target construct (actual usage); The average latent variable scores correspond to their performance whereas

Table 7: IPMA for organizational productivity

Latent constructs	Total effect of the construct organizational productivity (importance)	Index values (performance)
Excellence Principles (EPN)	0.204	71.466
Excellence Practices (EPC)	0.296	62.092
Employee Performance (EPF)	0.399	59.339

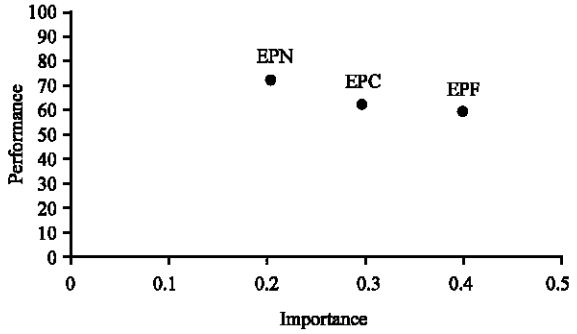

Fig. 3: IPMA (priority map) for organizational productivity; EPN:Excellence Principles, EPC: Excellence Practices, EPF: Employee Performance

the index value's (performance scores) calculation was achieved by rescaling the scores of the latent constructs to within a range from 0 (lowest performance) to 100 (highest performance). IPMA enhances the results of PLS analysis (Ringle and Sarstedt, 2016) because it gives attention to the latent construct's average value as well as their indicators (the performance dimension) in addition to performing the path coefficients analysis (the importance dimension). The results for total effects (importance) and index values (performance) of the IPMA of the outcome construct organizational productivity is displayed in Table 7.

The scores for total effects and index values were plotted on a priority map (Fig. 3). It can be observed that employee performance is a very important factor in determining the organizational productivity due to its relatively higher importance value compared to other constructs in the proposed model.

While there exists an apparent gap on the importance of factors for determining organizational productivity, these factors have similar performance. IPMA aims to identify the predecessors that have both relatively high importance (with strong total effect) and relatively low performance for the target construct (with low average latent variable scores) (Hair *et al*., 2017). Particular attention may be given to the attributes of these constructs which can be potential areas for improvement. To conclude, although, variables such as value scored relatively intermediate in performance, it has small relevance in influence quality. In sum, in order to improve the organizational productivity, the managerial activities should focus on enhancing the performance of employee performance.

Based on the proposed model, this study improves the understanding of the role played by organizational excellence (practices and principles) and employee performance in the productivity at Health Authority Abu Dhabi (HAAD) in the United Arab Emirates and highlights relevant implications and suggestions for management and policy makers. The discussions are further detailed in the following.

The study found that excellence principles positively affect organizational productivity among employees within the Health Authority Abu Dhabi in the United Arab Emirates, this is supported by previous studies (Antony and Bhattacharyya, 2010; Katou and Budhwar, 2015; Ringrose, 2013). It is explained by the fact that the more the leadership of the organization is committed to establishing directions that will be aligned with all activities, teams and units that will ultimately be at the best interests of Abu Dhabi health service needs, besides encouraging cooperation, team work and social responsibility commitment, the more resource efficient the organization become and more likely to achieve optimal quality, besides meeting its benchmarks on time to perform its duties.

Likewise, it was found that excellence practices positively affect organizational productivity among employees within the Health Authority Abu Dhabi in the United Arab Emirates, this is supported by previous studies (Harrington, 2005; Ringrose, 2013; Terouhid and Ries, 2016). It is explained by the fact that the more effective the organization governance in terms of decision making and accountability so that, priorities are identified and objectives are balanced. Besides, economic needs and expectations are always monitored and strategy is put in place to effectively manage resources and have a strict procedure to select suppliers and stakeholder. The more resource efficient the organization becomes and more likely to achieve optimal quality, besides meeting its benchmarks on time to perform its duties.

Additionally, employee performance was found to positively affect organizational productivity among employees within the Health Authority Abu Dhabi in the United Arab Emirates, this is supported by previous studies (Almatrooshi *et al*., 2016; Katou and Budhwar, 2015). It is explained by the fact that the more the employees are creative, always suggest and adopt new ideas, efficient in utilizing resources and meeting all task deadlines, the more resource efficient the organization becomes and more likely to achieve optimal quality, besides meeting its benchmarks on time to perform its duties.

Finally, according to the importance-performance map analysis, employee performance scored highest in terms of importance and excellence principles scored in terms of performance within the tested model. Therefore, in order for health authority Abu Dhabi to enhance its organizational productivity, employees need to improve their performance in terms of creativity, innovation, productivity and efficiency. Moreover, it has to enhance organizational excellence in terms of leadership involvement, alignment, focus on customer, people involvement, partnership development, data-based decision making and social commitment.

CONCLUSION

While the United Arab Emirates government institutions are ahead of regional counterparts in terms of performance, it is striving to enhance its public organization's productivity (Anonymous, 2016) the findings of this study could be considered as one of the initiatives to serve on that direction. The main objective of this study is to determine factors that affect organizational productivity within Health Authority Abu Dhabi (HAAD) in the United Arab Emirates. Despite various constraints to the study, the results have been encouraging as it has managed to throw some lights on a new perspective. This study proposed a model which include organizational excellence that is divided into principles and practices in addition to employee performance as independent variables and organizational productivity as the dependent variable. The results revealed that the three independent variables significantly explain 64% of organizational productivity. The implications of this study from the perspective of research and practitioners have been deliberated, limitations have been noted and some directions for future research have been suggested.

LIMITATIONS

The first limitation concerns the generalizability of the findings, the targeted sampling of this study includes an employee working in Health Authority Abu Dhabi in the United Arab Emirates only. Another limitation is that data was gathered by cross-sectional and is not longitudinal in nature. The relationship between variables prescribed in the model of this study are highly case-dependent and thus they vary from organization to another, the model was implemented for an example organization which is Abu Dhabi Health Authority. As described in the introduction section of this research. Moreover, the exclusion of other organizational resources for instance, financial resources represents another limitation of the model. Although, such resources are necessary for organizations in the successful implementation of their capability-building plans, it was decided that taking into account these organizational resources in the model will result in more unnecessary complications to the model and reduce from the main objectives of this research.

IMPLICATIONS

Implications for research: This research study has made use of the available literature of the concept of organizational excellence by applying it to the context of an organization in the public sector in the United Arab Emirates to examine its role as a source of competitive advantage and its effect on the organizational productivity. This research can be seen as an attempt to contribute to the understanding of the organizational excellence that leads to a firm's enhanced productivity and thus enhanced competitive advantage (Rao, 2016). This concept has significant value for researchers interested in organizational excellence. Moreover, the variance explained by the proposed model in the current study for organizational productivity among knowledge workers within the Health Authority Abu Dhabi in the United Arab Emirates is 64%. The predictive power of the model in this study has therefore a higher ability to explain and predict organizational productivity than obtained from some of the previous studies with different variances explained recorded for organizational productivity: 52, 39% (Alwahaishi and Snasel, 2013). This research offers empirical support to the theoretical relevance of organizational excellence principles and practices, along with employee performance to predict the productivity of organizations (Aldholay *et al*., 2018a-c; Mutahar *et al*., 2018).

Implication for practice: The present research is of significant for practitioners as it illustrates the importance of organizational excellence and employee performance. Although a link of causality between the variables of this study cannot be clearly recognized because of the cross-sectional design, the results indicate that employee performance and organizational excellence are vital to facilitate and enhance the organizations' productivity. The order of this sequence should encourage organizations to put more emphasis on nurturing employee creativity and innovativeness. Moreover, the implications of the key findings provide significant benefits not only for at HAAD but also to the Abu Dhabi local government authorities. I ncorporating the findings,

a number of practical implications were found such as promoting employees to enhance their performance which leads to improving organizational excellence and quality of work.

It is expected that key findings, especially the proposed model, will help in supporting the UAE government policy initiatives, especially to increase productivity as part of the job at all levels of organizations. The evidence shows a link between organizational excellence and better performance and productivity (Aladwan and Forrester, 2016; Antony and Bhattacharyya, 2010; Nazir and Islam, 2017).

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