

## Sharing Knowledge among Kindergarten Teachers

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### **Abstract**

The current research aims to identify the knowledge sharing among kindergarten teachers, and in order to achieve the objectives of the research, it was necessary to build a research scale (sharing knowledge). The research was conducted from (200) female teachers, and the results showed that the kindergarten teachers share knowledge.

**Keywords:** knowledge sharing: kindergarten teachers

### **Chapter One**

#### **General Framework for Research**

##### **Research problem:**

There is no doubt that the success of kindergartens in achieving its lofty mission depends on the extent to which there are teachers who have specialized educational qualifications to work at this stage, which is a sensitive stage in a child's life, and in this aspect, contemporary trends indicate that success in this profession depends on two basic conditions in the parameter, namely readiness and preparation. Then, preparing it in a scientific manner to ensure that it succeeds in carrying out the work prepared for it, (Amer, 2008: 64).

Despite the development in the educational system, it still faces many problems that hinder its work to achieve knowledge sharing. Studies have indicated that there are a number of problems that affect knowledge sharing, including the large burden placed on members of educational bodies and the weak incentives that encourage sharing. In the knowledge, and the lack of suitable places within the institution that allow communication between members, as well as the dissatisfaction of educational bodies with some leaders, which makes the institution lack a cooperative climate, which leads the educational body to negative performance and the occurrence of some organizational and interest conflicts and weak positive interaction (Al-Shahri, 2017: 4).

The research problem is determined by the following question: Is there knowledge sharing among kindergarten teachers?

##### **The importance of research:**

The process of sharing information and experiences between individuals is an essential component of knowledge management and a pivotal process within its operations, which includes knowledge acquisition, storage, application and evaluation. Some classify knowledge management in three processes: knowledge acquisition, knowledge sharing, and knowledge utilization, a process of developing and creating ideas, skills and relationships. As

for knowledge sharing, it is a factor in the dissemination of knowledge and benefiting from knowledge that occurs when education is integrated into the institution (Sohail, Daud, 2009: 129). The use and sharing of knowledge collectively, which enhances the team spirit, and from here we find that knowledge sharing has basic requirements, which are the cooperative environment, training, learning, knowledge stores and the joining of individuals to work teams (Al-Qahwi, 2013: 106).

Educational institutions are the most prominent knowledge-producing institutions and the largest repositories and exporters of it in society. These institutions must develop and share knowledge and experiences among their members. Faculty members are considered the main element in influencing and changing the knowledge society in the present era, as they play essential roles in the development of information technology and changes in the organization of work (Kim, Ju, 2008: 183). Knowledge-sharing behavior is related to individuals' willingness to share their knowledge and experiences with individuals, which leads to creating a sense of pleasure, and thus knowledge-sharing gives happiness, solves problems, decision-making and increases work performance (Razak, et al, 2016: 547).

### **Research Objectives;**

The research aims to identify:

- 1-Share the knowledge of kindergarten teachers.
- 2-Significance of differences in knowledge sharing among kindergarten teachers according to the variable of specialization.

### **Research Limits:**

The current research is determined by teachers of government kindergartens affiliated with the General Directorates of Education in Baghdad (Karkh / Rusafa) for the academic year 2020-2021.

### **Search terms:**

First: knowledge sharing is defined by:

- 1-Manaf, Marzuki: 2009

It is a learning process through the exchange of ideas, knowledge, information and experiences, and it is related to the individual's ability to transfer his explicit and tacit knowledge to others (Manaf, Marzuki, 2009:7).

- 2 -Yeh et al 2011:

It is a communicative process in which knowledge is discussed and exchanged through direct interaction and via the Internet in order to raise the value of existing knowledge (Yeh et al, 2011:2466).

- 3-Al-Hafiz and Al-Mahdi 2015:

It is the process of exchanging and sharing information, ideas, experiences and knowledge related to work among faculty members, in a way that enables them to carry out their work in a creative manner and achieve value and competitive experience for the university institution (Al-Hafiz and Al-Mahdi, 2015: 500).

**Definition of the researchers theoretically:**

It is the intentional behavior of the other party sharing different knowledge to achieve mutual benefit, which has a direct impact on situations related to a particular behavior.

**Procedural definition of the two researchers:**

The sum of the paragraphs that express the knowledge sharing of kindergarten teachers, which is estimated by the degree obtained by the knowledge sharing scale prepared in the research.

**Secondly:-** The kindergarten teacher signify it

Amer 2008:

She is an educational figure who is carefully chosen through a set of criteria for the physical, mental and social characteristics and characteristics appropriate for the child-rearing profession.

Third:- Kindergarten ;

**Ministry of Education 1990:**

It is an educational institution that accepts children between the ages of (4-6) years, with the aim of developing the aspects of their personalities, physical, mental, social, emotional, spiritual, patriotic and national (Ministry of Education, 1990: 9).

## Chapter II

### **Theoretical framework and previous studies**

#### **Theoretical background:**

Writers and researchers differed about the concept of knowledge, and this is a natural thing because each one of them looks at knowledge from an angle that fits with his inclinations and trends, based on linguistics that reflects that point of view. However, everyone agrees on the fact that knowledge is a precious resource and is the true wealth of individuals, peoples and societies (Al-Salami, 2002:204).

It is worth noting that the knowledge sharing process is one of the processes of knowledge management and the basis on which other processes depend, in addition to being the most important element of knowledge management that achieves competitive advantages for the organization by improving its capabilities to satisfy needs and respond to rapid changes (Al-Zahrani, 2019: 343) . Sharing knowledge means the presence of new knowledge constantly, so it occupies an important position in institutions because the strength of institutions does not lie only in the possession of knowledge, but its strength lies in its sharing and sharing. Benefits, protecting institutions from losing knowledge, improving their efficiency, developing the skills of their members and others (Harb, 2019: 206).

#### **The theory that explains knowledge sharing:**

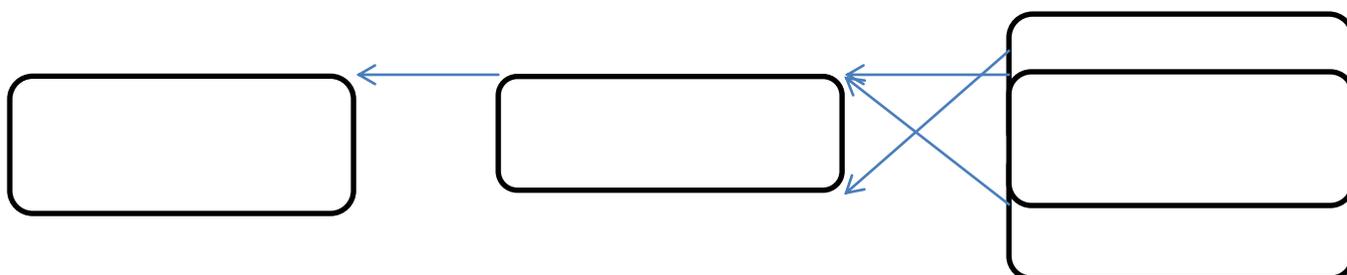
##### **IcekAjzen 1991 Theory of Planned Behavior**

This theory explains the behavior of sharing knowledge through rational psychological processes, as it assumes that the individual makes a logical and rational choice for cognitive performance or not. Objective attitudes and standards and that the behavioral beliefs of the individual lead the behavior of sharing knowledge and lead to certain results, as the factors affecting the behavior of belief can be a motivational system that raises self-interest.

Behavioral beliefs are related to personal expectations factors, and one of those expected factors is the personal criterion, which is defined as the individual's perception of how people perceive the importance of cognitive behavior that can provoke this behavior according to the normative beliefs (Ajzen, 1991: 181\_185).

The theory asserts that sharing knowledge is a deliberate behavior and that the intent of the behavior is related to the perceived supervisory behavior in addition to personal standards and attitudes. The five factors of a person (awareness, status, compatibility with others, degree of nervousness, and openness) while the subjective criterion reflects the self-perception of others' opinions regarding the performance of a particular behavior and the perceived control behavior reflects the individual's perception of the availability of resources and opportunities to carry out the behavior. The theory is based on three factors which are the degree of classification of behavior between Harmful and beneficial, social pressure towards behavior, and the individual's abilities to direct towards behavior (Jawhara, 2014: 61). This can be represented in the following form:

**Figure (1)**  
**Theory of planned behavior (TPB) and knowledge sharing**



Source : Aliakbar et al, 2012, p 210

Aliakbar et al. 2012 indicated that some researchers have concluded that there are external motivating factors such as reputation and mutual benefit that have a direct impact on the attitudes related to the behavior of sharing knowledge, while the internal motivating factors influencing these attitudes are the enjoyment of helping others, and the need to belong to a group as well. The diversity of the group and the availability of facilitating conditions for sharing have a direct impact on the behavior of sharing knowledge.

The theory identified five factors that affect the success of knowledge sharing:

1-The source and the recipient.

2-The form and place of knowledge.

3-Readiness of the learner to teach.

4-The ability to share knowledge.

5-The environment in which sharing occurs (Khazali, 2015: 29).

Studies that dealt with the concept of knowledge sharing

Studies dealing with the concept of knowledge sharing:

#### **Khazali's study (2015):**

Sharing knowledge and its relationship to the method of rigidity-flexibility.

The study aimed to identify the level of knowledge sharing among male and female teachers and to identify rigidity and flexibility and the nature of the relationship between knowledge

sharing and the method of rigidity and flexibility. The descriptive research method was chosen for the study, where the sample size amounted to (400) teachers and schools were chosen by the equal random sampling method. A measure of knowledge sharing and a measure of rigidity and flexibility were prepared. The statistical means were chosen (Cronbach's alpha, Pearson correlation coefficient), and the study concluded:

- 1-The research sample is generally characterized by knowledge sharing.
- 2-There are no statistically significant differences in knowledge sharing according to the gender variable (Khazali, 2015: 81-85).

### Chapter III

#### Research Methodology and Procedures

##### Method of Research

The curriculum is defined as the method adopted by the researcher to reach his desired goal and that his job in the social sciences is to explore the principles that regulate social, educational and human phenomena in general and lead to their occurrence so that in their light he can interpret and control their results and control them (Ghobari and Abu Shaira, 2010: 18).

##### Research community: Population of Research

The research community means all the individuals, things, or people who constitute the subject of the research (Abbas et al., 2014: 217).

The research community consisted of teachers of government kindergartens affiliated with the General Directorates of Education in the province of Baghdad for the academic year (2020-2021) in both Karkh and Rusafa, and their number was (1979) teachers.

##### Sample of Research

Studying the original research community requires a long time, great effort and material costs, which prompted the researcher to choose a sample that includes a number of individuals who are members of the original community instead of studying the whole community (Obeidat et al., 1986: 106). And he must choose a model that forms part of the units of the society concerned with the research and is representative of it and must bear all its characteristics.

This model enriches the researcher to study all the units and vocabulary of the original society (Kandalji and Al-Samarrai, 2009: 255). And the sample are the individuals to whom the research is applied (Abu Allam, 2007: 158). Accordingly, the research sample was selected from the community of kindergarten teachers affiliated to the Karkh Education Directorates (first, second, third) and Rusafa (first, second, third) according to the following steps:

- 1-The researcher determined the number of kindergartens in the general directorates of education in the province of Baghdad on its two sides (Al-Karkh - Al-Rusafa), and its number reached (181)
- 2-The researcher determined the preparation of kindergarten teachers in the general directorates of education in the governorate of Baghdad on its two sides (Al-Karkh - Al-Rusafa), and their number was (12) teachers, which represent the research community.

3-The researcher randomly determined the percentage of (10%) of the kindergarten teachers from each of the general directorates of education in the governorate of Baghdad on its two sides (Al-Karkh - Al-Rusafa), and their number was (200) teachers.

4-The researcher intentionally determined the kindergartens in which the selected teachers are located in point (3), and their number reached (45) kindergartens.

**Table (1)**

Distribution of the research sample members for kindergarten teachers Districts The total numbers of Riyadh numbers The total numbers of parameters 10% of the Riyadh parameters The No. of Kindergarten that were selected

No. of Kindergarten that were selected	Teachers %10 of Kindergarten	The total No. of Teachers	The total No. of Kindergarten	Districts	Seq.
7	40	399	28	Rusafa-first	1
13	50	495	51	Rusafa-second	2
5	19	188	20	Rusafa- third	3
9	36	355	32	Karkh- first	4
8	35	345	30	Karkh- Second	5
3	20	197	20	Karkh- Third	6
<b>45</b>	<b>200</b>	<b>1979</b>	<b>181</b>	<b>Total</b>	

**Research Tool:**

For the purpose of achieving the objectives of the research, the two researchers built a scale (knowledge sharing) due to the lack of ready-made measures of the study problem that fit the research sample and achieve its objectives.

Paragraph validity (apparent honesty);

To identify the apparent honesty, the two researchers presented the paragraphs of the scale in their initial form to a group of arbitrators in the field of education, psychology and kindergarten, and their number reached (14) appendix (2) to examine them and assess their validity in measuring what they were designed for, because this examination verifies the link between the paragraph as it appears apparently with the feature. Measured, as the researcher takes the provisions agreed upon by (80%) of their opinions or more, and I asked the arbitrators to judge the validity of the paragraphs, and in light of the arbitrators' opinions, no paragraph was excluded because it obtained an agreement percentage (100%) of the opinions In light of the arbitrators' opinions, the scale's instructions were approved and corrected, and the approval came to (46) items out of a total of (46) items at a rate of (100%), so that the scale as set out in Appendix (5) contains (46) items.

**Survey experience:**

To verify the clarity of the paragraphs of the scale for a sample of kindergarten teachers, in terms of wording and meaning, as well as the clarity of the instructions to them and the way to answer the alternatives, an exploratory study was conducted by the two researchers, where the scale was applied to a random sample consisting of (15) teachers from Al-Ghusun Kindergarten and the new growth. It turns out that the scale's instructions and paragraphs are all clear and understandable to the parameters.

**Statistical analysis of the items of the scale:**

**Items analysis**

The process of statistical analysis of the items is one of the important steps for building the scale, as it makes it more reliable and reliable (Chiselli, 1981: 428). The process of statistical analysis of paragraphs mostly aims to calculate their discriminatory strength and their validity coefficients (Al-Kubaisi, 1995: 5), as the accuracy of the scale in measuring what was set to measure depends on the accuracy of its paragraphs, and Nunnally (1981) indicated that the appropriate sample size for the statistical analysis process must not be less than five people for each paragraph of the total paragraphs of the scale (Nunnally, 1981: 262).

The statistical analysis of the paragraphs seeks to calculate the discriminatory power and the relationship of the paragraph's degree to the total degree, and for the purpose of distributing the sample in kindergartens in Baghdad Governorate, a group of kindergartens in the General Directorates of Education was intentionally selected in Baghdad (Al-Karkh and Al-Rasafa) in its three districts, 45 kindergartens were selected from Riyadh, and the research sample consisted of (200) female teachers. Here is a detail of that:

**A\_ Extraction of the discriminatory power of paragraphs: discrimination**

By discriminating, we mean the extent to which it is possible to measure individual differences between individuals (Allam, 2003: 277). In order to find the discriminatory power of the scale, the researcher used the discriminatory power equation, the T-test for two extreme samples. The two researchers applied the scale to a sample of (200) kindergarten teachers in the city of Baghdad. This number gives the best contrast between individuals in the characteristic and thus shows us the best discrimination of the paragraphs (Anastasia, 1976: 209).

Then the two researchers arranged the total scores of the sample in descending order, and chose the highest (27%) of the total scores to be the upper group, and the lowest (27%) of the total scores to be the lowest group (Al-Zobaie et al., 1981: 74). The T-test for two extreme samples was used to test the significance of the difference between the average scores of each of the upper and lower groups and for each of the scale items, and after extracting the arithmetic mean and standard deviation for both the upper and lower groups, the calculated T-value represents the discriminatory power of the item, and it turns out that all the scale items are distinct and statistically significant, and Table (2) shows that.

**Table (2)**  
**The discriminatory power of the knowledge sharing scale using the two extreme samples**

<b>Sig.</b>	<b>Calculated -T</b>	<b>Standard deviation</b>	<b>Arithmetic mean</b>	<b>Groups</b>	<b>No. of Parag.</b>
<b>Sig.</b>	9.17	0.56	4.74	<b>Higher</b>	<b>1</b>
		0.96	3.65	<b>Lower</b>	
<b>Sig.</b>	8.78	0.46	4.8	<b>Higher</b>	<b>2</b>
		1.05	3.72	<b>Lower</b>	
<b>Sig.</b>	7.57	0.41	4.83	<b>Higher</b>	<b>3</b>
		1.05	3.91	<b>Lower</b>	
<b>Sig.</b>	8.09	0.42	4.81	<b>Higher</b>	<b>4</b>
		1.21	3.7	<b>Lower</b>	
<b>Sig.</b>	8.81	0.34	4.87	<b>Higher</b>	<b>5</b>
		1.11	3.77	<b>Lower</b>	
<b>Sig.</b>	9.05	0.5	4.77	<b>Higher</b>	<b>6</b>
		1.22	3.48	<b>Lower</b>	
<b>Sig.</b>	9.81	0.34	4.9	<b>Higher</b>	<b>7</b>
		1.16	3.62	<b>Lower</b>	
<b>Sig.</b>	4.39	1.07	3.52	<b>Higher</b>	<b>8</b>
		1.05	2.81	<b>Lower</b>	
<b>Sig.</b>	6.18	1.1	3.9	<b>Higher</b>	<b>9</b>
		0.97	2.92	<b>Lower</b>	
<b>Sig.</b>	5.55	1.21	3.76	<b>Higher</b>	<b>10</b>
		1.04	2.8	<b>Lower</b>	
<b>Sig.</b>	8.56	0.63	4.71	<b>Higher</b>	<b>11</b>
		1.13	3.51	<b>Lower</b>	
<b>Sig.</b>	11.80	0.7	4.56	<b>Higher</b>	<b>12</b>
		1.11	2.9	<b>Lower</b>	
<b>Sig.</b>	8.86	0.4	4.84	<b>Higher</b>	<b>13</b>
		1.19	3.64	<b>Lower</b>	
<b>Sig.</b>	10.25	0.68	4.59	<b>Higher</b>	<b>14</b>
		1.08	3.19	<b>Lower</b>	
<b>Sig.</b>	12.39	0.55	4.7	<b>Higher</b>	<b>15</b>
		1.15	2.99	<b>Lower</b>	
<b>Sig.</b>	12.27	0.52	4.78	<b>Higher</b>	<b>16</b>
		1.16	3.09	<b>Lower</b>	
<b>Sig.</b>	13.65	0.51	4.76	<b>Higher</b>	<b>17</b>
		0.96	3.16	<b>Lower</b>	
<b>Sig.</b>	9.87	0.48	4.77	<b>Higher</b>	<b>18</b>

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		0.96	3.63	<b>Lower</b>	
<b>Sig.</b>	9.99	0.71	4.62	<b>Higher</b>	<b>19</b>
		1.03	3.27	<b>Lower</b>	
<b>Sig.</b>	9.10	0.61	4.63	<b>Higher</b>	<b>20</b>
		1.07	3.42	<b>Lower</b>	
<b>Sig.</b>	8.54	1.05	4.09	<b>Higher</b>	<b>21</b>
		1.1	2.7	<b>Lower</b>	
<b>Sig.</b>	8.78	0.93	4.2	<b>Higher</b>	<b>22</b>
		1.08	2.85	<b>Lower</b>	
<b>Sig.</b>	8.86	0.9	4.35	<b>Higher</b>	<b>23</b>
		1.12	2.98	<b>Lower</b>	
<b>Sig.</b>	6.13	1.05	4.02	<b>Higher</b>	<b>24</b>
		1.04	3.05	<b>Lower</b>	
<b>Sig.</b>	7.75	0.88	4.07	<b>Higher</b>	<b>25</b>
		0.99	2.97	<b>Lower</b>	
<b>Sig.</b>	10.34	0.99	4.29	<b>Higher</b>	<b>26</b>
		1.14	2.6	<b>Lower</b>	
<b>Sig.</b>	9.37	0.53	4.7	<b>Higher</b>	<b>27</b>
		1.2	3.37	<b>Lower</b>	
<b>Sig.</b>	9.82	0.61	4.66	<b>Higher</b>	<b>28</b>
		1.24	3.2	<b>Lower</b>	
<b>Sig.</b>	14.14	0.42	4.78	<b>Higher</b>	<b>29</b>
		1.07	3.02	<b>Lower</b>	
<b>Sig.</b>	9.34	0.42	4.85	<b>Higher</b>	<b>30</b>
		1.15	3.62	<b>Lower</b>	
<b>Sig.</b>	11.66	0.49	4.74	<b>Higher</b>	<b>31</b>
		1.12	3.21	<b>Lower</b>	
<b>Sig.</b>	9.77	0.44	4.78	<b>Higher</b>	<b>32</b>
		1.21	3.42	<b>Lower</b>	
<b>Sig.</b>	10.74	0.47	4.78	<b>Higher</b>	<b>33</b>
		1.23	3.26	<b>Lower</b>	
<b>Sig.</b>	12.83	0.56	4.6	<b>Higher</b>	<b>34</b>
		1.05	2.97	<b>Lower</b>	
<b>Sig.</b>	9.77	0.61	4.72	<b>Higher</b>	<b>35</b>
		1.13	3.37	<b>Lower</b>	
<b>Sig.</b>	11.23	0.59	4.71	<b>Higher</b>	<b>36</b>
		1.14	3.15	<b>Lower</b>	
<b>Sig.</b>	8.26	1.21	4.1	<b>Higher</b>	<b>37</b>
		1.19	2.59	<b>Lower</b>	

<b>Sig.</b>	12.53	0.51	4.74	<b>Higher</b>	<b>38</b>
		1.04	3.17	<b>Lower</b>	
<b>Sig.</b>	11.07	0.47	4.83	<b>Higher</b>	<b>39</b>
		1.19	3.3	<b>Lower</b>	
<b>Sig.</b>	10.26	0.61	4.65	<b>Higher</b>	<b>40</b>
		1.12	3.24	<b>Lower</b>	
<b>Sig.</b>	10.96	0.51	4.79	<b>Higher</b>	<b>41</b>
		1.08	3.38	<b>Lower</b>	
<b>Sig.</b>	11.75	0.71	4.59	<b>Higher</b>	<b>42</b>
		1.17	2.86	<b>Lower</b>	
<b>Sig.</b>	11.74	0.41	4.86	<b>Higher</b>	<b>43</b>
		1.15	3.31	<b>Lower</b>	
<b>Sig.</b>	10.74	0.44	4.78	<b>Higher</b>	<b>44</b>
		1.24	3.26	<b>Lower</b>	
<b>Sig.</b>	10.83	0.54	4.73	<b>Higher</b>	<b>45</b>
		1.22	3.17	<b>Lower</b>	
<b>Sig.</b>	11.79	0.46	4.74	<b>Higher</b>	<b>46</b>
		1.08	3.24	<b>Lower</b>	

#### **B- The relationship of the paragraph's degree to the total degree:**

It is intended to find the correlation between the degree of each item in the scale with its total score, and Anastasi, 1976) indicates that the correlation coefficient between the score of each item and the total score of the scale and with statistical significance is an indicator of the validity of the scale construction (Anastasi, 1976: 154).

In order to calculate the correlation of the item with the total score of the scale, the researchers used the Pearson correlation coefficient and after obtaining the results and balancing the calculated correlation coefficient with the tabular value that reaches it turns out that all the items are significant, as shown in Table (3)

**Table(3)**

**Statistical analysis of the items of the knowledge sharing scale using the item degree relationship method with the total score**

<b>Sig.</b>	معامل الارتباط	Parag.	<b>Sig.</b>	Correl-ation Coeff	Parag.	<b>Sig.</b>	Correl-ation Coeff	Parag.	<b>Sig.</b>	Correl-ation Coeff.	Parag.
<b>Sig.</b>	0.40	<b>37</b>	<b>Sig.</b>	0.42	<b>25</b>	<b>Sig.</b>	0.57	<b>13</b>	<b>Sig.</b>	0.53	<b>1</b>
<b>Sig.</b>	0.58	<b>38</b>	<b>Sig.</b>	0.49	<b>26</b>	<b>Sig.</b>	0.59	<b>14</b>	<b>Sig.</b>	0.50	<b>2</b>
<b>Sig.</b>	0.59	<b>39</b>	<b>Sig.</b>	0.57	<b>27</b>	<b>Sig.</b>	0.60	<b>15</b>	<b>Sig.</b>	0.45	<b>3</b>
<b>Sig.</b>	0.55	<b>40</b>	<b>Sig.</b>	0.58	<b>28</b>	<b>Sig.</b>	0.67	<b>16</b>	<b>Sig.</b>	0.48	<b>4</b>
<b>Sig.</b>	0.57	<b>41</b>	<b>Sig.</b>	0.69	<b>29</b>	<b>Sig.</b>	0.66	<b>17</b>	<b>Sig.</b>	0.51	<b>5</b>
<b>Sig.</b>	0.62	<b>42</b>	<b>Sig.</b>	0.60	<b>30</b>	<b>Sig.</b>	0.52	<b>18</b>	<b>Sig.</b>	0.59	<b>6</b>

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<b>Sig.</b>	0.61	<b>43</b>	<b>Sig.</b>	0.63	<b>31</b>	<b>Sig.</b>	0.60	<b>19</b>	<b>Sig.</b>	0.58	<b>7</b>
<b>Sig.</b>	0.59	<b>44</b>	<b>Sig.</b>	0.62	<b>32</b>	<b>Sig.</b>	0.55	<b>20</b>	<b>Sig.</b>	0.26	<b>8</b>
<b>Sig.</b>	0.52	<b>45</b>	<b>Sig.</b>	0.62	<b>33</b>	<b>Sig.</b>	0.44	<b>21</b>	<b>Sig.</b>	0.34	<b>9</b>
<b>Sig.</b>	0.59	<b>46</b>	<b>Sig.</b>	0.66	<b>34</b>	<b>Sig.</b>	0.50	<b>22</b>	<b>Sig.</b>	0.33	<b>10</b>
			<b>Sig.</b>	0.58	<b>35</b>	<b>Sig.</b>	0.49	<b>23</b>	<b>Sig.</b>	0.54	<b>11</b>
			<b>Sig.</b>	0.64	<b>36</b>	<b>Sig.</b>	0.38	<b>24</b>	<b>Sig.</b>	0.61	<b>12</b>

C\_ Relationship of the paragraph's degree to the field to which it belongs:

The availability of honesty in the paragraphs of the scale is one of the important stages that falls on the shoulders of the researcher, because the validity of the scale depends to a large extent on the validity of its paragraphs (Al-Kinani, 1995: 145). There is more than one indicator or method to detect the validity of the scale, and one of the most common indicators is the correlation coefficient (Ouda, 1998: 340).

Since the knowledge sharing scale includes a number of fields that differ among themselves, which necessitated extracting the correlation between the degree of each paragraph and the total degree of the domain to which it belongs. And the total score for the domain in which it is located, and it was found that the correlation coefficient are all statistically significant at the level of significance (05.0), as shown in Table (4)

**Table (4)**

**Statistical analysis of the items of the knowledge sharing scale using the method of item degree relationship with the total score of the domain to which it belongs**

<b>Sig.</b>	Correl- ation Coeff.	Parag.	<b>Sig.</b>	Correl- ation Coeff.	Parag.	<b>Sig.</b>	Correl- ation Coeff.	Parag.
Educational planning			Educational Aids			Knowledge sharing behavior		
<b>Sig.</b>	0.66	<b>1</b>	<b>Sig.</b>	0.66	<b>1</b>	<b>Sig.</b>	0.60	<b>1</b>
<b>Sig.</b>	0.65	<b>2</b>	<b>Sig.</b>	0.66	<b>2</b>	<b>Sig.</b>	0.52	<b>2</b>
<b>Sig.</b>	0.70	<b>3</b>	<b>Sig.</b>	0.52	<b>3</b>	<b>Sig.</b>	0.52	<b>3</b>
<b>Sig.</b>	0.63	<b>4</b>	<b>Sig.</b>	0.61	<b>4</b>	<b>Sig.</b>	0.53	<b>4</b>
<b>Sig.</b>	0.69	<b>5</b>	<b>Sig.</b>	0.55	<b>5</b>	<b>Sig.</b>	0.55	<b>5</b>
<b>Sig.</b>	0.40	<b>6</b>	<b>Sig.</b>	0.52	<b>6</b>	<b>Sig.</b>	0.64	<b>6</b>
<b>Sig.</b>	0.67	<b>7</b>	<b>Sig.</b>	0.55	<b>7</b>	<b>Sig.</b>	0.65	<b>7</b>
<b>Sig.</b>	0.68	<b>8</b>	<b>Sig.</b>	0.58	<b>8</b>	<b>Sig.</b>	0.37	<b>8</b>
<b>Sig.</b>	0.64	<b>9</b>	<b>Sig.</b>	0.48	<b>9</b>	<b>Sig.</b>	0.42	<b>9</b>
<b>Sig.</b>	0.68	<b>10</b>	<b>Sig.</b>	0.50	<b>10</b>	<b>Sig.</b>	0.4	<b>10</b>
<b>Sig.</b>	0.68	<b>11</b>	<b>Sig.</b>	0.51	<b>11</b>	<b>Sig.</b>	0.56	<b>11</b>
<b>Sig.</b>	0.69	<b>12</b>	<b>Sig.</b>	0.58	<b>12</b>	<b>Sig.</b>	0.64	<b>12</b>
<b>Sig.</b>	0.64	<b>13</b>	<b>Sig.</b>	0.62	<b>13</b>	<b>Sig.</b>	0.62	<b>13</b>
<b>Sig.</b>	0.58	<b>14</b>	<b>Sig.</b>	0.70	<b>14</b>	<b>Sig.</b>	0.64	<b>14</b>
<b>Sig.</b>	0.63	<b>15</b>	<b>Sig.</b>	0.6	<b>15</b>	<b>Sig.</b>	0.64	<b>15</b>
			<b>Sig.</b>	0.65	<b>16</b>			

d\_ Relationship of the degree of the field to other fields and to the total degree of the scale:

The internal correlations between each domain and the other domains of the knowledge sharing scale were found using the Pearson correlation coefficient, and all correlation coefficients were significant when compared with the tabular value as shown in Table (5)

**Table (5)**  
**Statistical analysis of the items of the knowledge sharing scale using the domain-to-domain relationship method and the domain in total degree**

Knowledge sharing	Educational planning	Educational Aids	Knowledge sharing behavior	Field Field
0.90	0.81	0.70	1	Knowledge sharing behavior
0.91	0.77	1	---	Educational Aids
0.94	1	---	---	Educational planning

### Reliability

By this, we mean reaching the same results when applying the test in two different periods, within a time limit of one or two weeks in most cases (Daoud and Abdel Rahman, 1990: 122).

It is referred to in a quantitative form called the stability coefficient, whose value ranges between zero and one, and the greater the value of the scale's stability coefficient, this indicates that the scale has high stability and vice versa (Al-Shayeb, 2009: 102), and the stability of the knowledge-sharing scale was extracted by the Alpha coefficient method. Cronbach alfa: This method leads to an internal consistency coefficient of the scale structure, also called the coefficient of homogeneity. On the stability of test scores (Allam, 2002: 165-166), and to extract the stability of a scale in this way, the alpha-Cronbach equation was applied and found that the reliability coefficient was equal to (0.94) for the knowledge-sharing scale, and this indicates the homogeneity of the scales.

•The final picture of the knowledge-sharing scale:

The measure of knowledge sharing in its final form consists of (46) items, with five alternatives that apply to it (always, often, sometimes, rarely, never) and with weights (5, 4, 3, 2, 1).

•The ultimate application of the knowledge sharing scale:

After agreement with the kindergarten supervisors and directors, the two researchers distributed the scale to the kindergarten teachers, by electronic method, to place their visas on the scale. The researcher, including:

Reducing the official working hours in government institutions.

The curfew that was due to the Corona disease that swept the world.

Statistical means:

- 1-T-test for one sample.
- 2-T-test for two independent samples.
- 3-Cronbach's alpha coefficient.
- 4-Pearson correlation coefficient.

#### Chapter Four

##### View and discuss results

Measuring the knowledge sharing of a sample of parameters.

The null hypothesis: There is no statistically significant difference between the arithmetic mean of kindergarten teachers on the knowledge sharing scale and the hypothetical mean of the scale at the level of significance (0.05).

To achieve this goal, the two researchers applied the knowledge sharing scale to a sample of female teachers whose number was (200) individuals, and the results showed that their average score on the scale amounted to (180.50) degrees and a standard deviation of (26.22) degrees, and when balancing this average With the hypothetical mean of the scale of (138) degrees, and using the t-test for one sample, it was found that the difference was statistically significant and in favor of the arithmetic mean, as the calculated t-value was higher than the tabular t-value of (1.96) with a degree of freedom (199) And the level of significance is (0.05), thus rejecting the null hypothesis and accepting the alternative hypothesis which states that there is a statistically significant difference between the arithmetic mean of kindergarten teachers on the knowledge sharing scale and the hypothetical mean of the scale at the significance level (0.05) and Table (6) illustrates this.

**Table (6)**

**T-test for the difference between the sample mean and the hypothetical mean of the knowledge sharing scale for the parameters**

Sig. Level	Degree of Freedom	T-Tabulated Value	T-Calculated Value	Hypothetical mean	Standard deviation	Arithmetic mean	Data Size
Sig.	199	1.96	22.92	138	26.22	180.50	200

-Know the significance of the differences in the sharing of knowledge among the female teachers according to the variable of specialization.

The null hypothesis: There is no statistically significant difference between the two arithmetic averages of kindergarten teachers on the knowledge sharing scale according to the specialization variable at the level of significance (0.05).

To achieve this goal, the t-test was used for two independent samples of unequal size to know the differences in knowledge among kindergarten teachers according to the specialization variable. It is less than the T-table value of (1.96) at the (0.05) level and the degree of freedom (198), thus accepting the null hypothesis and rejecting the alternative hypothesis which states that there is a statistically significant difference between the arithmetic averages of kindergarten teachers on the knowledge sharing scale on the

According to the specialization variable at the significance level (0.05), and Table (7) shows this.

**Table (7)**

**The t-test for two independent samples to know the differences in the sharing of knowledge among the female teachers according to the variable of specialization**

<b>Sig.</b>	<b>Tabulated -T</b>	<b>Calculated -T</b>	<b>Standard deviation</b>	<b>Mean</b>	<b>No.</b>	<b>Specialization</b>
<b>Non-Sig.</b>	1.96	1.50	27.81	178.45	130	<b>Kindergarten</b>
			22.68	184.30	70	<b>Other Specialization</b>

### **Conclusions**

1-Kindergarten teachers share knowledge at a high level.

### **Recommendations**

1-Holding scientific seminars and conferences in the Ministry of Education to develop the knowledge sharing among kindergarten teachers.

2-The role of kindergarten in creating the appropriate environment that encourages the establishment of social relations and cooperation with each other.

### **Suggestions**

1-Conducting a study dealing with the knowledge sharing variable in primary and middle schools.

2-Building a training program using educational methods to develop knowledge sharing among kindergarten teachers.

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