

The Role of Knowledge Management in Achieving Organizational Loyalty Among Teachers of Basic Education Schools in North Al Batinah Governorate in The Sultanate of Oman from Their Point Of View

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Abstract

This study aimed at identifying the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view. For this aim the study utilized the descriptive analytical approach by means of the survey, after measuring its reliability and validity. The survey distributed among (374) male and female teachers. The study indicated that, the knowledge management dimension got a moderate results, moreover, there are no statistically significant differences at the function level ($\alpha \leq 0.05$), due to the variable of gender and educational qualification. While the results of the organizational loyalty dimension came at an average level. The main results that, there is a direct relationship between knowledge management and organizational loyalty. The researchers recommended that: the importance of expanding the concept of knowledge management processes in basic education schools, and recommended adopting the educational pioneering ideas that teachers possess and disseminating them in the educational fields for the knowledge exchange.

Keywords: *knowledge management, organizational loyalty, Oman.*

Introduction

There is no doubt that the success of institutions and their financial and moral progress lie in their ability to keep

abreast of the fast-paced changes to ensure their continuity in the light of the massive knowledge explosion of information and access to this information. Besides, the increasing use of information technology and communications is one of the most important factors in triggering the emergence of knowledge management. The challenge is no longer limited to finding information for institutions and their objectives. However, the challenge lies in how to utilize this information and transform it into knowledge which can be made use of in achieving the vision and objectives of institutions through finding various alternatives and options which can contribute to achieving educational objectives and providing decision-makers with various alternatives and options.

Although the science of knowledge management is new at the educational level, compared to other academic fields, there has been a growing interest in it and its use in various educational fields due to the great affluence of information. Al-Rashidi (2020) and Laila (2018) pointed out that educational institutions need knowledge management in order to achieve their objectives through interaction, sharing and refraining from using the old-fashioned mode which most educational environments suffer from. Knowledge management provides those who use it with a dynamic work mechanism and allowed them to learn better and more positively, which reflects on their performance at work as they also recognize the importance of acquiring and developing knowledge (Obeid, 2020).

It is clear that the employees who have profound loyalty to their institutions can cope with new digital developments because they are self-driven to initiative-taking, creativity and automatic integration to achieve the objectives of their

institutions through accepting the philosophy and objectives of their institutions (Al-Ghamdi, 2021). One of the consequences of the exceptional pandemic which struck the world and the complete lockdown which followed it was that it confused all investment sectors, especially the educational one. However, educational institutions and companies adapted to the pandemic and they rushed to activate the application of knowledge management and online work. It is well-known that teachers are the cornerstone of the educational process as they transmit and guide knowledge. They are also active players in the decision-making process to achieve more productivity and acquire knowledge and share it (Al-Salim, 2015).

It is also clear to researchers that knowledge management and its relationship with organizational loyalty depend to a great extent on the employees at these institutions, especially the educational ones. So, the more profound the employees' loyalty is, the more capable they are to adapt to the digital developments. Teachers usually develop self-driven desires for development, creativity and achievement in their schools. Thus, when teachers' aims merge with their schools' objectives, there emerges an active educational environment.

The problem of the study

In the past two decades, the world has witnessed a massive knowledge explosion which has impacted the educational institutions all over the world. As a result, there has been an accumulation of knowledge. Lack of sufficient experience and absence of good planning to take advantage of this knowledge have contributed to the

enormity of this problem. Part of this can be ascribed to the phenomenon of employees' disloyalty to their institutions as indicated by a study conducted by Al-Inezi and Elias (2018). Al-Nabi et al., (2019) emphasized that teachers' work satisfaction depends on knowledge management to a great extent. Al-Rashidi (2020) pointed out that the application of knowledge management at schools contributes to creating teachers' competitiveness for better development and more achievement. This was also stressed by Al-Rabie and Ibrahim (2020) in their study.

With the above-mentioned paragraphs in mind and based on the researchers' experience as they work in the educational field both at school and university levels, the researchers have sensed a weakness in the role of knowledge management in achieving organizational loyalty at public education schools. This can also be reflected in the absenteeism of some of those working in the educational field from training programs held in their schools or outside them. It can also be clear from the reluctance of some of them to deal positively with the knowledge processes in their institutions, whether the processes are related to attracting, spreading, dissimilating or applying knowledge. This has also been confirmed by a pilot study conducted by the researchers at the end of the academic year 2021/2022 which showed that knowledge management was not comprehended in an appropriate and desirable way so as to contribute significantly to teachers' competitiveness to make use of it with an eye to developing the educational process and raising it to the level of international competitiveness.

To further investigate and follow up the effect of knowledge management processes on achieving

organizational loyalty among teachers in the Sultanate of Oman and make some recommendations and suggestions to decision-makers in this field, this study was conducted and it aimed to:

Identify the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view.

Study questions

The study aims to identify the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view through answering the following main question:

What is the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?

This main question has two sub-questions which are:

- What is the level of loyalty for the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?
- Are there statistically significant differences ascribed to the variables of gender, academic qualifications and years of experience at the significance level ($\alpha \leq 0.05$) of the mean of the effect of applying knowledge management to the work loyalty of the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman?

Significance of the study

The significance of the study stems from two main aspects: scientific and practical. The scientific aspect derives its significance from the importance of the targeted sample which consists of male and female teachers who represent the most important component of the success of the educational process and the status of its continual development. Its significance also comes from learning about these teachers' loyalty, predicting their future behaviour towards their profession and identifying the level of their organizational loyalty which is the basis of the success of knowledge management as it has a great effect on improving students' learning levels. The practical aspect derives its significance from applying knowledge management and approving it as an administrative mode at basic education schools in North Al Batinah Governorate in the Sultanate of Oman through providing some practical suggestions which will hopefully be of help to the decision-makers at the Ministry of Education who will be briefed on the importance of applying knowledge management and its relationship with organizational loyalty which will eventually contribute to increasing the level of work satisfaction of those working in the educational field. This will reflect positively not only on the educational institutions but also on society at large.

Limitations of the study

- Time limitations: This study will be conducted in the second semester of the academic year 2022/2023.
- Place limitations: The study involves basic education schools in North Al Batinah Governorate.
- Human limitations: The study consists of teachers of basic education schools in North Al Batinah Governorate.

- Topic limitations: The study is limited to the topic of the role of knowledge management in organizational loyalty.

Study variables

- Independent variable: It is the role of knowledge management.
- Dependent variable: It is teachers' organizational loyalty.
- Demographic variables: These are gender, years of experience and academic qualifications.

Study terms

- Knowledge management: In this study, it is a precise system which can help spread knowledge through an organization at the individual or collective level, and it can improve work performance directly. It is expected to be acquired from institutional information at the right time. It can also provide the right candidates for the expected job (Al-Inezi, 2019). Procedurally, knowledge management is a methodical and comprehensive process carried out by teachers to coordinate organizational activities as per the acquisition of knowledge, creativity, storage, participation, development and reciprocity for individuals and groups who seek to achieve the main organizational objectives.
- Organizational loyalty: In this study, it is the values and objectives which employees at institutions represent and lead to their integration into their work environments through playing their organizational and work roles, showing their desires and preparation to do their best for their institutions (Ra'ouf & Keid, 2020). Procedurally, organizational loyalty means the feelings and emotions

shown by teachers through their loyalty at work and doing their best to achieve the objectives of the schools where they work.

- **Basic education schools:** In this study, they refer to a unified system to develop the educational system in the Sultanate of Oman. It starts from the first grade to the tenth grade and seeks to provide the basic needs such as skills, knowledge and information and aims to develop teachers' values and attitudes as per their knowledge desires and abilities (Educational Gate, 2020). Procedurally, basic education schools are public schools for the first stage of education, and they are called cycle one schools which start from the first grade to the fourth grade and cycle two schools which start from the fifth grade to the tenth grade.
- **North Al Batinah Governorate:** In this study, it is the coastal line between the sea and the mountain and includes six wilayats (Alsuwaig, Alkhaboura, Saham, Liwa and Shinas) (Media Gate, 2020). Procedurally, North Al Batinah Governorate is a governorate in the Sultanate of Oman in the north of Oman coast which extends from wilayat Alsuwaiq to wilayat Shinas.
- **Teachers' loyalty:** In this study, it expresses "the net effect of effort made by the individual and starts with tasks and his/her abilities and realization of his/her role. It also refers to the degree at which the individual's tasks are completed and achieved" (Salama, 2020). Hamza (2017) defined it as the employee's execution of his/her tasks and responsibilities assigned to him/her by the institution or party which he/she works at and which his/her career is related to. Procedurally, the concept of loyalty refers to the completion and achievement of the

tasks which comprise employees' work, and it reflects how this work is achieved or how the individual meets the work requirements. There is often an overlap between performance and effort. Effort refers to the level of energy exerted, whereas performance is based on measuring the outcomes achieved by the individual.

Theoretical framework of knowledge management

Importance of knowledge management

Institutions have been largely dependent on the continuation of renewing and developing the knowledge aspect of their work and have departed with the traditional routine which is based on instructions and rules and does not care about renewal and development. Knowledge is the intellectual capital of institutions. It can be implicit or explicit. So, to make use of knowledge, it should be managed well through generating, sharing and applying it.

Al-Inezi classified it into two kinds:

- Implicit knowledge which is based on personal experience, thinking rules, intuition and personal judgement.
- Explicit knowledge which is formal knowledge that cannot be coded, written and transferred to others.

Abu Afifa (2019) distinguished two kinds of knowledge when he stated that we know more than we can say. This is a clear indication of the difficulty of putting implicit knowledge in spoken words because it is regarded as the result of many elements, most important of which are:

- Data which are a number of unrelated facts presented and provided without any initial, previous judgements.

Data become information which is classified, revised, analyzed and put in a clear and intelligible framework.

- Information is there in fact to provide credible data. It is provided for specific purposes. After developing it, it can be promoted to the state of knowledge or used to compare and assess previous, specific results. It is also there for the purpose of communication or participation in a debate or discussion.
- Abilities: In addition to information, knowledge requires the ability to obtain information from acquired data to transform them into information which can be used and utilized. God gave some people the ability to think creatively and the ability to analyze and interpret information.
- Attitudes: As pointed out by Al-Rawashda (2019), attitudes are the most important thing as they are closely related to knowledge because they push the individual to think, analyze and take action. Therefore, attitudes are an essential element as they motivate classes, manage knowledge and create desires.

Processes of knowledge management

Abu Afifa's study (2019) indicated that the processes of knowledge management can be summarized as follows:

- Generating knowledge through sharing ideas and positive practices among individuals and groups to generate and invest an intellectual capital to identify problems, find new, creative solutions and maintain excellence and innovation in achievement.
- Storing knowledge. Institutions may lose knowledge easily when individuals leave, so knowledge should be preserved, sustained and retrieved when needed.

- Distributing knowledge: This can be done through exchanging and sharing ideas among the institution's employees to increase experience and skills and spread them among the employees.
- Applying knowledge: Institutions invest knowledge and execute it. Applying knowledge management contributes directly to raising the performance level of institutions and achieving their desired objectives. Institutions can also identify the kind of knowledge used in its work and applications. Then, the way of work can be identified and improved in order to achieve the objectives. Knowledge management should target fields which are strategically important. Work should also benefit from it, which means knowledge management strategies are connected with the main strategies of the institution (Sabrina & Ibn Hjouba, 2018). Applying knowledge means investing it. Obtaining it, storing it and sharing it are not enough. It is more important to apply knowledge in institutions as their success depends on the amount of applied knowledge and the gap between what people know and what they have applied. This means that knowledge is one of the most important criteria of assessment in this field.

Organizational loyalty and factors affecting it

The importance of organizational loyalty lies in institutions' employees accepting any change process inside these institutions which contributes to developing attitudes and behaviours and predicting creativity in institutions so that the values and aims of the employees are similar to those of the institution. This shows employees' work loyalty better and pushes them to make more effort to ensure the institution's continuity and

competitiveness with other institutions. Since the educational process is based on teachers' loyalty to achieve their institution's objectives, teachers should have organizational loyalty in the educational work which can be achieved only through applying knowledge management at their institutions. Therefore, the researchers seek to identify the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman.

There are plenty of factors which affect organizational loyalty. Some of the most important factors are the policies which ensure that the needs of the employees at the institution are met, hence ensuring their comfort, self-satisfaction and loyalty to their institution. In addition, learning about the objectives and organizational processes of the institution contributes to connecting the employees with their institution and their integration into it without taking into account any considerations or financial gains in return for any achievement, outcome or excellent performance of any specific work (Al-Nabi et al., 2019).

Previous studies

Arab studies

Al-Siyani and Mohsen (2021) conducted a study to measure the effect of the administrative processes of knowledge on the organizational creativity of private universities in Yemen. The researchers used the descriptive, analytical approach. They used a questionnaire as their data collection tool. The sample consisted of 60 university employees. Their study arrived at a number of findings which identified the effect of the administrative

processes of knowledge which are generating, storing, distributing and applying knowledge on organizational creativity.

Ra'ouf and Keid (2020) carried out a study which aimed at measuring the relationship between organizational loyalty and transformational leadership. Their study sample consisted of 300 male and female managers. The reserachers followed the descriptive, analytical and correlational approach, and they used a questionnaire as their data collection tool. The findings showed a strong relationship between transformational leadership and organizational loyalty.

Boskar's study (2019) aimed at identifying the effect of the quality of work on employees' organizational loyalty. The researcher used the descriptive approach. The study sample consisted of 64 employees. A questionnaire was used as the data collection tool. The findings showed no effect of the quality of work on employees' organizational loyalty.

Al-Jaraida and Al-Nabi (2019) did a study which aimed at investigating the degree of organizational loyalty and the degree of work satisfaction of basic education school principals. The researchers used the descriptive, analytical approach and used a questionnaire as the data collection tool. The sample consisted of 369 basic education school principals. The findings showed a high degree of organizational loyly and a fair degree of work satisfaction.

Al-Nasr and Muftah (2019) conducted a study which aimed at identifying the roles of knowledge management in improving the performance of the employees at the educational institutions. The researchers used the

descriptive, analytical approach. The sample consisted of all the heads of departments, the administrative sections and teaching faculty at Surman College of Science and Technology. The findings showed a correlation between knowledge management and organizational loyalty of the college. Generating and storing knowledge were greater than distributing and applying knowledge.

Al-Khalil and Mahriz (2019) carried out a study which aimed to identify the effect of applying knowledge management on the quality of educational services. The sample consisted of 196 employees at Tishreen University. The researchers used the descriptive approach. The findings showed that applying knowledge management in educational institutions contributes to developing the educational process.

Al-Inezi (2018) conducted a study which aimed to identify the role of the processes of knowledge management in developing and improving the quality of services provided by the institutes and colleges of technical education in Kuwait. The sample consisted of 100 employees. The researcher used the descriptive, analytical approach as it was the most suitable for his study. The findings showed a statistically significant relationship with a moral effect of the processes of knowledge management and the improvement of the services provided by the general colleges and institutes of technical education in Kuwait.

Ibrahim et al., (2018) conducted a study which aimed to explore the processes of knowledge management at middle schools in Kuwait. The researchers used the descriptive,

analytical approach. The findings revealed many obstacles to applying knowledge management at middle schools in Kuwait. Some of the obstacles were the domination of culture which limits the sharing of knowledge among institutions, lack of financial and moral support on the part of the higher leadership of knowledge management and lack of integration between the processes of knowledge management and the activities of organizational learning.

English studies

Habtoor et al., (2020) conducted a study which aimed at identifying the effect of the infrastructure on knowledge management to improve the educational process in Libiya. The infrastructure included the organizational culture, the organizational structure and technological equipment. The sample consisted of 612 employees in the educational sector. The researchers used the descriptive, analytical approach. The findings showed a morally significant relationship between knowledge management and the effectiveness of the infrastructure. The findings also showed that the institutions where employees practiced organizational loyalty contributed to increasing their competence compared to other institutions where employees did not practice organizational loyalty. According to the study, knowledge management and its use in organizational life were more effective and could achieve the objectives of those institutions.

Alias et al., (2018) carried out a study which aimed to explore the effect of knowledge management on employees' work satisfaction in Malaysia. The processes of knowledge management, creating and acquiring knowledge, sharing and keeping knowledge were

independent variables, while work satisfaction was a dependent variable. The findings showed the existence of work satisfaction through the application of knowledge management in the institutions. The study recommended doing more research on this topic to increase the understanding of the effect of knowledge management on employees' work satisfaction.

Abualoush et al., (2018) conducted a study which aimed at identifying the relationship between knowledge management, the infrastructure, the institutions' performance and the intellectual capital. The sample consisted of 134 participants, and the researchers used the descriptive, analytical approach. They used a questionnaire as the data collection tool for their study. The findings showed a positive relationship between the intellectual capital, the institution's performance and knowledge management. There was a negative relationship between the intellectual capital and the infrastructure of knowledge management. However, the findings showed no relationship between the infrastructure of knowledge management and the institution's performance.

Armaghan and Renaud (2017) conducted a study which aimed to identify the assessment of knowledge management in Iranian institutions. They also applied knowledge management in the institutions to identify the attitudes to sharing knowledge. The sample consisted of 104 male and female employees (teachers, principals and vice-principals) in the research organization in the Republic of Iran. The findings showed opposition and unacceptance of the application of knowledge management in the institutions, although the findings showed that the principals and their deputies would like to apply

knowledge management. The study recommended encouraging employees continually to use new teaching methods in addition to designing lessons in creative ways and with new ideas.

Hmazah et al., (2017) carried out a study which aimed to explore the relationship between organizational loyalty and knowledge management. The researchers used the descriptive approach. The sample consisted of 70 participants. A questionnaire was used to collect data. The questionnaire had two parts. The first part was related to knowledge management, and the second part was related to organizational loyalty. The findings showed a strong correlation between knowledge management and organizational loyalty. The study showed the effective role played by knowledge management in raising the performance efficacy in the company under investigation, and in the operational processes, customer satisfaction, learning and growth.

Celebý and Korumaz (2016) conducted a study which aimed at exploring the degree of teachers' organizational loyalty to Turkish schools in Istanbul. The researchers used the descriptive, analytical approach. A questionnaire was used to collect data. The sample consisted of 412 male and female teachers. The findings showed an increase in the level of teachers' organizational loyalty. The items of devotion, effort, follow-up, identity and acceptance all came at high levels.

Khan et al., (2015) carried out a study which aimed to explore the fields of teachers' organizational loyalty at Pakistani schools and the factors which affected it. The researchers followed the descriptive approach and used a

questionnaire to collect data for their study. The sample consisted of 218 male and female teachers. The findings showed three fields of teachers' organizational loyalty: reciprocal loyalty, relationship loyalty and ideological loyalty. The findings also showed a number of key factors which affected teachers' organizational loyalty which were enablement, organizational formation and participation.

Comments on the previous studies

After reviewing the previous studies, the researchers discovered that all the studies reviewed had a quantitative data collection tool which was a questionnaire. In addition, all the studies followed the descriptive, analytical approach, while they had different objectives. For example, Al-Siyani and Mohsen (2016) aimed at measuring the effect of the processes of knowledge management on organizational creativity in private universities in Yemen, while Ra'ouf and Keid (2020) aimed to measure the relationship between organizational loyalty and transformational leadership. However, Salama, Ishaq, Habtoor and Amin (2020) aimed to identify the effect of providing the infrastructure on knowledge management, while Boskar (2019) aimed to identify the quality of work on employees' organizational loyalty. Al-Jaraida and Al-Nabi (2019) aimed to examine the degree of organizational loyalty and the degree of work satisfaction of basic education principals. Muftah's study (2019) aimed to identify the roles of knowledge management in developing employees at educational institutions, while Al-Khalil and Mahriz (2019) aimed to identify the effect of applying knowledge management on the quality of educational services. Abualloush et al., (2018) aimed to explore the relationship between knowledge management, the

infrastructure, the institution's performance and the intellectual capital, whereas Hamzah et al., (2017) aimed to explore the relationship between organizational loyalty and knowledge management.

What distinguishes the present study from the previous studies is that it addresses the relationship between knowledge management and organizational loyalty among basic education teachers in North Al Batinah Governorate, and it made use of the previous studies in developing the data collection tool, selecting the study sample and enriching the literature. However, the present study is similar to the previous studies in that all the previous studies tackled organizational loyalty or knowledge management. The previous studies all agreed on the importance of investing the human element and the intellectual capital in knowledge management. They also emphasized that organizational loyalty contributed to developing institutions and maintained their continuity.

The present study also made use of the previous studies in identifying the problem of the study and the following main concepts: organizational loyalty and knowledge management. It also benefited from the use of knowledge management in educational institutions as an introduction to realizing organizational loyalty in these institutions. The current study also made use of the analysis and interpretation of the findings of the previous studies as well as making suggestions for achieving organizational loyalty at schools in the Sultanate of Oman in the light of knowledge management. The current study made use of the previous studies in selecting the appropriate approach which was the descriptive, analytical approach as it was the most convenient for such a study. The researchers also

made use of the previous studies in choosing the most suitable data collection tool and how to develop it which was the questionnaire, selecting the proper statistical methods, learning about how to identify the findings and finally making recommendations and suggestions.

The most important findings which the researchers arrived at from the previous studies are:

- Continual improvement and development due to possessing knowledge management
- The existence of a consistently appropriate and cooperative atmosphere between institutions and their employees
- Knowledge management gave training paramount importance and enabled its users and gave them the necessary authorization to do work as required
- Knowledge management, its improvement and flexibility in responding to its development reduced costs.

Methodology of the study

The researchers used the descriptive, analytical approach because it was the most suitable one for their study and the best for realizing the objectives of the study and answering its questions which were represented in learning about the relationship between knowledge management and organizational loyalty among basic education teachers in North Al Batinah Governorate. This would be achieved through collecting relevant data, analyzing them and processing them statistically to arrive at precise scientific findings which would contribute to interpreting the phenomenon correctly.

Study population

The study population included all male and female basic education teachers in North Al Batinah Governorate in the Sultante of Oman who were 11872. A simple random sample consisting of 374 male and female basic education teachers in North Al Batinah Governorate was selected (The National Center for Statistics and Information, 2022).

Study sample

A simple random sample consisting of 374 male and female basic education teachers in North Al Batinah Governorate was selected from the study population during the second semester of the academic year 2022/2023. An electronic questionnaire that could be analyzed and coded was distributed to the sample of the stuyay as per the variables of the study shown in Table 1 below.

Table 1
Distribution of the study sample as per the demographic variables

Variable	Category	Number
Gender	Male	124
	Female	250
	Total	374
Academic qualifications	BA	274
	Postgraduate degree	100
	Total	374
Years of experience	Less than 10	200
	More than 10	174
	Total	374

Study tool

The researchers used a questionnaire as the data collection tool. They divided the tool into three parts: the first part was related to demographic information, the second part was related to knowledge management and the

third part was related to organizational loyalty. The researchers made use of the theoretical framework and the previous studies such as Al-Rabie and Ibrahim (2020) and Obeid (2020) and to develop the questionnaire. The questionnaire included 58 statements divided into two parts; one for knowledge management and included five items: storing knowledge with 8 statements, diagnosing knowledge with 4 statements, applying knowledge with 6 statements, generating knowledge with 7 statements and distributing knowledge with 7 statements, and another part for organizational loyalty which included three fields: emotional loyalty with 11 statements, moral loyalty with 6 statements and continual loyalty with 9 statements. Likert's five-response scale was adopted to answer the statements of the questionnaire (strongly agree, agree, neutral, disagree and strongly disagree).

Validity of the data collection tool

To check the validity of the tool, seven reviewers reviewed it to ensure that the statements were clear and linguistically correct, that they would measure what they were designed to measure and that they were related to the topic of the study. The researchers implemented all comments of the reviewers. To measure the internal validity of the tool, Pearson correlation coefficient was used for each statement in the questionnaire.

Reliability of knowledge management measurement

Indicators of the reliability of the study construct were extracted using Pearson correlation coefficient for each statement of the item of knowledge management to ensure the reliability of the tool. The internal consistency coefficient was calculated for the statements of the item of

knowledge management using Alpha- Cronbach equation to measure the internal consistency of the responses of the sample individuals to the statements in the questionnaire while distributing the tool. Alpha – Cronbach value of the scale statements as a whole was 0.963 as shown in Table 2 below.

Table 2
Reliability values (Alpha-Cronbach) for all items of the study

Item	Number of statements	Reliability values (Alpha-Cronbach)
The whole questionnaire	32	0.963
Item 1	8	0.901
Item 2	4	0.797
Item 3	6	0.927
Item 4	7	0.909
Item 5	7	0.773

Table 2 shows the reliability values of Alph-Cronbach of the statements of the knowledge management measurement through the internal consistency method and Pearson correlation coefficient. The values ranged between 0.927 and 0.773, while Alpha-Cronbach value of the scale statements as a whole was 0.963 which is good for the purposes of the study at the significance level.

The answer to the study questions

The first question: What is the role of knowledge management in achieving oraganizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?

The findings of the study showed that the means ranged between 3.27 and 3.30. The finding on storing knowledge

was the highest with a mean of 3.30 and a standard deviation of .91978, while applying knowledge came last with a mean of 3.22 and a standard deviation of .94207. The mean of the processes of knowledge management for the school principals as a whole was 3.26. The means and the standard deviations of the estimates of the individuals of the sample for the statements were calculated separately. The findings can be ascribed to the fact that some basic education school principals found it difficult to apply knowledge management in their schools because the Ministry of Education has no clear strategy for knowledge management to apply in the basic education schools in North Al Batinah Governorate as per Table 3.

Table 3
Means and standard deviations of knowledge management

	Number	Mean	Standard Deviation	Rank	Level
Storing knowledge	373	3.3043	.91978	1	Fair
Diagnosing knowledge	373	3.2708	.94207	2	Fair
Applying knowledge	373	3.2221	1.03892	6	Fair
Generating knowledge	373	3.2478	.95868	5	Fair
Distributing knowledge	373	3.2551	.76001	4	Fair

First item: Storing knowledge

Table 4 below shows that the means ranged between 3.20 and 3.38 and the standard deviations ranged between 1.270 and 1.198. Statement 3 which says, “The school has systems to easily retrieve stored information” came in first with a mean of 3.38 and a standard deviation of 1.155,

while Statement 1 which says, “The school has an electronic infrastructure to store knowledge” came in last with a mean of 3.20 and a standard deviation of 1.270. The mean of the statements of storing knowledge as a whole was 3.30.

Table 4
Means and standard deviations of storing knowledge

	Number	Mean	Standard Deviation	Rank	Level
Q1	373	3.20	1.270	8	Fair
Q2	373	3.29	1.130	5	Fair
Q3	373	3.38	1.198	1	Fair
Q4	373	3.36	1.222	2	Fair
Q5	373	3.27	1.182	7	Fair
Q6	373	3.28	1.155	6	Fair
Q7	373	3.32	1.216	4	Fair
Q8	373	3.33	1.218	3	Fair

Second item: Diagnosing knowledge

Table 5 shows that the means ranged between 3.29 and 3.32. Statement 2 which says, “I reconsider my knowledge needs periodically as per the age developments” came in first with a mean of 3.32 and a standard deviation of 1.211, while Statement 3 which says, “I explore new knowledge from the available sources” came in last with a mean of 3.23 and a standard deviation of 1.219. The findings showed that the mean of diagnosing knowledge as a whole was 3.24 to a fair degree.

Table 5
Means and standard deviations of diagnosing knowledge

	Number	Mean	Standard Deviation	Rank	Level
A1	373	3.29	1.160	2	Fair
A2	373	3.32	1.211	1	Fair
A3	373	3.23	1.219	4	Fair
A4	373	3.24	1.191	3	Fair

Third item: Applying knowledge

Table 6 shows that the means and standard deviations of applying knowledge ranged between 3.27 and 3.17. Statement 3 which says, “I have the freedom to employ the knowledge I have in the educational process” came in first with a mean of 3.27 and a standard deviation of 1.211, while Statement 6 which says, “The school has clear mechanisms for the processes of knowledge management”. The findings showed that the mean of applying knowledge as a whole was 3.22 to a fair degree.

Table 6
Means and standard deviations of applying knowledge

	Number	Mean	Standard Deviation	Rank	Level
B1	373	3.25	1.206	2	Fair
B2	373	3.23	1.199	3	Fair
B3	373	3.27	1.211	1	Fair
B4	373	3.20	1.205	4	Fair
B5	373	3.21	1.229	5	Fair
B6	373	3.17	1.239	6	Fair

Fourth item: Distributing knowledge

The findings in Table 7 showed that the means of generating knowledge ranged between 3.20 and 3.28. The

statement “The school administration allocates a budget to encourage projects related to the processes of knowledge management” had the highest mean which was 3.28 with a standard deviation of 1.126 to a fair degree, while the statement “The school administration develops the culture of individual initiatives related to generating knowledge” had the lowest mean of 3.20 with a standard deviation of 1.231 to a fair degree. The findings showed that the mean of generating knowledge as a whole was 3.24 to a fair degree.

Table 7
Means and standard deviations of generating knowledge

	Number	Mean	Standard Deviation	Rank	Level
C1	373	3.21	1.267	5	Fair
C2	373	3.20	1.231	6	Fair
C3	373	3.27	1.158	2	Fair
C4	373	3.28	1.126	1	Fair
C5	373	3.27	1.181	2	Fair
C6	373	3.25	1.176	4	Fair
C7	373	3.26	1.205	3	Fair

Fifth item: Distributing knowledge

The findings in Table 8 showed that the means of distributing knowledge ranged between 3.31 and 3.10. Statements 4 and 7 which say respectively, “The school administration encourages experienced and competent teachers to transfer knowledge to those new to teaching” and “The school administration ensures to engage teachers in specialized scientific conferences” had the highest mean of 3.31, while Statement 6 which says, “The school has local internet to distribute knowledge” had the lowest mean of 3.10 to a fair degree. The findings showed that the mean

of distributing knowledge as a whole was 3.25 to a fair degree. The findings can mean that it is possible for teachers to cooperate with each other through exchanging ideas, attitudes and knowledge which they make use of in coming up with creative ideas in addition to the encouragement of the Ministry of Education to share knowledge and expertise with each other through various activities and the scientific publications issued by the ministry. The local community can also produce a lot of creative ideas and share them with the neighboring schools.

Table 8
Means and standard deviations of distributing knowledge

		Number	Mean	Standard Deviation	Rank
D1	373	3.23	1.204	3	Fair
D2	373	3.28	1.208	2	Fair
D3	373	3.28	1.201	2	Fair
D4	373	3.31	1.186	1	Fair
D5	373	3.28	1.218	2	Fair
D6	373	3.10	1.132	4	Fair
D7	373	3.31	1.011	1	Fair

The first sub-question: What is the level of loyalty for the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?

To answer the first sub-question, the researcher used means and standard deviations. Table 9 shows that the means and standard deviations of organizational loyalty ranged between 3.029 and 3.060. Emotional loyalty and continual loyalty had the highest mean of 3.060 with a standard deviation of .69275 to a fair degree, while moral loyalty had the lowest mean of 3.29 and a standard

deviation of .70906 to a fair degree. The findings showed that the mean of organizational loyalty as a whole was 3.052 to a fair degree.

Table 9
Means and standard deviations of organizational loyalty

	Number	Mean	Standard Deviation	Rank	Level
Emotional loyalty	373	3.0602	.69275	1	Fair
Moral loyalty	373	3.0299	.70906	2	Fair
Continual loyalty	373	3.0602	.69275	1	Fair

First field: Emotional loyalty

Table 10 shows that the means of emotional loyalty ranged between 3.29 and 2.86. Statement 2 which says, “I feel I belong to my school” came in first with a mean of 3.23 and a standard deviation of 1.089, while Statement 9 which says, “I support my students to achieve academic excellence” came in last with a mean of 2.86 and a standard deviation of .995. The findings showed the mean of emotional loyalty as a whole was 3.060 to a fair degree.

Table 10
Means and deviations of emotional loyalty

	Number	Mean	Standard Deviation	Rank	Level
E1	373	3.09	1.086	5	Fair
E2	373	3.23	1.089	1	Fair
E3	373	3.10	1.032	4	Fair
E4	373	3.05	1.110	6	Fair
E5	373	2.99	1.096	7	Fair
E6	373	3.14	1.000	3	Fair
E7	373	3.15	1.049	2	Fair
E8	373	2.95	1.029	8	Fair
E9	373	2.86	.995	9	Fair

Second field: Moral loyalty

Table 11 shows that the means of moral loyalty ranged between 3.31 and 2.88. Statement 5 which says, “I try to have a positive effect on society” came in first with a mean of 3.31 and a standard deviation of 1.006, while Statement 1 which says, “I protect the school’s property as though it were mine” came in last with a mean of 2,88 and a standard deviation of 1.022. The findings showed that the mean of moral loyalty as a whole was 3.029 to a fair degree.

Table 11
Means and standard deviations of moral loyalty

	Number	Mean	Standard Deviation	Rank	Level
F1	373	2.88	1.022	6	Fair
F2	373	2.90	1.024	5	Fair
F3	373	2.91	1.022	4	Fair
F4	373	3.10	1.132	2	Fair
F5	373	3.31	1.006	1	Fair
F6	373	3.07	1.069	3	Fair

Third field: Continual loyalty

Table 12 shows that the means of continual loyalty ranged between 3.23 and 2.85. Statement 1 which says, “I encourage my colleagues to participate in educational development programs” came in first with a mean of 3.23 and a standard deviation of 1.085, while Statement 9 which says, “I am sure that my work as a teacher is subject to institutional rules and regulations” came in last with a mean of 2.85 and a standard deviation of .999, while the mean of continual loyalty as a whole was 3.060 to a fair degree.

Table 12
Means and standard deviations of continual loyalty

	Number	Mean	Standard Deviation	Rank	Level
G1	373	3.09	1.086	5	Fair
G2	373	3.23	1.085	1	Fair
G3	373	3.10	1.032	4	Fair
G4	373	3.05	1.110	6	Fair
G5	373	2.98	1.100	7	Fair
G6	373	3.14	1.000	3	Fair
G7	373	3.15	1.049	2	Fair
G8	373	2.95	1.025	8	Fair
G9	373	2.85	.999	9	Fair

The second sub-question: Are there statistically significant differences ascribed to the variables of gender, academic qualifications and years of experience at ($\alpha \leq 0.05$) of the mean of the effect of applying knowledge management to the work loyalty of the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman?

Gender

T-test findings of two independent groups in the means of the application of knowledge management to basic education teachers in North Al Batinah Governorate in the Sultanate of Oman ascribed to the variable of gender.

Table 13 shows that the T-values of the independent groups in the means of the application of knowledge management to basic education teachers in North Al Batinah Governorate in the Sultanate of Oman ascribed to the variable of gender are in favor of female teachers. Storing knowledge had the highest mean which was 3.35, while applying knowledge had the lowest mean which was

3.150. These findings might mean that the female teachers look at their jobs as jobs which achieve their own ambitions and give them the desired status, unlike the male teachers who aim to achieve a higher academic and social status. This agrees with Al-Inezi’s study (2018) which sought to identify the role of the processes of knowledge management in developing and improving the quality of services offered by the institutes and colleges of applied education in Kuwait. The findings showed statistically significant differences, with a moral effect, of the processes of knowledge management to improve the quality of services offered by the institutes and colleges of applied education in Kuwait ascribed to the variable of gender in favor of female teachers to a high degree.

Table 13
Means and standard deviations of the variable of gender

Item	Gender	Number	Mean	Standard deviation	Freedom degrees	T-value	Significance level
Measurement of knowledge management processes	Female	233	3.3058	.80553	371	1.353	.177
	Male	140	3.1879	.82949			
Storing knowledge	Female	233	3.3541	.90148	371	1.350	.178
	Male	140	3.2214	.94692			
Diagnosing knowledge	Female	233	3.3326	.94481	371	1.639	.102
	Male	140	3.1679	.93177			
Applying knowledge	Female	233	3.2654	1.02777	371	1.039	.300
	Male	140	3.1500	1.05699			
Generating knowledge	Female	233	3.2992	.94360	371	1.337	.182
	Male	140	3.1622	.98068			
Distributing knowledge	Female	233	3.2765	.75965	371	.702	.483
	Male	140	3.2194	.76201			

Years of experience

T-test findings of two independent groups in the means of the application of knowledge management to basic education teachers in North Al Batinah Governorate in the

Sultanate of Oman ascribed to the variable of years of experience.

Table 14
Means and standard deviations of the variable of years of experience

Item	Years of experience	Number	Mean	Standard deviation	Freedom degrees	T-value	Significance level
Measurement of knowledge management processes	Less than 10 years	228	3.2533	.81901	371	-.245	.806
	10 years and more	145	3.2746	.81262			
Storing knowledge	Less than 10 years	228	3.3032	.87432	371	-.029	.977
	10 years and more	145	3.3060	.99018			
Diagnosing knowledge	Less than 10 years	228	3.2675	.98710	371	-.083	.934
	10 years and more	145	3.2759	.86989			
Applying knowledge	Less than 10 years	228	3.2251	1.05594	371	.072	.943
	10 years and more	145	3.2172	1.01519			
Generating knowledge	Less than 10 years	228	3.2431	.93959	371	-.118	.906
	10 years and more	145	3.2552	.99120			
Distributing knowledge	Less than 10 years	228	3.2224	.74733	371	-1.040	.299
	10 years and more	145	3.3064	.77937			

Table 14 shows no statistically significant differences in the means of the role of knowledge management in achieving organizational loyalty for basic education teachers ascribed to the variable of years of experience at ($\alpha \leq 0.05$). Distributing knowledge had the highest mean of 3.306 and a standard deviation of .7793 in favor of “10 years and more”, while applying knowledge had the lowest mean of 3.217 and a standard deviation of 1.015 in favor of “10 years and more”.

Academic qualifications

T-test findings of two independent groups in the means of the application of knowledge management to basic education teachers in North Al Batinah Governorate in the Sultanate of Oman ascribed to the variable of academic qualifications.

Table 15
Means and standard deviations of the variable of academic qualifications

Item	Academic qualifications	Number	Mean	Standard deviation	Freedom degrees	T-value	Significance level
Measurement of knowledge management processes	BA	262	3.3182	.80039	371	2.071	.039
	MA	111	3.1278	.83865			
Storing knowledge	BA	262	3.3721	.89271	371	2.200	.028
	MA	111	3.1441	.96607			
Diagnosing knowledge	BA	262	3.3292	.95200	371	1.846	.066
	MA	111	3.1329	.90756			
Applying knowledge	BA	262	3.2818	1.03246	371	1.710	.088
	MA	111	3.0811	1.04516			
Generating knowledge	BA	262	3.3081	.92601	371	1.872	.062
	MA	111	3.1055	1.02197			
Distributing knowledge	BA	262	3.2917	.74512	371	1.432	.153
	MA	111	3.1686	.79076			

Table 15 shows the findings of the t-test of two independent groups were less than the T-value which means there was a positive effect of the role of knowledge management in improving organizational loyalty. It is also statistically significant at ($\alpha \leq 0.05$) except for “distributing knowledge”. This contributes to raising the morale of the teachers, enhancing their loyalty to their schools and accounting for their job satisfaction. Knowledge management helps increase teachers’ mental abilities and

knowledge abilities which improve their behavior and work outcomes and in turn lead to their organizational loyalty. So, knowledge management has an essential and active role in creating and developing teachers and schools. Acquiring knowledge and sharing it would improve teachers' work conditions, pay and decisions they take. The above table shows statistically significant differences at ($\alpha \leq 0.05$) in teachers' promotions and incentives who possess knowledge, and this makes them feel comfortable. Therefore, they must be encouraged and motivated to increase their scientific and research production which will qualify them for these promotions and incentives and satisfy their financial and psychological needs. This also indicates the necessity of focusing on supporting and encouraging teachers to participate in symposiums and conferences to share the knowledge which they possess, exchange experiences and enhance cooperation among different educational institutions. This is in line with Obeid' study (2014) which also stressed the idea of supporting and encouraging teachers to participate in scientific conferences and symposiums to exchange knowledge. This was also highlighted by Al-Madhoun's study (2014) which showed a statistically significant correlation between the processes of knowledge management and organizational loyalty at basic education schools in North Al-Batinah in the Sultanate of Oman.

Discussion of the findings

Discussion of the findings on the main question: What is the role of knowledge management in achieving organizational loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?

The findings on the main question showed that role of knowledge management in achieving organizational

loyalty among teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view was fair. This can be ascribed to the lack of attention to knowledge management given by the Ministry of Education to the teachers of basic education schools in North Al Batinah Governorate which in turn reflects negatively on the educational system. The findings on the first question showed the role which knowledge management played in achieving oraganizational loyalty among teachers of basic education schools in North Al Batinah Governorate through the following five items:

The first item: storing knowledge for basic education teachers in North Al Batinah Governorate

The findings of the study showed that the mean of storing knowledge as a whole was 3.30 with a standard deviation of .919 to a fair degree. This finding can be ascribed to lack of sufficient knowledge on the part of the teachers of basic education schools in North Al Batinah Governorate of the importance of storing knowledge. Table 4 shows that there is a pressing need to store knowledge better in basic education schools. Knowledge can be stored in different forms such as docuements and data bases which can be referred to and used when needed. This finding can be ascribed to lack of awareness of teachers of basic education schools in North Al Batinah Governorate of the importance of storing knowledge and the fact that storing knowledge makes it easy for them to get it when they need it in addition to making teachers' work easier and mor flexible. When teachers learn about the causes of their lack of awareness, they can find solutions. It can also be ascribed to the Ministry of Education, which, despite all the efforts it makes to develop the educational process, still

needs to provide more advanced equipment and modern digital devices to store knowledge and execute the educational process better. Lack of technicians to deal with the digital tools created another problem for the teachers of basic education schools in North Al Batinah Governorate. These findings were in line with Al-Siyani and Mohsen (2021), but they differed with Al-Fidha and Abqawi (2020).

The second item: diagnosing knowledge for basic education teachers in North Al Batinah Governorate

The findings of the study showed that the mean of diagnosing knowledge as a whole was 3.27 with a standard deviation of .94207 to a fair degree. This finding can be ascribed to the lack of awareness of teachers of basic education schools in North Al Batinah Governorate of the importance of diagnosing knowledge and the role of systems, rules and regulations in school work environments. This could mean that they also did not have the necessary knowledge to develop themselves professionally and discover the knowledge aspect of their work.

The third item: applying knowledge for basic education teachers in North Al Batinah Governorate

The findings of the study showed that the mean of applying knowledge as a whole was 3.222 with a standard deviation of 1.038 to a fair degree. This can be ascribed to the role of the educational administration in giving the teachers the freedom to employ knowledge in the educational process to deliver the content to the students in a new way. It can also be ascribed to the skills which the teachers of basic education schools in North Al Batinah

Governorate have which are the result of self-development through attending training courses and workshops that led them to use their expertise and knowledge in the educational process. Modern trends in the educational process which are characterized by pleasure and excitement to deliver the educational content might be added to the above-mentioned reasons. Finally, it can be ascribed to the psychological aspect of the teachers as they have a positive understanding of their roles as significant cornerstones of the educational process who supervise the educational contexts to improve the outcomes that are based on an educational content. This finding disagreed with Hussein (2017).

The fourth item: generating knowledge for basic education teachers in North Al Batinah Governorate

The findings of the study showed that the mean of generating knowledge as a whole was 3.247 with a standard deviation of .95868. This can be ascribed to the personal effort made by the teachers of basic education schools in North Al Batinah Governorate and their intellectual and mental energy and abilities in all fields in addition to developing learning abilities, spreading the culture of knowledge and creating competitions based on intelligence. It can also be ascribed to the integration of the teachers' knowledge with the requirements of communication and information technology and their continual development and update of knowledge. This finding can also be ascribed to the cooperative framework in which expertise is documented and transferred among teachers of basic education schools. This simplifies the educational processes, reduces costs, diversifies ideas, renews creativity, not to mention the interest which the

teachers of basic education schools in North Al Batinah Governorate show in the role of knowledge in the freedom of generating and establishing ideas. It seems that the educational process which is based on technological tools has done its part in meeting the teachers' creative competencies through motivating them to meet the professional requirements of their work. The teachers were motivated to do their best and make use of the incentives which helped them develop their own abilities. The findings agreed with Khatab's study findings (2016) in terms of the role of generating knowledge in achieving administrative creativity.

The fifth item: distributing knowledge for basic education teachers in North Al Batinah Governorate

The findings showed that the mean of distributing knowledge as a whole was 3.255 with a standard deviation of .7600 to a fair degree. This can be ascribed to the administrative flexibility of the basic education schools in North Al Batinah Governorate, the exchange of expertise among schools and the retention of qualified teachers. This finding can also be ascribed to the exchange of expertise, ideas, knowledge and information within an interactive atmosphere which helps motivate teachers to do their best and contributes to improving the educational process. This process consists of knowledge and expertise which develop teachers' educational performance and provides them with the opportunity to participate in interactive activities such as specialized workshops and other channels of exchanging knowledge among one another. This finding agreed with Al-Inezi's study (2018) on the role of the processes of knowledge management in improving the services offered to the colleges and institutes of technical education in Kuwait and disagreed with Hussein's study (2017).

Discussion of the findings on the first sub-question

What is the level of loyalty for the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view?

The findings on this question showed that the level of the organizational loyalty for the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman from their point of view was fair. This can be ascribed to the positive relationship between the teachers of basic education schools in North Al Batinah Governorate and their school administration. This study agreed with Al-Jaraida and Al-Nabi (2019).

Emotional loyalty for the teachers of basic education schools in North Al Batinah Governorate

The findings showed that the mean of emotional loyalty was 3.060 with a standard deviation of .962 to a fair degree. This can be ascribed to the emotional behaviour of the teachers in basic education schools and the educational administration which reflects a positive state and desirable practices. This, in turn, helps the teachers of basic education schools in North Al Batinah Governorate to achieve their life goals through the schools they belong to.

Moral loyalty for the teachers of basic education schools in North Al Batinah Governorate

The findings of the study showed that the mean of moral loyalty was 3.029 with a standard deviation of .709 which is high. This can be ascribed to the fact the teacher's job is based on an important aspect of moral behaviour which makes them feel morally obliged to their schools. This aspect is an essential requirement for achieving loyalty in

the teachers of basic education schools in North Al Batinah Governorate. This finding can also be ascribed to the personal skills which the teachers of basic education schools in North Al Batinah Governorate have which led to continual interaction between them and the students' parents and the positive treatment which the teachers of basic education schools in North Al Batinah Governorate showed towards their educational institutions. As teachers represent a practical example of morals, their relationship with their educational institutions to which they belong become stronger, more effective and more flexible.

Continual loyalty for the teachers of basic education schools in North Al Batinah Governorate

The findings showed that the mean of continual loyalty was 3.060 with a standard deviation of .692 to a fair degree. This can be ascribed to the technical developments which have affected the educational process and the digital tools which have helped teachers create various methods of delivering the educational content and various mechanisms of assessing their performance. This reflects positively on teachers' work at basic education schools in North Al Batinah Governorate and the educational process as a whole. In fact, educational institutions seek to sharpen the teachers' skills, develop their potential and scientific expertise, and invest in that. Therefore, teachers' continual loyalty can be guaranteed, and they can achieve work satisfaction through their financial income and intersemestral vacations which help provide them with psychological stability that helps develop their personal and professional skills which, in turn, enhance their continual loyalty to their educational institutions.

Discussion of the findings on the second sub-question

Are there statistically significant differences ascribed to the variables of gender, academic qualifications and years of experience at ($\alpha \leq 0.05$) of the mean of the effect of applying knowledge management to the work loyalty of the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman?

Gender

The findings on gender showed no statistically significant differences at ($\alpha \leq 0.05$) between the means of the role of knowledge management in achieving organizational loyalty for the basic education school teachers in North Al Batinah Governorate. This can be ascribed to the fact the teachers of basic education schools in North Al Batinah Governorate are subject to the same work terms and conditions both technically and administratively as they belong to the same educational institution. This can also be ascribed to the rules and regulations governing gender discrimination with regard to citizens' rights and responsibilities. So, the task done by both genders serve the educational process in an equal and important manner.

Academic qualifications

The findings on academic qualifications showed no statistically significant differences at ($\alpha \leq 0.05$) between the responses of the study sample to the role of knowledge management in achieving organizational loyalty for the teachers of basic education schools in North Al Batinah Governorate in the Sultanate of Oman. This can be ascribed to the positive attitudes which the teachers have towards their work. This achieves work loyalty almost equally especially that the teachers do their jobs in an equal atmosphere in terms of rights and responsibilities. It can

also be ascribed to the incentive system for teachers with academic qualifications and an increase in salaries for all academic qualifications involved in the educational process which eventually leads to organizational loyalty.

Years of experience

The findings on years of experience showed statistically significant differences at ($\alpha \leq 0.05$) between the means of the responses of the study sample to the degree of organizational loyalty for the teachers of basic education schools in North Al Batinah Governorate in favor of “less than 10 years”. This can be ascribed to the fact the organizational loyalty was connected with teachers with less experience, which might be the result of a positive mental image of the profession of teaching. More specifically, this can be attributed to the lack of work boredom on the part of this group of teachers who are still at the beginning of their professional development. That was accompanied by using technological tools in the educational process which helped provide the students with excellent educational outcomes.

Based on the findings of the study, the researchers came up with the following recommendations and suggestions:

- The researchers recommend developing the electronic infrastructure of knowledge storage;
- The researchers recommend applying knowledge management in institutions to get the best outcomes at all levels and improve employees' loyalty;
- The researchers recommend providing the right atmosphere and holding the necessary training courses and workshops to train their employees to achieve the desired goals;

- The researchers recommend providing an electronic digital environment inside schools to facilitate the distribution, storage and spread of knowledge;
- The researchers recommend instilling the organizational culture in employees and urging them to exchange and share knowledge with one another;
- The researchers recommend adopting pioneering educational ideas of teachers and spreading them in the educational fields to exchange knowledge;
- The researchers recommend restructuring teachers' salary and promotion systems so as to match the career salary and promotion systems in order to increase the positive educational outcomes;
- The researchers recommend the necessity of expanding the concept of knowledge management processes at basic education schools;
- The researchers recommend the necessity of setting up a special department for knowledge management at the Ministry of Education which will be concerned with applying knowledge management at basic education schools to improve the teachers' performance, loyalty and productivity.

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References

Arabic references

- Abu Afifa, A. (2019). إدارة المعرفة وعلاقتها بالإبداع الإداري، دراسة. [Knowledge management and its relationship with administrative creativity: a practical study on Palestine ban in Gaza Strip], [Unpublished MA dissertation], Al-Azhar University, Palestine.
- Al-Ajami, N. (2016). الولاء التنظيمي وعلاقته بالإبداع الإداري لدى مديرات المدارس الثانوية بالمملكة العربية السعودية، دراسة ارتباطية [Organizational loyalty and its relationship with administrative creativity for secondary education school female principals in the Kingdom of Saudi Arabia: a correlational study], *The International Interdisciplinary Journal of Education*, 5(10), 384 – 400.
- Al-Fidha, J., & Aqbawi, L. (2020). دور عمليات إدارة المعرفة في الدراسة الميدانية المؤسسة العمومية للصحة الجوارية: تفعيل توجه التميز التنظيمي بادرار [The role of knowledge management processes in activating the trend of organizational distinction: a field study on Établissement Public De Santé De Proximité D'adrar], [Unpublished MA dissertation], Université d'Adrar Ahmed Draia, Algeria.
- Al-Ghamdi, A. (2021). واقع تطبيق إدارة المعرفة في الإشراف التربوي [The reality of the application of knowledge management to educational supervision at the education directorate in Asir region], *Arab Journal of Scientific Publication*, 22(32), 251 – 304.
- Al-Inezi, M. E. (2018). دور عمليات إدارة المعرفة في تحسين جودة الخدمات المقدمة في كليات ومعاهد الهيئة العامة لتعليم التطبيق في دولة الكويت [The role of knowledge management processes in improving the quality of services offered in the colleges and institutes of the Public Authority for Applied Education and Training in Kuwait], [Unpublished MA dissertation], Al-alBayt University, Jordan.
- Al-Jaraida, M., & Al-Nabi, N. (2019). الولاء التنظيمي وعلاقته بالرضا الوظيفي لدى مديري مدارس الحلقة الثانية من التعليم الأساسي في سلطنة عمان [Organizational loyalty and its relationship with job satisfaction for cycle 2 basic education school principals in the Sultanate of Oman]. *Scientific Journal of King Faisal University :Humanities and Management Sciences*, 2(20), 16 – 48.
- Al-Khalil, A. A., & Mahriz, M. (2019). أثر عمليات إدارة المعرفة في جودة الخدمات التعليمية ، دراسة تطبيقية على كليتي الاقتصاد والعلوم في جامعة تشرين [The effect of knowledge management on the quality of educational services: An applied study on the College of Economics and the College of Sciences in Tishreen University], *Hama University Journal*, 2(11), 1 – 25.

- Al-Nasr, A. A., & Muftah, H. (2019). دور عمليات إدارة المعرفة في تحسين أداء المؤسسات التعليمية ، دراسة ميدانية في كلية أم الربيع للعلوم التقنية ، [The role of knowledge management processes in improving the performance of educational institutions: a field study at Surman College of Science and Technology], *Human and Comunitny Studies Journal*, 1(9), 1 – 33.
- Al-Rabie, T., & Ibrahim, A. (2020). إدارة المعرفة لدى مديري المدارس في محافظة أربد وعلاقته بالأداء المدرسي من وجهة نظر معلمي المدارس [Knowledge management of school principals in Irbid governorate and its relationship with school performance from the perspective of school teachers], *Islamic University Educational and Psychological Journal*, 28(2), 661 – 691.
- Al-Rashidi, N. (2020). إدارة المعرفة كمدخل لتطوير الإدارة التعليمية [Knowledge management as an introduction to developing educational administration in Kuwait], *Arab Journal of Quality Education*, 11(4), 1 – 22.
- Al-Salim, M. (2015). الولاء التنظيمي لدى مدرسي التعليم الثانوي العام [Organizational loyalty for secondary education school principals and its relationship with participating in decision-making], [Unpublished MA dissertation], Damascus University, Syria.
- Al-Siyani, M., & Mohsen, R. (2021). أثر عمليات إدارة المعرفة على الإبداع المنظمي في الجامعات الخاصة، مجلة ربحان للنشر العلمي [The effect of knowledge management processes on organizational creativity in private universities], *Rihan Journal for Scientific Publication*, 6(7), 49 – 77.
- Boskar, F. (2019). جودة حياة العمل وانعكاساتها على الولاء التنظيمي للعاملين، دراسة ميدانية بمصلحة الاستعجالات الطبية مشونش [Quality of work life and its effect on employees' organizational loyalty: a field study on medical emergency services in M'Chouneche], [Unpublished MA dissertation], de l'Université Mohamed Khider, Biskra, Algeria.
- Educational Gate. Ministry of Education, Muscat, <https://home.moe.gov.om/pages/3/show/320>
- Hussein, M. (2017). دور إدارة المعرفة في تحسين الثقافة التنظيمية داخل المنظمات العامة ، دراسة تطبيقية على الشركة القابضة لإنتاج وتوزيع الكهرباء والطاقة [The role of knowledge management in improving the organizational culture inside public organizations: A practical study on the Holding Company for Electricity and Energy Production and Distribution], *Journal of Administrative Sciences*, 35(4), 93 – 186.
- Khatab, A. A. (2016). التعرف على دور توليد المعرفة في تحقيق الابتكار [Identifying the role of knowledge generation in achieving administrative creativity in Jordanian pharmaceutical Companies], *Scientific Journal of Commercial and Environmental Studies*, 1(7), 157 – 189.

- Laila, Gh, (2018). أثر إدارة المعرفة على الرضا الوظيفي لدى الموارد البشرية: دراسة ميدانية بمجمع صيدال [The effect of knowledge management on work satisfaction for human resources: a field stud at Groupe Saidal], 5(2), 45 – 62.
- Obeid, A. (2020). درجة الرضا الوظيفي لدى مدرسي المدارس الحكومية في محافظة رام الله والبيرة وعلاقته بإدارة المعرفة [Degree of work satisfaction for government school principals in Ramallah and Al-bireh governorate and its relationship with knowledge management], *Islamic University Educational and Psychological Journal*, 28(4), 1- 24.
- Ra'ouf, S., & Keid, A. (2020). الولاء التنظيمي وفق القيادة التحويلية لدى مديري المدارس الإعدادية في محافظة واسط according to transformational leadership for middle school principals in Wasit governorate], *Journal of Educational and Psychological Research*, 17(66), 409 – 426.
- Sabrina, M., & Ibn Hjouba. (2018). عمليات إدارة المعرفة في تحسين أداء المورد البشري بالمؤسسة الاقتصادية ، دراسة حالة مؤسسة الاتصالات الجزائرية تيسمسيلت [Knowledge management processes in improving human resources of economic institutions: a case study of the Algerian telecommunications company (Tissemstilt)], *Journal of Economic Studies*, 1(5), 203 – 226.

English references

- Abualoush, S. Masa'deh, R. Bataineh, K & Alrowwad, A. (2018). The Role of Knowledge Management PROCESS and Intellectual Capital as Management Intermediary Variables Between Knowledge Infrastructure and Organization Performance. *Interdisciplinary Journal of Information, Knowledge and Management*. (13), 280-309.
- Ahmed, heba. (2020). *The Relevance of Knowledge Management to Educational Organizations*. 15 P.
- Alias, N., Mansor, A., Rahman, A., Ahmad, A., Samsudin A., (2018). The Impact of Knowledge Management towards Employee's Job Satisfaction, *International Journal of Academic Research in Business and Social Sciences*, 8(9), 245–265.
- Armaghan, N., & Renaud, J. (2017). Evaluation of Knowledge Management in an Organization, *Journal of Information & Knowledge Management*, 16(1), 1-18.
- Christopher Thorn. (2021). *Knowledge Management for Educational Information Systems: What Is the State of the Field*.

https://www.researchgate.net/publication/234561211_Knowledge_Management_for_Educational_Information_Systems_What_Is_the_State_of_the_Field .

- Edward Sallis. (2018). *Total Quality Management in Education. 180 P, Available on Taylor & Francis eBooks*
- Eric C. K. Cheng. (2018). *Knowledge Management for School Education*, ISBN: 978-981-287-233-3
- Jones, Gary (Deputy Principal, Highlands College, Jersey), Sallis, Edward (Principal and Chief Executive, Highlands College, Jersey).(2022). *Knowledge Management in Education, Enhancing Learning & Education*.
- Kianto, K., & Vanhala, M., & Heilmann, M. (2016), The impact of knowledge management on job satisfaction, *Journal of Knowledge Management*, 20(4), 621 – 636
- Salama, S. Isaac, O. Habtoor, N. & Ameen, A. (2016). Impact of Availability of Knowledge Management Infrastructure on Improving the Performance of The Education Sector Staff in Libya: Organizational Loyalty as a Mediating Variable, *International Journal of Management and Human Science (IJMHS)*, 4(1),1-10.
- Salleh, S. Ismail, S. Hamzah, S. Zahari, A. Mohammed, N & Abdullah, N (2017). Knowledge Sharing and Organizational Commitment in Organization, *Journal of Applied Environmental and Biological Sciences*, 7(5S), 37-40.
- Salleh, S. Ismail, S. Hamzah, S. Zahari, A. Mohammed, N & Abdullah, N .(2017). *Knowledge Sharing and Organizational Commitment in Organization*, *Journal of Applied Environmental and Biological Sciences*, 7(5S), 37-40.
- Sangeeta. Namdev .Dhamdhare.(2018). *IMPORTANCE OF KNOWLEDGE MANAGEMENT*, Librarian, Modern College of Arts, Volume: 16 Number: 1 Article 11.
