مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Leadership Behavior, Knowledge Management technology, and Academic Performance in Iraqi Public Universities

Hakim Hsoonee Almayali*	Haidar Ali Aldulaimi**	Ibrahim Rasool Hani**
College of Economics and Administration, University of Kufa, Najaf, Iraq. Email: Hakemh.almaialy@uokufa.edu.iq	College of Administration Sciences, Al-Mustaqbal University Haidar.ali.aldulaimi@uomus.edu.iq	College of Administration Sciences, Al-Mustaqbal University Ibrahim.rasool@uomus.edu.iq

Abstract

Purpose – The purpose of this study aims to investigate the relationships among leadership behavior and academic performance in Iraqi universities, given the mediating role of knowledge management (KM).

Design/methodology/approach – This research will employ the use of quantitative research method to reach out to a broader population sample made up of 1,210 questionnaires on academic leaders and academic staff was distributed in 25 Iraqi public universities. The hypothesis testing being employed is based on the estimating structural equation model (SEM).

Findings – The final structural model that uses maximum likelihood estimation analysis confirmed a goodness of fit indices to the data. The mediating role of KM has partial significant effect on the relationship between leadership behavior and academic performance.

Research limitations/implications - The inherent limitation is in the sampling frame and the results cannot be generalized to the whole education like private universities. This study can contribute and support the national strategic plan 2009-2013 of Iraq HEIs.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Social implications – According to the interviews with academic leaders and staff in Iraqi universities, the academic leaders agreed that the problems of leadership stemmed from the lack of utilization of information technology in managing knowledge in their universities to treat social and economic issues.

Originality/value– In raises support for the objectives of National Strategy 2009 – 2013 of the Iraqi HEIs, the findings of the current study may support academics staff and leaders in how they can improve academic activities in their universities through KM.

Keyword Leadership Behavior, knowledge management, Academic Performance, Iraqi Public Universities.

Paper type Research paper

1. Introduction

According to UNESCO (2003), Iraqi universities have built their capacity through investment and the maintenance of human capital expertise and information technological to treat social and economic issues. In this regard, these Iraqi universities are dedicated to support teaching, research, service, and satisfaction among academic staff. Therefore, Iraqi universities have considered teaching, research, and service of society as part of their mission (Ministry of Higher Education and Scientific Research 2012). In 1975, the Iraqi government and leaders of Iraqi universities rendered adequate aid by supporting various facilities, such as teaching, research, service, curriculum, laboratories, scholarship, and training in order to develop knowledge among society. Therefore, Iraq had one of the most sound educational systems in

the 1970-1980s among the Arab world universities (Janabi & Urban 2011; UNESCO 2008). From 1991 to 2003, following Iraq's occupation of Kuwait in 1991, the United Nations Security Council (UNSC) enacted economic sanctions that kept Iraq away from the rest of the world. This led to the mass destruction of information technology, infrastructures and support for academic staff in terms of teaching method, research productivity, and service in Iraqi universities. As a result of the wars experienced by the Iraqi universities the destruction, as well as arson and looting, such as in the University of Basra and Mustansiriya (Ministry of Higher Education and Scientific Research 2012).

However, such assessments need further investigation, data collection and data analysis to find out the weaknesses as well as to highlight hidden potential of Iraqi universities which could be exploited through providing incentives in information technology to keep abreast with other global institutions (Alatwee & Alabidy 2007; Walee et al. 2007). This is supported by results of the interviews with the academic leaders who suggest that most leaders in Iraqi universities do not realize the importance of knowledge management (KM) in enhancing academic performance.

Omona et al. (2010, p. 93) posits "knowledge management must be part and parcel of the higher education process" for it can enhance academic performance especially in HEIs. Therefore, there is a need to conduct more studies on how to intensify the benefits of KM in order to achieve high academic performance (Zwain et al. 2012; Sewkarran 2008). Once again very few studies have examined KM among employees (Fathi et al. 2011).

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Consequently one of the gaps in the literature is the lack of empirical studies to examine the relationship between KM and performance (Mills & Smith 2011; Zack et al. 2009) and specifically KM with academic performance in Iraqi universities (Zwain et al. 2012). However, to the best of the researchers' knowledge, this relationship has not been examined in previous researches and studies. Hence, the current study aims to address this concern, which is to test the mediating role of Knowledge Management (KM) in the relationship between leadership behavior and academic performance.

As highlighted in the gaps above, the Iraqi universities faced various issues, which require further investigation into the relationships and mediating role of knowledge management (KM) between leadership behavior and academic performance in Iraqi public universities. While KM may play critical mediating roles between leadership behavior and academic performance, this relationship has not been done in previous researches. Therefore, this study aims to investigate the relationships among leadership behavior and academic performance in the public universities of Iraq given the mediating role of knowledge management using Structural Equation Modelling (SEM).

2. Literature Review

2.1Leadership Behavior

No single definition of leadership behavior exists because different viewpoints, places, and scopes of studies are used to examine this concept. Burns (1978) defined leadership as the reciprocal process of mobilizing by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize

goals independently. Leadership in organizations should create conditions that are beneficial to quality culture whereby employees can introduce better work that conforms to organizational values (Bass & Stogdill 1990; Fullwood et al. 2013). Thus, leadership takes place when a particular group member modifies the incentive and abilities of others in the group. For the purpose of this study, leadership behavior is based on the definition by Bass and Stogdill (1990). This definition focuses on the interaction between two or more members of a group which often involves a structuring or restructuring of the situation and the perceptions and expectations of the members.

Swanson and Johnson (1975) studied of the leadership behavior among 141 peers of the US Air Force. The findings pointed out that leadership behavior influences performance. According to Niles (1997), leadership behavior in universities setting can be described as transformational and transactional leadership behavior. Both transformational and transactional leadership behavior have shown a positive relationship in improving performance (Dubinsky et al. 1995; Emery & Barker 2007; Nordin 2011; Stashevsky & Koslowsky 2006). There is a large body of knowledge relating to leadership and performance of middle managers in business, similar researches of leadership behavior and academic performance in HEIs are limited, especially in Iraq (Taher & Amain 2007). Therefore, the following hypothesis is postulated:

H1: There is a significant relationship between leadership behavior and academic performance in Iraqi universities.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

A. Knowledge Management (KM)

According to Davenport and Hansen (1999), KM is concerned with the exploitation and development of the knowledge assets in an organization with the aim to further the objectives of the organization. In this research, the researcher defines KM in an organization as the ability to lead employees to work alone as individuals, on projects, and in communities of similar interest to generate collective knowledge by creating, capturing, sharing, and leveraging information to improve performance (Fullwood et al. 2013; Lakshman 2007). Therefore, knowledge management involves a number of processes that govern the creation, dissemination and utilization of knowledge to fulfill objectives of the organization. It also refers to a range of practices used by organizations to identify, create, represent, and distribute knowledge for reuse, creating awareness, and learning across the organizations (Guechtouli et al. 2013).

Yang (2007) stated that leadership behavior positively and empirically affects knowledge management (KM). The findings reveal a positive relationship between leadership behavior and KM. In addition, Polities (2001) argued that the role of leadership behavior is increasingly changing from information and knowledge gate keeping to KM for all employees. In the context of higher education, several researchers revealed a significant relationship between leadership behavior and KM, whereby leadership behavior is strongly associated with KM (Merat & Bo 2012; Parker 2011; Polities 2001). However, very few past studies examine the relationship between leadership behavior and KM (Nunnally 1978; Xue et al. 2011;

Zheng et al. 2010), particularly in HEIs among academic leaders in universities (Allen et al. 2003). Therefore, the following hypothesis is postulated:

H2: There is a significant relationship between leadership behavior and knowledge management in universities in Iraq.

B. Knowledge Management and Academic Performance

Universities rely upon knowledge production, dissemination, and application of knowledge for enhancing academic performance (Kantabutra & Rungruang 2013; Zwain et al. 2012) thus, the issue of KM is considered important as it comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable the adoption of insights and experiences for a knowledge-based institution (Cheng et al. 2009). In short, the literature reviews show a positive relationship between KM and performance (Akhavan et al. 2011).

Kidwell et al. (2000) advocated the potential applications and benefits of knowledge management (KM) for higher education institutions (HEIs). They concluded that KM leads to better decision making capabilities, improvement in academic services, and reduction of costs for academic institutions. The results indicate that the practices of KM are positively associated with performance as generally suggested by the literature review of KM (Darroch & McNaughton 2003; Tanriverdi & Venkatraman 2005). The literature reviews have shown a positive relationship between KM and performance (Akhavan et al. 2011; Zack et al. 2009). Omona et al. (2010, p. 93) posits "knowledge management must be part and parcel of the higher

education process" for it can enhance academic performance of Iraqi universities. Thus, there is a need to conduct more studies on how to reap the benefits of KM in order to achieve high academic performance (Zwain et al. 2012; Sewkarran 2008). Therefore, it is postulated that:

H3: There is a significant relationship between knowledge management and academic performance in Iraqi universities.

C. Knowledge Management as Mediating Variable

Knowledge management (KM) is deemed as an indispensable behavior by both senders and receivers of knowledge among academic staff in the universities (Rajalakshmi & Wahidabanu 2011; Yuen & Majid 2007).Yeh (2005) studied the application of KM in the universities. Their findings revealed that to achieve a multi-dimensional strategic model for KM, it is important to conduct brainstorming sessions with members of the board of education, and leadership. It has been further explained that the system of KM acts as an agent to support the creation, organization, and dissemination of university knowledge to its relevant stakeholders. In this way, student parents, agencies, departments and other relevant bodies can obtain information more quickly and accurately, besides being better informed and making more timely decisions.

Suzana (2010) found that a significant relationship between leadership and knowledge management (KM) might increase the probability of being an added value for KM as issues of KM had created value among academic staff particularly in the information technology. It has been further explained that the KM system acts as an agent to support the creation, organization, and

dissemination of knowledge in university. However, this relationship has been minimally examined in previous researches. Hence, the current study aims to address this concern, which is testing the mediating role of Knowledge Management (KM) in the relationship between leadership behavior and academic performance. Therefore, the following hypothesis is postulated:

H4: Knowledge management mediates the relationship between leadership behavior and academic performance in Iraqi universities.

Methodology

The target population of this study is the 2,587 academic leaders (heads of department, deputy deans, deans, and vice president) and 9,911 academic staff (only associate professors and professors) from 25 universities in the public sector of Iraqi universities (Ministry of Higher Education and Scientific Research 2012). Academic staffs (including professors and associate professors) were chosen because they are more experienced, with leadership in decision making, and they are trusted to lead their universities towards achieving world class rank compared to lecturers and senior lecturers.

Due to the geographical distribution of the respondents in the 25 public universities, the 1,210 questionnaires were distributed through personal self-administered survey. Based on the drop and collect method, the researcher traveled to every university to distribute and collect the questionnaire from the respondents. This survey was collected during the months of October 2012 to May 2013 from 25 HEIs, namely the public universities of Iraq.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Overall, the response rate was 59 percent from 713 academic staff. The sample data was acceptable for Structural Equation Model (SEM) analysis based on 10:1 cases per parameter(Kline 2011).

In this study, leadership behavior comprises of transformational leadership and transactional leadership. Typically, these two styles are measured using subscales of transformational and transactional leadership behavior (Bass & Avolio 1995) on the Multifactor Leadership Questionnaire (MLQ-5X). The researcher elicited 20 items from the subscale of transformational leadership for this study.

Bass and Avolio (1995) measured the subscale of transactional leadership by using MLQ-5X-. The researcher selected 12 items that are related to transactional leadership. The Cronbach's alpha of transactional leadership is recorded at .86.

Another component of the questionnaire is Knowledge Management Assessment Instrument (KMAI). The KMAI was developed by Lawson (2003). Lawson’s study was based on a combination of different processes of three researchers namely Mihir (2001) and Horwitch and Armacost (2002). This study has adopted a knowledge management (KM) cycle of six-processes namely knowledge creation, knowledge capture, knowledge organization, knowledge storage, knowledge dissemination, and knowledge application. The Cronbach's alpha of KM ranges from .80 to .89.

Academic performance measures the general perception of faculty members and administrators on four dimensions. For the measurements of teaching and research, the researcher used statements developed by Boyer (1990),

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Tang and Chamberlain (1997) (Cronbach's Alpha = .76). The scales for staff satisfaction developed by Ssesanga and Garrett (2005) are also well established and the Cronbach's Alpha is recorded at .88. For the measurement of service, the researcher adopted the measurement scale for service by Hashim (2009) with Cronbach's Alpha recorded at .82 which is far above the cut-off point of equal to or greater than .70 for reliability as recommended by Nunnally (1978).

Structural Equation Modeling (SEM) is a family of statistical models that seek to explain the relationships among multiple variables (Hair et al. 2010). SEM provides a flexible approach to examining how variables are related to one another. According to Hair et al. (2010) and (Kline 2011) there are four key characteristics of SEM. The first characteristic lies in its ability to assess of multiple and interrelated dependence relationships. The second characteristic lies in its capability to represent unobserved concepts in these relationships and to correct the measurement error in the assessment process. The other characteristic is its explanation of the covariance among the measured items. Finally, SEM estimates effect size through path analysis (Hair et al. 2010).

Analysis and Results

This study consists of three latent variables, one exogenous variable and two endogenous variables. The exogenous variable is leadership behavior which measured through two dimensions were transformational and transactional leadership behavior by 20 and 12 items, respectively. While the endogenous

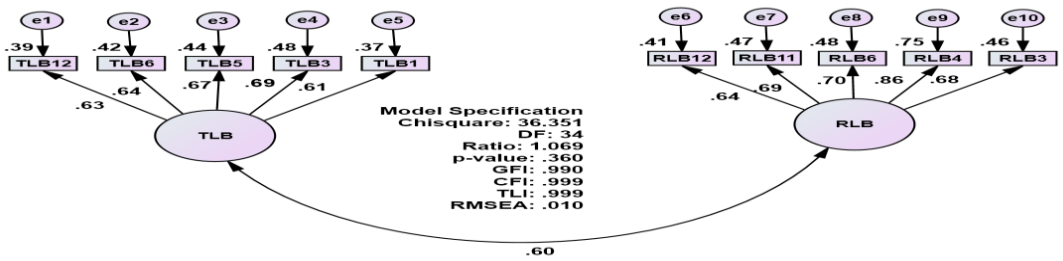
مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

latent variable are knowledge management (KM) and academic performance which measured by 24 and 29 items, respectively using AMOS version 20. Figure 2 shows the measurement of Confirmatory Factor Analysis (CFA) of the overall model fit to data were (Chi-square = 36.35, df= 34, Ratio= 1.07, p= .360, GFI= .99, CFI= .99, TLI= .99, NFI= .98 and RMSEA= .01). Based on Maximum Likelihood Estimates (MLE), all the indicator variables loaded highly and significantly onto their respective factors. In addition, all the constructs were significant correlated each other while the value of the factor loading was statistically significant, more than .50. Therefore, the measurement model of leadership behavior was within the acceptable levels based on the criteria of overall fit to data.



Legend
Transformational Leadership Behavior (TLB),
Transactional Leadership Behavior (RLB)

Figure 2 Revised measurement model for exogenous variable (Leadership Behavior).

Since the measurement model of knowledge management did not achieve adequate fit to data because the recommended values of goodness of fit

مجلة الغري للعلوم الاقتصادية والادارية

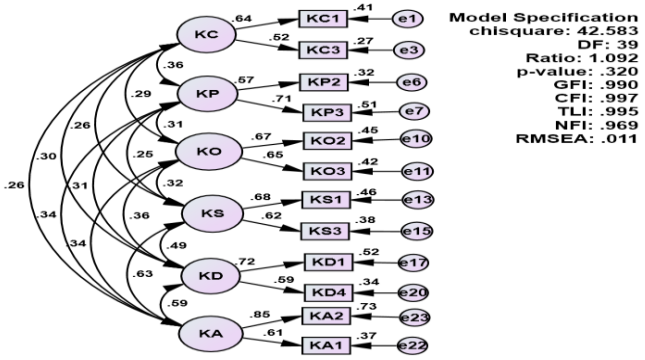
مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

indices where given as P value >. 05, CFI > .90, TLI > .90, and NFI > .90 (see Figure 3). Therefore, the confirmatory factor analysis (CFA), through the use of modification index in AMOS software, was conducted by putting constrains on the 12 items of knowledge management; the analysis can have indirect effect on latent variable.

Figure 3 shows that the revised measurement model for knowledge management constructs produced relatively good fit indices. In other word, the model fit knowledge management indices and the data fit of the measurement model fit perfectly. Figure 4.6 shows that all measures of the overall model fit were given as Chi-square = 42.58, df =39, Ratio =1.649, P = .32, Ratio= 1.09, GFI = .99, CFI=.99, TLI=.99, NFI= .96 and RMSEA = .011 for the measurement model of knowledge management were reasonable, indicating the model to be a sound fit of the data "adequate fit".



Legend
Knowledge Creation (KC), Knowledge Capture (KP), Knowledge Organization (KO), Knowledge Storage (KS), Knowledge Dissemination (KD), Knowledge Application (KA)

Figure 3 Revised measurement model for Knowledge Management**.**

مجلة الغري للعلوم الاقتصادية والادارية

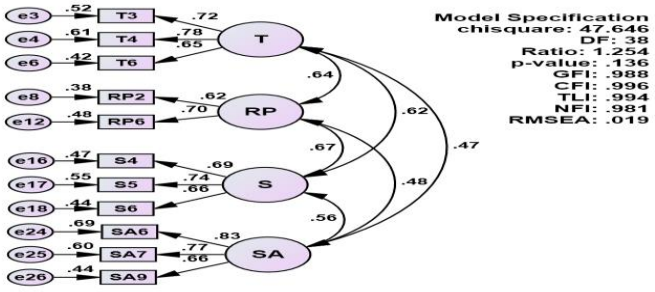
مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

The maximum likelihood estimates for indicator variables of knowledge management, standardized regression weight (SRW) exceeded .50 percent and SMC was good contribution to each items to the variable. All the C.R. values were greater than 1.96. Maximum likelihood estimates for indicator variables knowledge management (KM) that consists of six construct namely Knowledge Creation (KC), Knowledge Capture (KP), Knowledge Organization (KO), Knowledge Storage (KS), Knowledge Dissemination (KD), Knowledge Application (KA) can have indirect effect on knowledge management (KM) of the latent variable significant at the $p < .001$ level.

Figure 4 illustrates the goodness of model fit indices showed the data fit of the measurement model: chi-square/df = 47.64, DF=38, Ratio=1.25, p=.136, GFI=.98, CFI= .99, TLI=99, NFI= 98 and RMSEA=.019. The measurements of model were within the acceptable levels, indicating a sound fit of the data to the model. The overall fit of the model was described as satisfactory. All other fit indices of the model of academic performance were at acceptable levels indicating, a good fit to data.



Legend
Teaching (T), Research productivity (RP), Service (S), Satisfaction of Academic Staff (SA)

Figure 4 Revised measurement model of Academic Performance**.**

The maximum likelihood estimates for indicator variables of academic performance variable (AP) that consists of Teaching (T), Research productivity (RP), Service (S), and Satisfaction of Academic Staff (SA) can have indirect effect on the academic performance (AP) of the latent variable. All 11 items appropriate or valid because of SRW were greater than .50 percent and SMC had good contribution of each items of the variable.

The measurement model of latent variables leadership behavior, knowledge management and academic performance of this study utilized 33 indicators to assess goodness overall model fit indices to the data, factor loading in one group for the purpose to evaluate the latent variables indirectly and the correlation between latent variables (see Figure 5).

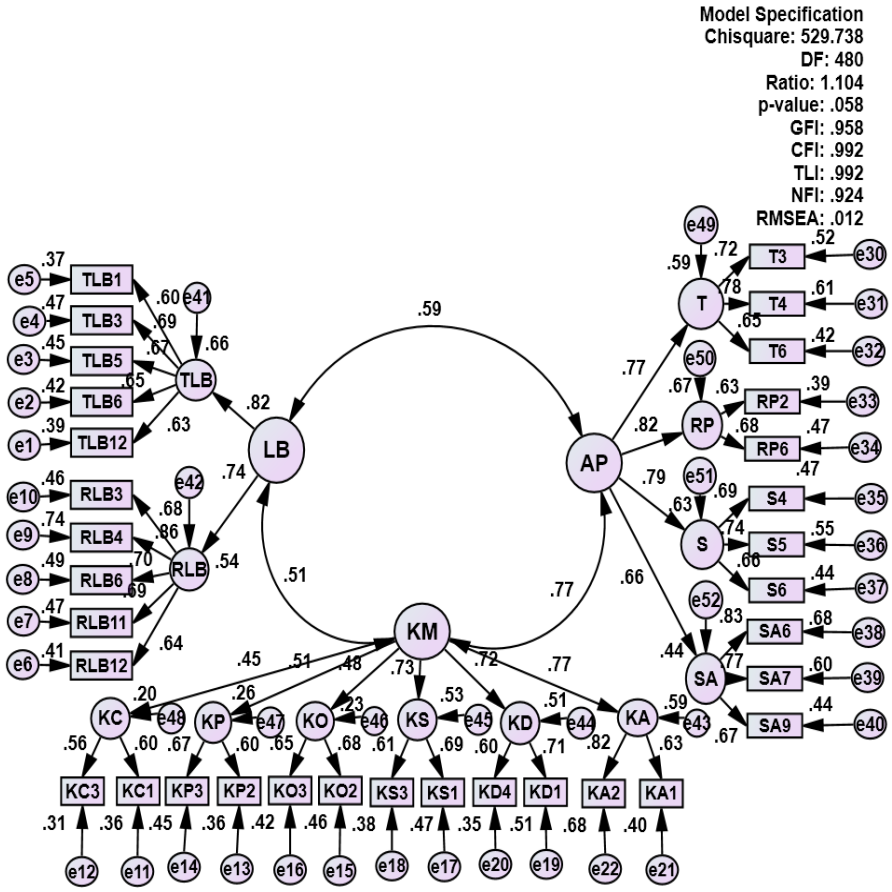
Figure 5 recorded the first indices of this model. The measurements for the goodness of fit are as follows: Chi-square is 529.74 with 480 degrees of freedom, Ratio=1.10, P value = .058. According to Byrne (2001, p. 82) the value for “good fit” in the goodness of fit index (GFI) is .96. Meanwhile, Kline (2011, p. 208) stated that the value required for close fit is .95 in the comparative fit index (CFI); hence the value of CFI of this model, .99 fulfilled the requirement for close fit, higher than the .95. Finally, the most widely cited fit measure, ment is the root mean square error of approximation (RMSEA).Kline (2011, p. 205) posited that an “adequate fit” for RMSEA is .05; hence the value of RMSEA of this model, .012 is indeed well-above the "adequate fit".

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024



Legend
Leadership Behavior (LB), Transformational Leadership Behavior (TLB), Knowledge Management (KM), Knowledge Creation(KC), Knowledge Capture (KP), Knowledge Organization (KO), Knowledge Storage (KS), Knowledge Dissemination (KD), Knowledge Application Academic Performance (AP), Teaching (T), Research productivity (RP), Service (S), Satisfaction of Academic Staff (SA)

Figure 5 Revised measurement models of LB, KM and AP.

Figure 5 shows that at .51, there is a statistically significant correlation between leadership behavior and knowledge management. Similarly, at .77, there is a relationship between knowledge management and academic performance. Finally, at .59, there is also a relationship between leadership

behavior and academic performance. All these values indicate that it is important to support previous researches for confirmation and validation for further hypothesis testing.

Convergent Validity of Final Measurement Model

In structural equation modeling (SEM) analysis, convergent validity can be assessed by computing Average Variance Extracted (AVE) and Composite Reliability (CRI) (Fornell&Larcker, 1981). Table 1 obtained the convergent validity of the final structural model.

Table 1 Convergent Validity of the Final Structural Model

Variables	No. of Original Items	No. of Final Items	CRI ≥ .70	AVE ≥ .50
Leadership Behavior	32	10	**.95**	.86
Knowledge Management	24	12	.92	.83
Academic Performance	29	11	.95	.90

Table 1 shows that all the variables leadership behavior, knowledge management, and academic performance had generally exhibited acceptable level of CRI with values (.95, .92, and .95) respectively. Which CRI are more than the value .70. Additionally, Table 1 displayed all the variables (leadership behavior, knowledge management, and academic performance) had generally exhibited acceptable level of AVE with values (.86, .83, and .90) respectively, all above the recommended minimum level of .50.

Empirical Testing of Hypothesized Model

Based on modification index of the revised model, 52 items were in order to achieve the significant model of exogenous and endogenous constructs (P =

.058). Table 2 the parameters estimate of fit of the re-specified model is better compared to the goodness of fit of the hypothesized model ($p < 0.05$) and C.R. is significant greater than 1.96.

As shown in Figure 6 the first indices of this model is Chi-square is 529.74 with 480 degrees of freedom, Ratio=1.10, and P value = .058. The goodness of fit index (GFI) which is .96. Meanwhile, Kline (2011, p. 208) stated that the value required for close fit is .95. The comparative fit index (CFI) is recorded at .99 fulfilled the requirement for close fit, higher than the .95. Finally, Kline (2011) opines that the most widely cited fit measure, the root mean square error of approximation (RMSEA), is .012 is indeed well-above the "adequate fit".

Figure 6 is significant in relationship between leadership behavior and knowledge management (KM) was recorded at .51. Similarly, the relationship between KM and academic performance, was .63, while the relationship between leadership behavior and academic performance, and was .27. All these findings as shown in (revised measurement model), indicate that it was more important to support previous research and to shows the maximum likelihood estimates for indicator variables. The factor loadings ranged from .56 to .86, which have exceeded the threshold of > .50. This states to confirm the valid for further hypothesis testing.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

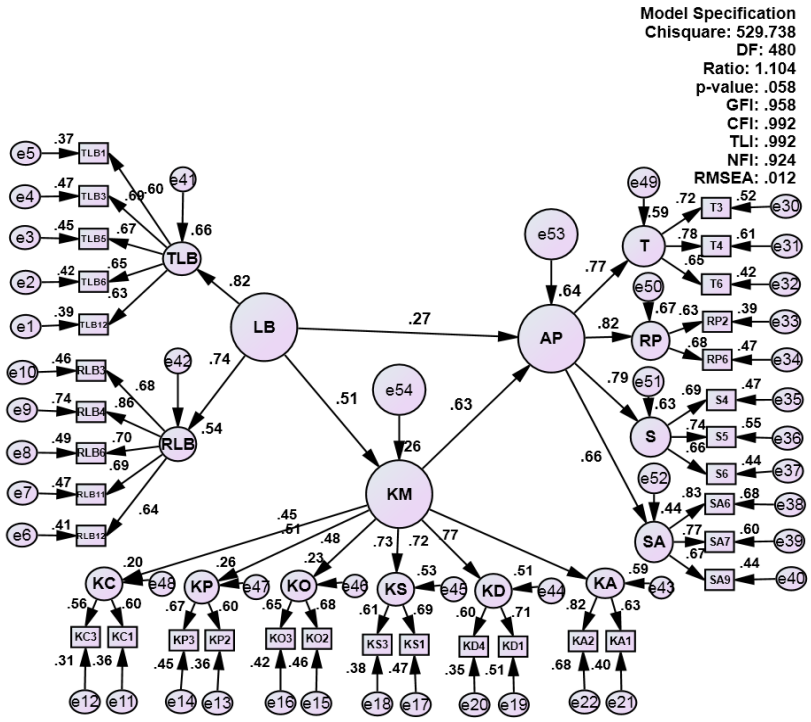


Figure 6 Re-specified hypothesized model.

Table 2 demonstrates that hypothesis H1 have a direct effect on leadership behavior and academic performance (β=.27; CR=4.24; P<.05); thus H1 was accepted, However, the significant associations between leadership behavior and academic performance was consistent with previous studies (Bass & Avolio 1997; Niles 1997; Nordin 2011). Leadership behavior has a direct significant effect on Knowledge management (β=.51; CR=4.87; P<.05); thus H2 was accepted, This finding is generally consistent with findings in the previous studies by Lakshman (2007), Nguyen and Mohamed (2011) and Politis (2002) who stated that leadership behavior was positively related to KM. Similarly, Knowledge management also has a direct positive effect on academic performance (β=.63; CR=5.53; P<.05); thus H3 was accepted. As

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

a result, this refer that KM was partial mediating effect between leadership behavior and academic performance.

The fourth hypotheses (H4) deals with the mediating role of knowledge management (KM). Based on path effect that uses SEM, KM has partial significant mediating effect on the relationship between leadership behavior and academic performance. These findings results indicate that leadership behavior influence academic performance directly. The statistical results, obtained in this study partial supported Hypothesis 4. Moreover, factor loadings also confirmed the interaction between leadership behavior and KM as significant at a level of 0.001% and (P<.001). The interaction between knowledge management and academic performance was significant at (p<.001). It clearly showed the mediating effect of KM in the relationship between leadership behavior and academic performance. Thus, Hypothesis 4 was accepted. Omona et al. (2010) stated that knowledge management (KM) must be part and parcel of the higher education process for it can enhance academic performance of Iraqi universities. Therefore, there is a need to conduct more studies on how to intensify the benefits of KM in order to achieve high academic performance (Zwain et al. 2012). The total effect was employed to confirm KM as mediating variable in the model. Through the effect of interaction factor loading in the re-specified model using SEM, the mediating effect in KM was confirmed to be the partial mediating variable in the relationship between leadership behavior and academic performance.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Table 2 Direct Relationships in Final structural Model

Causal Path			Sta. Path Coefficient	Estimate	S.E.	C.R.	P	Status
LB	→	AP	.27	.28	.06	4.24	.000***	Significant
LB	→	KM	.51	.25	.05	4.87	.000***	Significant
KM	→	AP	.63	1.32	.24	5.33	.000***	Significant

Note: *** Significant at .001 level.

As a rule of thumb, the effect size (R^2), or the proportion of variance explained in the latent dependent variables was interpreted as small (≥ .01), medium (≥ .09), or large (≥ .25) (Cohen, 1988).

Table 3 indicates the findings of Squared Multiple Correlation (SMC) that explained .26 percent variance as predicted in KM from leadership behavior effect. Meanwhile, the managerial leadership behavior (LB) and the mediating effect of KM explained for .64 % variance as predicted in academic performance (AP) from effect each of leadership behavior and KM.

Table 3 Squared Multiple Correlation Results

Endogenous Variable	Squared Multiple Correlation SMC = R^2
Knowledge Management	.26
Academic Performance (AP)	.64

To recap, for providing more accurate estimates of causal path relationships among the latent variable, it was by used SEM. Meanwhile, CFA was used to evaluate the valid of the instrument measure and a final structural model under maximum likelihood approach (SRW, SMC, variance, S.R., C.R. and probability). Table 4 summarizes the overall of hypotheses testing of direct and indirect relationships based on path analysis.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Table 4 Summary of Overall of Hypothesis Testing Direct and Indirect Effect of Variables Interaction Based on Path Analysis

No. of Hypothesis	Hypothesis Statement	Decision
H1	There is a significant and positive relationship between leadership behavior and academic performance	Accepted
H2	There is a significant and positive relationship between leadership behavior and knowledge management	Accepted
H3	There is a significant and positive relationship between knowledge management and academic performance	Accepted
H4	Knowledge management mediates the relationship between leadership behavior and academic performance	Fully Accepted

Finally, the results suggested that, the success of leadership behavior is dependent on knowledge management (KM) in enhancing academic performance. The results based on path effect size between leadership behavior and knowledge management. That mean, knowledge management should be part and parcel of higher educational process that lead to enhance academic performance (teaching activity, research productivity, service, and staff satisfaction) driven by leadership behavior.

Based on the results, that knowledge management has strong effect on academic staff within universities process. Therefore, university leadership should concern about promotions as the most effective means of influencing faculty teaching performance through reward and support their follower as well as providing information technology by upgrade and applying knowledge management process within their universities. Faculty members

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

must be understand that they need effective teachers or may lose their jobs. In terms of research, the university should increase of financial to support and encourage the researchers to conduct research.

Conclusion

Leadership in Iraqi public universities is crucial in the achievement of excellence in academic performance. The results of this study confirm the recommendation of previous researches, particularly in the context of Iraqi HEIs that mentioned the success of leadership behavior is dependent on knowledge management (KM) in enhancing academic performance. The findings of this study also indicate university leaders (deans, heads of departments, and others) are required to demonstrate KM in order to upgrade the academic performance of Iraqi universities. The results of this research which is important with in Iraqi universities because the results have raised support for the aims of the Iraq National Strategy Plan 2009-2013.

The present study embodies the empirical examination of the partial mediation role of KM in the relationship between leadership behavior and academic performance under social organizational theory' perspectives. Theoretically, the study contributes to the body of knowledge by providing empirical evidence to support theories and previous literature related to the mediating roles of KM in the relationship between leadership behavior and academic performance that the fundamental contribution in addressing the gap in the literature, especially in Iraqi universities.The results bear social influence to support the interchange for universities in Iraq. The findings of this study provide evidence of equally advantageous of the practical and

theoretical implications. This study support academics and leaders in enhance academic performance. This research demonstrate that KM can facilitate in enhance academic performance to generate new knowledge through educational, philosophy, and research policies.HEIs in Iraq have emerged as a driving force for the rapid progress of society to become a worthy ground for researchers to create efficient and keep human capital.

Based on the limitation of this study, there is a need to further study the impact of the relationship between the perceptions of leadership behavior and academic performance in the higher education sector in Iraq by mediating role of knowledge management. In reality, there could be many more other features or constructs that can influence these relationships such as organizational commitment. Therefore, future research is recommended to cover these areas. Since the data was confined to academic leaders and academic staff in public universities of Iraq. It is recommended that further research should study the same framework among the private universities in Iraq. To the best of the researches knowledge, the current study is the first of its kind in the Iraqi universities. Therefore, similar studies are needed to produce more knowledge in this area. Such studies may consider changing the knowledge of present and future professionals. Hence, further research could test this model in other contexts for further verification of results using SEM.

References

Akhavan, A.M.S., Owlia1, M. and Jafari, Y. (2011), “A model for linking knowledge management strategies, critical success factors, knowledge

management practices and organizational performance; the case of Iranian universities." In *IEEE International Conference on Engineering and Engineering Management (IEEM), 6-9 Dec*, Vol. 6, pp. 1591 – 1595

Alatwee, A.A.H. and Alabidy, A.R. (2007), "Analysis of the effect of the interactive relationship between the cultural orientation and the leadership support in the behavior of teaching staffs work." In *Proceeding in International Conference on Higher Education, 7 August, Erbil, Iraq*, Vol. 4. pp. 145–157.

Allen, D.G., Shore, L.M. and Griffeth, R.W. (2003), "The role of perceived organizational support and supportive human resource practices in the turnover process." *Journal of Management*, Vol. 29 No. 1, pp.99–118.

Bass, B.M. and Avolio, B.J. (1997), *"Full Range Leadership Development: Manual for the Multifactor Leadership Questionnaire,"* Palo Alto, CA, USA: Mind Garden, Inc.

Bass, B.M. and Avolio, R.J. (1995), *"Multifactor Leadership Questionnaire for Research,"* Palo Alto, CA, USA: Mind Garden.

Bass, B.M. and Stogdill, R.M. (1990), *"Bass and Stogdill's Handbook of Leadership: Theory, Research, and Managerial Applications"* 3rd ed., London: Collier Macmillan Publisher.

Boyer, L.E. (1990), *"Scholarship Reconsidered: Priorities of the Professoriate,"* New Jersey: The Carnegie Foundation for the Advancement of Teaching.

Burns, J.M. (1978), *"Leadership,"* New York: Harper and Row.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Byrne, B.M. (2001), *"Structural Equation Modeling with AMOS: Basic Concepts, Applications and Programming,"* Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Cheng, M.-Y., Ho, J.S.-Y. and Lau, P.M. (2009), "Knowledge sharing in academic institutions: A study of multimedia nniversity Malaysia." *Electronic Journal of Knowledge Management*, Vol. 7 No. 3, pp.313–324.

Darroch, J. and McNaughton, R. (2003), "Beyond market orientation: The adoption of knowledge management practices and the innovativeness of New Zealand firms", *European Journal of Marketing*, Vol. 37 No. 3, pp.572–594.

Davenport, T. and Hansen, M. (1999), "Knowledge management at Andersen consulting" ,*Harvard Business School Case Study*,No.9-499-032

Dubinsky, A.J. et al. (1995), "Transformational leadership: An initial investigation in sales management." *The Journal of Personal Selling and Sales Management*, Vol. 15 No. 2, pp.17–31.

Emery, C.R. and Barker, K.J. (2007), "The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel", *Journal of Organizational Culture, Communications and Conflict*, Vol. 11 No. 1, pp.77–90.

Fathi, N.M., Eze, U.C. & Goh, G.G.G., 2011. "Key determinants of knowledge sharing in an electronics manufacturing firm in Malaysia", *Library Review*, Vol. 60 No. 1, pp.53–67.

Fullwood, R., Rowley, J. and Delbridge, R. (2013) "Knowledge sharing amongst academics in UK universities", *Journal of Knowledge Management*, 17(1), pp.123–136.

Guechtouli, W., Rouchier, J. & Orillard, M., 2013. "Structuring knowledge transfer from experts to newcomers." *Journal of Knowledge Management*, 17(1), pp.47–68.

Hair, J.F. et al., 2010. *"Multivariate Data Analysis: A Global Perspective"* 7th ed., London: Pearson.

Hashim, R.A., 2009. *Perceived leadership behaviors and commitment to service quality among academic staff: The mediating influence of job satisfaction*. Ph.D thesis, Universiti Utara Malaysia, Malaysia.

Horwitch, M. & Armacost, R., 2002. "Helping knowledge management be all it can be." *Journal of Business Strategy*, 23(3), pp.26–31.

Janabi, S.A. & Urban, J.E., 2011. "Strategic plan for enhancing higher education computing Urban degree programs in Iraq." In *Global Engineering Education Conference (EDUCON), Amman, Jordan, April4-6*

Kantabutra, S. & Rungruang, P., 2013. "Perceived vision-based leadership effects on staff satisfaction and commitment at a Thai energy provider." *Asia-Pacific Journal of Business Administration*, 5(2), pp.157–178.

Kidwell, J.J., Vander Linde, K. & Johnson, S.L., 2000. "Applying corporate knowledge management practices in higher education." *Educause quarterly*, 23(4), pp.28–33.

Kline, R.B., 2011. *"Principles and Practice of Structural Equation Modeling"* 3rd ed., New York: The Guilford Press.

Lakshman, C., 2007. "Organizational knowledge leadership: A grounded theory approach." *Leadership & Organization Development Journal*, 28(1), pp.51–75.

Lawson, S., 2003. *"Examining the relationship between organizational culture and knowledge management."* Nova Southeastern University.

Merat, A. & Bo, D., 2012. "Strategic Analysis of Knowledge Firms: The links between Knowledge Management and Leadership." *Journal of Knowledge Management*, 17(1), pp.3–15.

Mihir, P., 2001. Knowledge management framework for high-tech research and development. *Engineering Management Journal*, 13(3), pp.27–33.

Mills, A.M. & Smith, T.A., 2011. "Knowledge management and organizational performance: A decomposed view." *Journal of Knowledge Management*, 15(1), pp.156–171.

Ministry of Higher Education and Scientific Research, 2012. *"National Strategic Plan of Iraqi Higher Education 2009-2013,"* Available at: http://www.mohesr.gov.iq/PageViewer.aspx?id=4.

Nguyen, H.N. & Mohamed, S., 2011. "Leadership behaviors, organizational culture and knowledge management practices: an empirical investigation." *Journal of Management Development*, 30(2), pp.206–221.

Niles, G.P., 1997. *"A comparative study of leadership behaviors in university settings."* Unpublished Doctoral Thesis: University of Rochester, New York, United States.

Nordin, N., 2011. "The influence of emotional intelligence, leadership behaviour and organizational commitment on organizational readiness for change in higher learning institution." In *The 2nd International Conference on Education and Educational Psychology, 29*. pp. 129–138.

Nunnally, I.C., 1978. *"Psychometric methods"* 2nd ed., New York: McGraw-Hill Series.

Omona, W., van der Weide, T. & Lubega, J., 2010. "Using ICT to enhance Knowledge Management in higher education: A conceptual framework and research agenda." *International Journal of Education and Development using ICT*, 6(4), pp.83–101.

Parker, M., 2011. *"Exploring tacit knowledge transfer: How community college leaders ensure institutional memory preservation."* Unpublished Doctoral Thesis, Northcentral University: US.

Polities, J., 2001. "The relationship of various leadership behaviors to knowledge management." *Leadership & Organization Development Journal*, 22(8), pp.354–364.

Politis, J.D., 2002. "Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: the consequences for performance." *Leadership & Organization Development Journal*, 23(4), pp.186–197.

Rajalakshmi, S. & Wahidabanu, R.S.D., 2011. "Sharing and capturing tacit knowledge in higher education—the info-cash." *International Journal of Computer Theory and Engineering*, 3(3), pp.365–368.

Sewkarran, J., 2008. *"Exploring the relationship between knowledge sharing and employee performance."* Unpublished Doctoral Thesis, Capella University: US.

Ssesanga, K. & Garrett, R.M., 2005. "Job satisfaction of university academics: Perspectives from Uganda."*Higher Education*,50(1), pp.33–56

Stashevsky, S. & Koslowsky, M., 2006. "Leadership team cohesiveness and team performance."*International Journal of Manpower*27(1),pp63–74

Suzana, R.K.R., 2010. The relationship of leadership challenges, corporate strategies, knowledge management and information technology investment among Institutions of higher learning in Malaysia. In *Computer Engineering and Technology (ICCET), 2010 2nd International Conference, Faculty of Office Management and Universiti Teknologi MARA on Vol. 7, 16-18 April*. IEEE, pp. V7–746 – V7–754.

Swanson, R.G. & Johnson, D.A., 1975. "Relation between peer perception of leader behavior and instructor-pilot performance." *Journal of Applied Psychology*, 60(2), pp.198–200.

Taher, M. & Amain, N.M., 2007. "The realties and prospects of higher education in Kurdistan region in the eyes of the teaching staff." In *Education, International Conference on Higher, 7 August, Erbil. Iraq*.

Tang, T.L.-P. & Chamberlain, M., 1997. "Attitudes toward research and teaching: Differences between administrators and faculty members." *Journal of Higher Education*, 68(2), pp.212–227.

Tanriverdi, H. & Venkatraman, N., 2005. "Knowledge relatedness and the performance of multibusiness firms." *Strategic Management Journal*, 26(2), pp.97–119.

UNESCO, 2003. *"Situation analysis of education in Iraq,"* United Nations Educational Scientific and Cultural Organization, Division of Educational Policies.

UNESCO, 2008. "Stop jeopardizing the future of Iraq." In *International Conference on the Right to Education in Crisis-Affected Countries. Paris: UNESCO Headquarters, UN. Iraq-HEOC.*

Walee, A.I., Muhmoud, L.A. & Ibrahim, S.A., 2007. "The role of knowledge management operation in developing the innovation behavior." In *International Conference on Higher Education, 7 August, Erbil, Iraq, 2*. pp. 32–47.

Xue, Y., Bradley, J. & Liang, H., 2011. "Team climate, empowering leadership, and knowledge sharing." *Journal of knowledge management*, 15(2), pp.299–312.

Yang, J.-T., 2007. "Knowledge sharing: Investigating appropriate leadership roles and collaborative culture." *Tourism Management*, 28(2), pp.530–543.

Yeh, Y.M.C., 2005. "The implementation of knowledge management system in Taiwan's higher education. *Journal of College Teaching & Learning*, 2(9), pp.35–42.

مجلة الغري للعلوم الاقتصادية والادارية

مجلد (20) (عدد خاص) 2024

وقائع المؤتمر العلمي السابع لكلية الادرة والاقتصاد (تكامل العلوم الإدارية والاقتصادية في ظل التحول الرقمي لنماذج الاعمال وتحديات الابتكار)

18 نيسان 2024

Yuen, T.J. & Majid, M.S., 2007. "Knowledge-sharing patterns of undergraduate students in Singapore." *Library Review*, 56(6), pp.485–494.

Zack, M., McKeen, J. & Singh, S., 2009. "Knowledge management and organizational performance: An exploratory analysis." *Journal of Knowledge Management*, 13(6), pp.392–409.

Zheng, W., Yang, B. & McLean, G.N., 2010. "Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management." *Journal of Business Research*,63(7), pp.763–771

Zwain, A.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*, 2(6), pp.441–455.