



Knowledge Sharing Behavior in the Curricula of United Arab Emirates Universities and Educational Organizations

Hani Yousef Jarrah

Al Ain University, United Arab Emirates, yousefjarrah1984@gmail.com,
hani.jarrah@aau.ac.ae

Mohammad Salman Alkhazaleh

Dr., Al Ain University, United Arab Emirates, mohammad.alkhazaleh@aau.ac.ae

Knowledge management is classified as one of the basic means that enable university administration to achieve development and change excellently. Thus, it is important to pay particular attention to the quality of knowledge management at the university. This study aimed to identify the knowledge sharing behavior among United Arab Emirates educational organizations and the factors affecting the knowledge sharing. The current study was based on a descriptive approach. The study sample consisted of 356 university professors. The results showed that the assessment of the teaching staff at nature of the knowledge sharing came to a medium level, and factors affecting the knowledge sharing among organizations are weak planning to enrich the curriculum, and lack of confidence among participants in the knowledge exchange process. For the experience variable, the value of F is 2.76 with a statistical significance 0.06. According to scientific level variable, the value of F is 0.93 with a statistical 0.43, where the value of (F) of the specialization variable is 0.36 with a statistical significance 0.78. The conclusion of this research was there were no statistically significant differences in the behavior. Both internal and external factors influence knowledge sharing were also defined.

Keywords: curriculum, educational organizations, knowledge sharing behavior, universities, knowledge management

INTRODUCTION

The knowledge is considered as an important economic commodity and primary factor that helps in the advancement of the state economy (Aminah et al., 2018; Bernstein, 2018; Luo & Bu, 2016; Young, 2018). As a result of the rapid developments, it has become a stand-alone specialization in our time (Emelyanova, Teplyakova & Efimova, 2019). The knowledge had a great attention since it is a crucial provider especially in the

Citation: Jarrah, H. Y., & Alkhazaleh, M. S. (2020). Knowledge Sharing Behavior in the Curricula of United Arab Emirates Universities and Educational Organizations. *International Journal of Instruction*, 13(3), 1-16. <https://doi.org/10.29333/iji.2020.1331a>

organizational context (Ngugi & Goosen, 2018). Moreover, it has become a vital supplier such as Information and Communication Technology, which is useful in determining the success of the organization and create a sustainable competitive feature (Xuexin & Danzi, 2017). Accordingly, most of the organizations such as hospitals have perceived the importance of the effective and efficient management of knowledge (Fitzgerald et al., 2016). Thus, job pressure, lack of practice-related knowledge and poor rapport with managers can be regarded as the most common occupational stressors in such institutions (Alenezi, Aboshaiqah & Baker, 2018).

Typically, six knowledge assets in an organisation can be considered (Gunjal, 2019). The first one is stakeholder relationships. The second part is human resources, including skills, competence, motivation, etc. The third one is physical infrastructure. The next is culture, which includes organisational values, employee networking, and management philosophy. The fifth part is traditional practices and routines. The last one is intellectual property.

Knowledge can be defined as a contextual information that can be used and applied as facts, concepts, rules, principles, thoughts, judgments, intuitions and feelings (Gobet, 2018). Additionally, knowledge has different types including the organizational routines and procedural knowledge, general and specific, individual and organizational knowledge as well as the most distinctive the explicit and implicit, where scientists consider that the implicit transformation to the explicit as the primary goal of knowledge management. The main objectives of knowledge management consist of being able to attain the innovative development as well as relevant competitive advantages.

Since the curricula is the main central point of the educational process as well the basis for any educational reform, it ranked firstly as a primary component of the pedagogical and educational system (Holmes & McLean, 2018). In addition, curriculum provides factors of efficiency and strength and its outputs are judged in terms of efficiency and effectiveness. Therefore, the whole educational subsystems such as the teacher training and the school activities must be related to the curriculum and its requirements as well achieve its objectives. For example, one of the key roles of teacher is to take decisions about the entire aspects of curriculum, as curriculum itself is not static but dynamic. Curriculum improvement should be carried out under the umbrella of its organizational framework and include logical, mental, individual, societal and physical development issues (Blinov et al., 2019; Mahmood & Aziz, 2018).

With the development of technology and communication networks and their facilitation to exchange knowledge and information which leads to allowing organizations, universities and institutions to share knowledge and exchange experiences, where knowledge sharing is a key factor in the sustainability of organizations (Madon & Krishna, 2018). Knowledge sharing is designed to manage processes within organizations and universities in order to transfer the appropriate knowledge to the targeted person, as well as facilitate the decision-making process (Paulin & Suneson, 2015). This concept was considered, because external knowledge sharing and knowledge leakage often pose a strategic confusion when educational organisations conduct innovation activities (Ritala et al., 2015). This research was conducted to clarify

the knowledge sharing reality among 65 United Arab Emirates universities and educational organizations and to identify the nature of knowledge sharing and the factors influencing it.

Since the universities and their educational programs and research centers are a source of knowledge and ideas initiation, this study is conducted for its importance at dealing with a new topic related to such. Universities adopt evolution, change and innovation as a basic approach in planning their future programs. This study contributes to the improvement of educational management quality as well as the activating knowledge management at the university.

LITERATURE REVIEW

Knowledge Sharing

Knowledge sharing among the organization's member is a mean of achieving success for the organization. Achieving the best result of the organization's performance requires an appropriate knowledge of the application.

Social communication is one of the key success factors of any knowledge management, especially the exchange of knowledge among individuals that is linked to the willingness of individuals to share their knowledge (Pivec & Maček, 2019). However, the effective knowledge sharing depends on the individuals' sharing behaviors. The lack of knowledge sharing in organizations has a negative impact on knowledge management, which is a major constraint

Knowledge sharing is one of the substantial knowledge management activities, which ensures the success of organizations and supports creativity (Al-Jamal, 2013). Additionally, knowledge sharing is an essential part of permanent learning organizations since it supports collaboration and reuse of individuals' knowledge through information technology and instruments such as document management system, work groups and databases that are considered knowledge sharing system historically. Which must be integrated with the additions of individuals and teams who are learning this system, and knowledge sharing requires essential stuffs such as collaborative environment, training and education (Ivanova, Vinogradova & Zadadaev, 2019).

According to the characteristics of the teaching staff working in Jordanian universities and the characteristics of IT infrastructure in them (Al-Lozi, Almomani & Al-Hawary, 2018) and based on the analytical descriptive approach (Rao, Suresh & Hegde, 2018), the study achieved its aim at identifying the effect of applying the knowledge management concept in quality assurance in private Jordanian universities. A questionnaire was used as an instrument for collecting data from the sample of the study represented by the faculty members in 6 private universities.

The previous studies such as (Usman, 2015; Sriratanaviriyakul & El-Den, 2017; Al-Kurdi et al., 2018) examined the Aknowledge-sharing concept at universities and institutions of higher education. Some studies examined the behavior of knowledge sharing among students (Ghadirian et al., 2014), and among university staff (Chahal & Savita, 2014), and to encourage academics to share knowledge (Tan & Ramayah, 2014).

Other studies have revealed the roles of heads of academic departments in the application of knowledge management input and sharing knowledge in enterprise projects (Foote & Halawi, 2018; Gunasekera & Chong, 2018).

As for the current study, it is distinct from the previous studies in revealing the behavior of knowledge sharing in the curricula of universities and educational organizations in the United Arab Emirates and the factors influencing this behavior. There is a lack of studies examining the behavior of knowledge sharing in the curriculum - according to the researcher knowledge.

METHOD

Research design

The study used the descriptive approach in order to identify the behavior of knowledge sharing in the curricula of 65 United Arab Emirates universities. The study community is represented with the university professors of 65 United Arab Emirates universities during the second semester of the academic year 2018. This semester was chosen, because university workers had already finished basic administrative issues; they have studied the progress of students and in the first semester, and they could provide a comprehensive assessment of the administration processes.

Such variables as gender, experience, scientific level, specialization were included to the analysis, because this paradigm with the implementation of MANOVA4 (tests for the difference in means between two or more groups) allows to examine the overall degree of cognitive sharing behavior in the curriculum in complex.

Sample

The study sample consisted of 356 university professors in the United Arab Emirates, selected from the study community using simple random sampling. Table 1 shows the distribution of the sample members according to the study variables.

Table 1
Distribution of Sample Members According to Variables

Variable	Category	Frequency	Percentage
Gender	Male	206	57.9
	Female	150	42.1
	Sum:	356	100.0
Experience	Less than 5 years	81	22.8
	From 5-10 years	119	33.4
	More than 10 years	156	43.8
	Sum:	356	100.0
Educational Degree	Professor	55	15.4
	Co- Professor	107	30.1
	Assistant Professor	136	38.2
	Sum:	58	16.3
Major	Teacher	356	100.0
	Arts	67	18.8
	Sciences	78	21.9
	education	132	37.1
	Other	79	22.2
	Sum:	356	100.0

Regarding the gender variable, the number of males 206 with a percentage of 57.9%, while the number of females 150 with a percentage of 42.1%. Regarding the experience variable, the highest frequency is more than 10 years was 156 with a percentage of 43.8%. Then the group 5-10 years at a repetition rate of 119 and by percentage 33.4%. The group less than 5 years was repeated at 81 and by percentage 22.8%. The frequency of class professor rate 55 with a percentage 15.4%, the rate of repetition of associate professor group was 107 with a percentage of 30.1%, and the repetition of the category of assistant professor with the rate of 136 and percentage 38.2%, and then the teacher group rate was 58 with a of percentage 16.3%.

Regarding the specialization variable, the highest frequency of education rate 132 and percentage 37.1%, then came the class other rate of recurrence rate 79 and percentage 22.2%. While the frequency of class (science) rate 78 and percentage 21.9. Finally, the class frequency of literature rate 67 and percentage 18.8%.

Validity

To ascertain the validity of the study instrument (questionnaire), it was presented to 8 experienced and competent experts in the field of curricula and teaching of faculty members in United Arab Emirates universities. They had to decide if the degree of language for the paragraphs of the questionnaire is appropriate and the paragraphs are fully adequate and perform deletion, addition or modification. The required amendments have been made under the observations and suggestions of experts and based on the consensus of the majority of experts, and finally the questionnaire was issued in its final form. The number of experts was considered appropriate in view of the number of

points in the questionnaire and the number of respondents as well as the need to involve only such experts who have the required competence.

Reliability

The study was applied twice within two weeks in order to verify the stability of the study instrument on a sample of 356 university professors in the United Arab Emirates selected from outside the original sample. Pearson correlation coefficient was calculated between the two applications to extract the stability of the return. The stability equation of the instrument Cronbach Alpha was applied to the study scale, and Table 2 shows this

Table 2
Alpha-Cronbach Coefficients of the Study Scale

No.	Measure	No. of items	Alpha-Cronbach	test	Reliability
1	Knowledge Sharing behavior	21	0.85	0.84	High
2	Knowledge Sharing Factors	19	0.87	0.83	High

Table 2 shows that the Cronbach alpha coefficients ranged between 0.85-0.87, the highest of the "knowledge sharing factors" measure, and the lowest "knowledge sharing behavior" measure, which are high coefficients and indicate a high degree of stability of the study scale. As for the test R. test results, they ranged between 0.83 - 0.84, the most prominent of which were "knowledge sharing behavior" and the lowest "factors affecting knowledge sharing", which are high stability coefficients for the purposes of applying the study.

Questionnaire Correction

The questionnaire is consisted of 40 paragraphs for complex assessment of respondents' opinion on examined problems and user friendliness when filling out the form. The researcher used the Likert scale for the fifth grade in order to measure the opinions of the members of the study sample and to give the grades 1-5 based on the degree of approval for all the paragraphs of the questionnaire, as follows: strongly agree is given 5, agree is given 4, neutral is given 3, not agree is given 2, and not strongly agree is given 1.

The following staging was given to judge the five-step mean as follows (see Table 3).

Table 3
Grade Scale of Knowledge Sharing Behavior

Means	Grade
0-2.33	weak
2.34-3.66	average
3.66 and more	high

Statistical Processing

To answer the study questions, some statistical treatments were used through the Statistical Package Program (SPSS). Repetition and percentages were applied to describe the personal characteristics of the sample members of the study. The means and

the standard deviations of the responses of the study sample members on all areas of the study instrument were defined. Way MANOVA4 analysis was used to detect differences according to different variables: gender, experience, scientific rank, and specialization. The data obtained were summarized using Microsoft Excel program.

Thy Study Limits:

The current study was restricted to United Arab Emirates university professors and 65 United Arab Emirates universities only. The study was conducted within the second semester of the academic year 2018. This period was chosen, because there were many organizational issues in the beginning of the academic year; the curriculum was not stable.

FINDINGS AND DISCUSSIONS

This section presents the results of the study aimed at identifying the behavior of knowledge sharing in the curricula of United Arab Emirates universities and educational organizations. The results will be presented based on the study questions.

Results related to answering the first question: What is the nature of the behavior of knowledge sharing among universities and educational organizations from the point of view of faculty members?

To answer this question, means and standard deviations were calculated for each paragraph of the scale and the scale as a whole.

First: the level of knowledge sharing behavior

Results showed (see Table 4) that the means of the paragraphs ranged from 3.234.00 and paragraph 20 was the highest, which stated "the university cooperates with foreign educational organizations in the process of knowledge sharing in order to enrich the university curricula". Paragraph 3 stated that "the training courses of individuals with experience and competence in the process of sharing knowledge could be used for the development of curriculum methods", with an average of 3.95 and a high degree. As for paragraph 11 which stated "training courses are used by individuals with experience and competence in the process of knowledge exchange to develop curriculum methods", with an average of 3.95 and high degree. Finally, paragraph 19, which stated that "the results of workshops and seminars in the process of knowledge sharing to enrich the curriculum" with an average of 3.23 and intermediate grade. The general means of the scale "Level of knowledge sharing behavior" 3.63 and with an intermediate level.

This may be a result of establishment a knowledge-based society, where it is the goal of countries that adopt comprehensive development strategies across government or national economy, as well as civil society organizations. In this endeavor, it has a national option that provides opportunities for investment of scientific and technological developments to achieve its legitimate interests. The process of sharing knowledge must be obtained from various sources (experts, specialists and scientific databases such as Scopus), using reference means, conferences and workshops, experts, periodicals, publications, e-mail, and self-learning. In addition, knowledge sharing among countries

to develop curricula requires using modern technological means in the process of knowledge sharing, to strengthen the curricula, and benefit from internal and external learning centers and training programs in the exchange of knowledge to improve the curriculum and the use of experts specialized in the process of knowledge sharing to enrich the university curriculum.

Second: factors affecting knowledge sharing

Table 4

Means and Standard Deviations of the "Factors Affecting Knowledge Sharing" Scales and the Scale as a Whole

No.	Paragraph	Means	SD	Rank	Degree
1	Lack of cooperation of some educational institutions in the knowledge sharing process to enhance university curricula	3.89	1.12	3	high
2	Lack of prior and adequate preparation for knowledge sharing to support university curricula	3.75	1.13	10	high
3	Lack of sufficient awareness of the importance of knowledge sharing and its effect on curriculum development	3.89	1.14	3	high
4	Weak planning in the knowledge sharing process to enrich the university curriculum	3.94	1.15	1	high
5	Lack of sufficient awareness of the importance of knowledge sharing	3.79	1.16	9	high
6	Human resource factors in knowledge sharing	3.70	1.18	14	high
7	The factor of time and accumulation of knowledge in the importance of knowledge sharing	3.82	1.15	8	high
8	The speed of changes and knowledge growth in the sharing process	3.85	1.18	6	high
9	Lack of specialized committees in the university curricula	3.71	1.19	13	high
10	Lack of excellent competencies in knowledge sharing	3.61	1.27	5	high
11	Absence of incentives to follow up knowledge sharing process to support the university curricula	3.75	1.23	10	high
12	Trying to install the curriculum for a relatively long time	3.58	1.28	18	intermediate
13	Lack of conviction in the usefulness and effectiveness of knowledge sharing and its importance in curriculum development	3.57	1.23	19	intermediate
14	Differences in languages among participants in knowledge sharing process	3.63	1.26	17	intermediate
15	Lack of confidence among participants in the knowledge sharing process	3.91	1.20	2	high
16	Lack of an adequate time in the process of knowledge sharing and its importance in curriculum development	3.68	1.24	15	high
17	The weakness of the university's interest in providing sufficient information about the experienced staff members of different academic departments	3.85	1.21	6	high
18	Lack of material and technical resources available to the university and necessary to activate knowledge sharing	3.68	1.21	15	high
19	Some participants believed that knowledge possessed by a source of strength should not be shared	3.74	1.24	12	high
Total		3.77	0.45		

Note: Degree adapted from (Jolae et al., 2014)

Table 4 shows that the means of the factors affecting knowledge sharing ranged from 3.57 to 3.94, paragraph 4 which states "weak planning in the process of knowledge exchange to enrich the university curriculum" was the highest with an average of 3.94 and high degree

The reason for this is that knowledge sharing is influenced by internal factors such as appropriate systems that support the knowledge sharing internally and the opportunities to support and improve the curriculum. Whereas the external ones such as the contractual environment, legislation and rules governing knowledge sharing among different countries (Ritala et al., 2015). In addition, knowledge sharing is influenced by the degree of adequate awareness of the importance of knowledge sharing and by changes and cognitive growth in the process of knowledge sharing – 3.57. Thus, if an employee is described by colleagues as hard to work with, a knowledge hoarder, they are referred to training to help them overcome these issues (McDermott & O'dell, 2001).

It is important to consider such factor as difference in languages among participants in knowledge sharing process - 3.63. Many scholars highlighted the importance of cross-cultural consideration in cross-border knowledge sharing (Li, 2010). Obstacles related to language barriers have little relevance on a domestic scale but are certainly a factor that cannot be ignored by universities that rely on sharing practices between international educational organizations (Riege, 2005).

Therefore, there should be sufficient knowledge of the importance of sharing knowledge and its support on curriculum development, and that there is a plan of the knowledge exchange process to improve the university curriculum.

The result of the study are consistent with the result of Tan & Ramayah (2014), which shows that internal stimuli are more effective than external ones. This suggests that academics are more influenced by internal stimuli (schedule, testing system, learning environment, learning facilities and technologies) than by external stimuli (family problems, financial problems, socio-psychological environment) (Hine, Pregelj & McManus, 2018). The results also provided an indication of the determinants of enhancing the intention to share knowledge among academics in higher education institutions through external stimuli.

It also agrees with the result of the Chahal & Savita (2014) study, which shows that the university can empower its employees more by allocating them to some of the most challenging jobs, where the most experienced staff are always willing to share knowledge.

Results related to the third question:

Does the nature of the behavior of knowledge sharing between universities and educational organizations differ from the point of view of faculty members according to the variables of gender, experience, scientific rank, and specialization? The arithmetical averages and standard deviations of the level of knowledge-sharing behavior by sex variables, experience, grade, specialization, table 4, and IV-MANOVA4 were calculated

on the overall degree of cognitive sharing behavior in the curriculum. The differences between sex variables, experience, scientific rank, specialization are shown in table 5.

Table 5
Means and Standard Deviations of Knowledge Sharing Behavior in the Curricula According to Gender, Experience, Scientific Level, Specialization Variables

Measure	Variable	Category	means	SD	
The level of knowledge sharing behavior	Gender	Male	3.63	0.39	
		Female	3.62	0.38	
	Experience	From 5-10 years	3.58	0.36	
		More than 10 years	3.60	0.37	
		Educational Rank	Professor	3.68	0.41
			Co-professor	3.65	0.37
	Assistant professor		3.65	0.39	
	Specialization	Teacher	3.62	0.39	
		Arts	3.61	0.39	
		Sciences	3.55	0.38	
		Others	3.69	0.34	
			3.62	0.47	

Table 5 shows that there are outward differences among the means of the knowledge sharing behavior in the curricula of United Arab Emirates universities and educational organizations according to gender, experience, scientific level, and specialization variables. The results of variance analysis WAY MANOVA4 regarding the statistical significance of these differences are presented in Table 6.

Table 6
Results of Multivariate Analysis MANOVA to Detect Differences in Knowledge Sharing Behavior in the Curricula of United Arab Emirates Universities and Educational Organizations According to Gender, Experience, Scientific Level and Specialization

Variable	Sum of squares	df	Squares average	F value	significance
Gender	0.04	1	0.04	0.28	0.60
Experience	0.54	2	0.27	1.81	0.17
Educational Rank	0.06	3	0.02	0.14	0.94
Specialization	0.70	3	0.24	1.58	0.19
The Error	51.34	346	0.15		
Total	52.82	355			

These results could be with a reason of that members of the study sample realize the importance of sharing and searching knowledge in their locations across countries, so that individuals and groups share the knowledge in educational organizations. Additionally, knowledge generation process does not develop the curriculum completely if this knowledge is not shared with others and enable them to use it without overloading the state. The results of the study agree with the results of Audi (2010) study, which show that there are no statistically significant differences in the reality of knowledge management in Pakistan universities due to gender variables and years of experience.

Results related to the question 4:

Does the level of factors influencing the sharing of knowledge among universities and educational organizations vary according to gender, experience, scientific level, and specialization? The means and standard deviations of the factors affecting knowledge-sharing by gender variables, experience, scientific level, specialization were assessed. Table 6 shows this. 4-Way MANOVA were calculated on the total score of all factors in the curriculum according to the different gender variables, experience, scientific level and specialization, Table 7 shows.

Table 7

The Means Standard Deviations of Factors Affecting Knowledge Sharing According to Different Gender Variables, Experience, Scientific Level and Specialization

Variable	Category	Means	df
Gender	Male	3.81	0.44
	Female	3.72	0.45
	From 5-10 years	3.74	0.42
	More than 10 years	3.74	0.47
Educational Rank	Professor	3.70	0.44
	Co-professor	3.81	0.43
	Assistant professor	3.77	0.48
	Teacher	3.77	0.39
Specialization	Arts	3.78	0.47
	Sciences	3.77	0.51
	Education	3.80	0.42
	Others	3.73	0.40

Table 7 shows that there are apparent differences between the statistical averages of the knowledge sharing standard in United Arab Emirates universities and educational organizations according to gender, experience, scientific level, and specialization. To understand the statistical significance of these differences, 4-Way MANOVA, Table 8 shows this.

Table 8

Results of Multivariate Analysis MANOVA to Detect Differences in the Factors Affecting Knowledge Sharing among United Arab Emirates Universities and Educational Organizations According to Gender, Experience, Scientific Level, and Specialization Variables

Variable	Sum of squares	df	Square average	F value	Significance
Gender	0.48	1	0.48	2.42	0.12
Experience	1.09	2	0.54	2.76	0.06
Total	70.81	355			
Educational	0.55	3	0.18	0.93	0.43
Specialization	0.22	3	0.07	0.36	0.78
The Error	68.29	346	0.20		

Table 8 shows that there are no statistically significant differences in the factors affecting knowledge sharing according to the gender variable, where the value of F is

2.42 with a statistical significance 0.12. As for the experience variable, the value of F is 2.76 with a statistical significance 0.06. According to scientific level variable, the value of F is 0.93 with a statistical 0.43, where the value of F of the specialization variable is 0.36 with a statistical significance 0.78.

Studies show there are many factors that influence knowledge sharing, including incentives and rewards that encourage knowledge sharing (Yu, Lu & Liu, 2010). Since the development of technology and communication networks facilitates to exchange knowledge and information, modern technologies can be considered as factors that affect positively in the dormancy of knowledge, where communities help contact among them and facilitate knowledge sharing (Madon & Krishna, 2018).

The absence of statistically significant differences between the activity the results of the scientific studies achieved by the teaching staff and quality assurance in the private Jordanian universities (Al-Hayaly & Alnajjar, 2016), the existence of statistically significant differences between the provision of modern scientific inputs, participation in external databases (Kohoutek et al., 2018), library diversification and quality assurance in Jordanian universities (Agasisti et al., 2019; Al-Widyan & Qdais, 2018). And also, the absence of statistically significant differences between the incentives obtained by teaching staff members and the computerization of libraries in the university and the access of the Internet to the offices of faculty members and the achievement of quality assurance in the private Jordanian universities.

CONCLUSION

The purpose of this research was to examine the factors affecting the knowledge sharing. Experimental part has included the survey of 356 university professors. Results of this study show that there are no statistically significant differences in the reality of knowledge management in universities due to the gender variables and years of experience. Both internal and external factors influence knowledge sharing (appropriate systems that support the knowledge sharing internally and the opportunities to support and improve the curriculum; contractual environment, legislation and rules governing knowledge sharing among different countries) were defined. The authors recommend improving curriculum and prove it for a relatively long period to achieve the desired goals. It is important to take benefits from the results of workshops and seminars held for the process of knowledge sharing to enrich and develop curricula. Doubling the material and technical resources available to the university and necessary to activate knowledge sharing can be regarded as a way to improve the knowledge sharing.

REFERENCES

- Agasisti, T., Barbato, G., Dal Molin, M., & Turri, M. (2019). Internal quality assurance in universities: does NPM matter? *Studies in Higher Education, 44*(6), 960-977.
- Alenezi, A. M., Aboshaiqah, A., & Baker, O. (2018). Work-related stress among nursing staff working in government hospitals and primary health care centres. *International journal of nursing practice, 24*(5), e12676.
- Al-Hayaly, M. A. M., & Alnajjar, F. J. S. (2016). Knowledge management processes and their impact on organizational performance, the adoption balanced scorecard: the moderating role of quality assurance standards—an applied study on Private Jordanian Universities. *International Journal of Business and Management, 11*(6), 70.
- Al-Jamal, A. (2013). *The knowledge management*. Kafr Alsheikh: Dar Aleilm Wal'iman
- Al-Kurdi, O., El-Haddadeh, R., & Eldabi, T. (2018). Knowledge sharing in higher education institutions: a systematic review. *J of Ent Inf Management, 31*(2), 226-246.
- Al-Lozi, M. S., Almomani, R. Z. Q., & Al-Hawary, S. I. S. (2018). Talent management strategies as a critical success factor for effectiveness of human resources information systems in commercial banks working in Jordan. *Global J of Manag and Bus Research*.
- Al-Widyan, M. I., & Qdais, H. A. (2018). Quality assurance at Jordan university of science and technology (JUST): Integrating administrative quality and academic accreditation. In *the Future of Higher Education in the Middle East and Africa* (pp. 21-31). Springer, Cham.
- Aminah, M., Kusumah, Y. S., Suryadi, D., & Sumarmo, U. (2018). The effect of metacognitive teaching and mathematical prior knowledge on mathematical logical thinking ability and self-regulated learning. *International J of Instruction, 11*(3), 45-62.
- Bernstein, B. (2018). On the classification and framing of educational knowledge. In *Knowledge, education, and cultural change* (pp. 365-392). Routledge.
- Blinov, V. I., Sergeev, I. S., Esenina, E. Y., Kurteeva, L. N., & Osadcheva S. A. (2019). Management of regional training systems. *The Education and Science J, 21*(3), 50-76.
- Chahal, S. S., & Savita, S. (2014). Knowledge sharing among university teaching staff: a case study. *Maharshi Dayanand University, Rohtak, India, 21-32*.
- Emelyanova, I. N., Teplyakova, O. A., & Efimova, G. Z. (2019). Modern evaluation methods at various levels of education. *The Education and Science Journal, 21*(6), 9-28.
- Fitzgerald, H. E., Bruns, K., Sonka, S. T., Furco, A., & Swanson, L. (2016). The centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement, 20*(1), 223-244.

- Foote, A., & Halawi, L. A. (2018). Knowledge management models within information technology projects. *Journal of Computer Information Systems*, 58(1), 89-97.
- Ghadirian, H., Ayub, A. F. M., Silong, A. D., Bakar, K. B. A., & Zadeh, A. M. H. (2014). Knowledge sharing behaviour among students in learning environments: A review of literature. *Asian Social Science*, 10(4), 38-45.
- Gobet, F. (2018). Three views on expertise: Philosophical implications for rationality, knowledge, intuition and education. *Education and Expertise*, 58-74.
- Gunasekera, V. S., & Chong, S. C. (2018). Knowledge management critical success factors and project management performance outcomes in major construction organisations in Sri Lanka: A case study. *VINE Journal of Information and Knowledge Management Systems*, 48(4), 537-558.
- Gunjal, B. (2019). Knowledge management: Why do we need it for corporates. *Malaysian Journal of Library & Information Science*.
- Hine, D., Pregelj, L., & McManus, M. (2018). Commercializing university research to mitigate simultaneous change stimuli: An exemplar case from the Australian higher education sector. *World Scientific Reference on Innovation, The (In 4 Volumes)*.
- Holmes, B., & McLean, M. (2018). *The curriculum: A comparative perspective*. Routledge.
- Ivanova, E. V., Vinogradova, I. A., & Zadadaev, S. A. (2019). The study of school educational environment in the context of ensuring equal access to quality education. *The Education and science journal*, 21(7), 69-89.
- Jolae, A., Md Nor, K., Khani, N., & Md Yusoff, R. (2014). Factors affecting knowledge sharing intention among academic staff. *International Journal of Educational Management*, 28(4), 413-431.
- Kohoutek, J., Veiga, A., Rosa, M. J., & Sarrico, C. S. (2018). The European standards and guidelines for quality assurance in the European higher education area in Portugal and the Czech Republic: Between the worlds of neglect and dead letters? *Higher Education Policy*, 31(2), 201-224.
- Li, W. (2010). Virtual knowledge sharing in a cross-cultural context. *Journal of Knowledge Management*, 14(1), 38-50.
- Luo, Y., & Bu, J. (2016). How valuable is information and communication technology? A study of emerging economy enterprises. *Journal of World Business*, 51(2), 200-211.
- Madon, S., & Krishna, S. (2018). *The digital challenge: information technology in the development context: Information technology in the development context*. Routledge.

- Mahmood, M., & Aziz, S. (2018). Curriculum development process at secondary level: Analysis of existing situation in Pakistan and proposing a model. *JRSS*, 6(2).
- McDermott, R., & O'dell, C. (2001). Overcoming cultural barriers to sharing knowledge. *Journal of knowledge management*, 5(1), 76-85.
- Ngugi, J., & Goosen, L. (2018). Modelling course-design characteristics, self-regulated learning and the mediating effect of knowledge-sharing behavior as drivers of individual innovative behavior. *EURASIA J of Math, Sci and Tec Edu*, 14(8), 1575.
- Paulin, D., & Suneson, K. (2015). Knowledge transfer, knowledge sharing and knowledge barriers—three blurry terms in KM. *Leading Issues in Knowledge Management*, 2(2), 73.
- Pivec, M., & Maček, A. (2019). Employment background influence on social media usage in the field of European project management and communication. *Journal of Business Research*, 94, 280-289.
- Rao, H. S., Suresh, A., & Hegde, V. (2018). academic dashboard—descriptive analytical approach to analyze student admission using education data mining. In *Information and communication technology for sustainable development* (pp. 423-432). Springer, Singapore.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of knowledge management*, 9(3), 18-35.
- Ritala, P., Olander, H., Michailova, S., & Husted, K. (2015). Knowledge sharing, knowledge leaking and relative innovation performance: An empirical study. *Technovation*, 35, 22-31.
- Sriratanaviriyakul, N. & El-Den, J. (2017). Motivational factors for knowledge sharing using pedagogical discussion cases: Students, educators, and environmental factors. *Procedia Computer Science*, 124, 287-299.
- Tan, C. N. L., & Ramayah, T. (2014). The role of motivators in improving knowledge-sharing among academics. *Information Research: An Int Elec J*, 19(1), 1-19.
- Usman, S. H. (2015). A survey on students' preference in knowledge sharing tools to support learning in higher education. *J of Advanced Management Sci*, 3(4), 350-353.
- Xuexin, H. E., & Danzi, Y. A. N. G. (2017). The Indian basic education curriculum reform in the new century and its enlightenment. *Journal of Teacher Education*, 5, 16.
- Young, N. A. (2018). Departing from the beaten path: international schools in China as a response to discrimination and academic failure in the Chinese educational system. *Comparative Education*, 54(2), 159-180.

Yu, T. K., Lu, L. C., & Liu, T. F. (2010). Exploring factors that influence knowledge sharing behavior via weblogs. *Computers in human behavior*, 26(1), 32-41.