The Role of Servant Leadership in Developing Management Information Systems

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Abstract: The research aims to test the impact of servant leadership in management information systems, as well as to identify the level of servant leadership practice and management information systems in the Directorate of Communications and Information Systems in the Iraqi Ministry of Interior, in terms of the importance of the research variables to the directorate and the sample community, as the research adopted the exploratory analytical descriptive approach In his achievement, through a survey of the opinions of an intended quota sample of (266) individuals, By adopting the questionnaire as a main tool for data collection that includes (44) items divided into the two research variables, As well as conducting open interviews to identify the problems, strengths and weaknesses of the directorate about practicing the research variables, The statistical analysis of the most prominent result concluded that the Directorate of Communications and Information Systems adopted the practices of servant leadership, and was able to employ them to positively influence the development of its management information systems, and the researcher came up with a set of recommendations.

Keywords: Servant Leadership, Management Information Systems, System Quality, Communication and Information Systems Directorate.

RESEARCH PROBLEM

The two topics of leadership, with its general framework and its different types, and management information systems of all kinds and branches, have received prominent and wide attention by specialists and researchers in administrative thought, so that researchers can follow the most prominent related studies, as the researcher noticed its focus on the influence of the two variables, each separately on organizational performance without being discussed The effect of the two variables on each other "in a unified model that can be researched and investigated. Given the fact that the researcher works in a security organization, is familiar with many different work reports, and in direct contact with all administrative levels, he identified the need for these organizations to adopt servant leadership practices that deal with serving workers, meeting their requirements, achieving their aspirations and participating in the decision-making process, as well as training them. And their development and qualification so that they can assume responsibilities in it in the short and long term, as the research problem was identified with the limited knowledge of the directorate leaders with concepts, models, role, dimensions and practices of the directorate leadership, as well as management information systems despite their practice of it, adding to this the blurring of the relationship between the two variables and the limited knowledge of the nature of That relationship, its type and direction, which prompted the researcher to define the research problem by asking a chief question (**Has the servant leadership of the Directorate of Communications and Information Systems at the Ministry of the Interior been able to improve the level of its administrative information systems?**). Several sub-questions branched out from it, which are as follows:

1. What is the level of interest and practice of servant leadership in the Directorate of Communications and Information Systems? Which of its most caring and adopting practices?

2. What is the level of interest of the Directorate of Communications and Information Systems in developing its administrative information systems that it uses? What are its most prominent dimensions of interest, identification and practice?

3. What is the relationship between servant leadership and management information systems?

4. Do servant leadership practices affect the development of management information systems?

RESEARCH HYPOTHESIS

The goal of the hypothetical model is to clarify the relationship between the two main variables and sub-variables for each of the two variables of the research, as the dimensions of servant leadership (**emotional processing** - **conceptual skills** - **empowering subordinates** - **helping subordinates to develop and succeed** - **emotional behavior** - **commitment to community development**) were chosen, which the researcher believes that It has a relationship and influence in the development of management information systems. While the dimensions of management information systems (**higher management concern - training - human resources - material resources - software**) were chosen, which represent the requirements and requirements of developing management information systems.

In order to serve the research objectives and its problem, the test chart was prepared to represent a set of influence relationships and correlations between variables.

1. The first component of the research outline represents servant leadership and its dimensions are: (**emotional healing - conceptual skills - empowering subordinates - helping subordinates to develop and succeed - ethical behavior - commitment to community development**) The researcher based on a study (Liden et al., 2008).

2. The second component of the research outline represents Information Systems Management in its five dimensions (**senior management interest - training - human resources - material resources - software**). The researcher relied on the study (Parker, 1993), the study (Ghurab and Hijazi, 1998) and the study (Al-Oudayah, 2015).
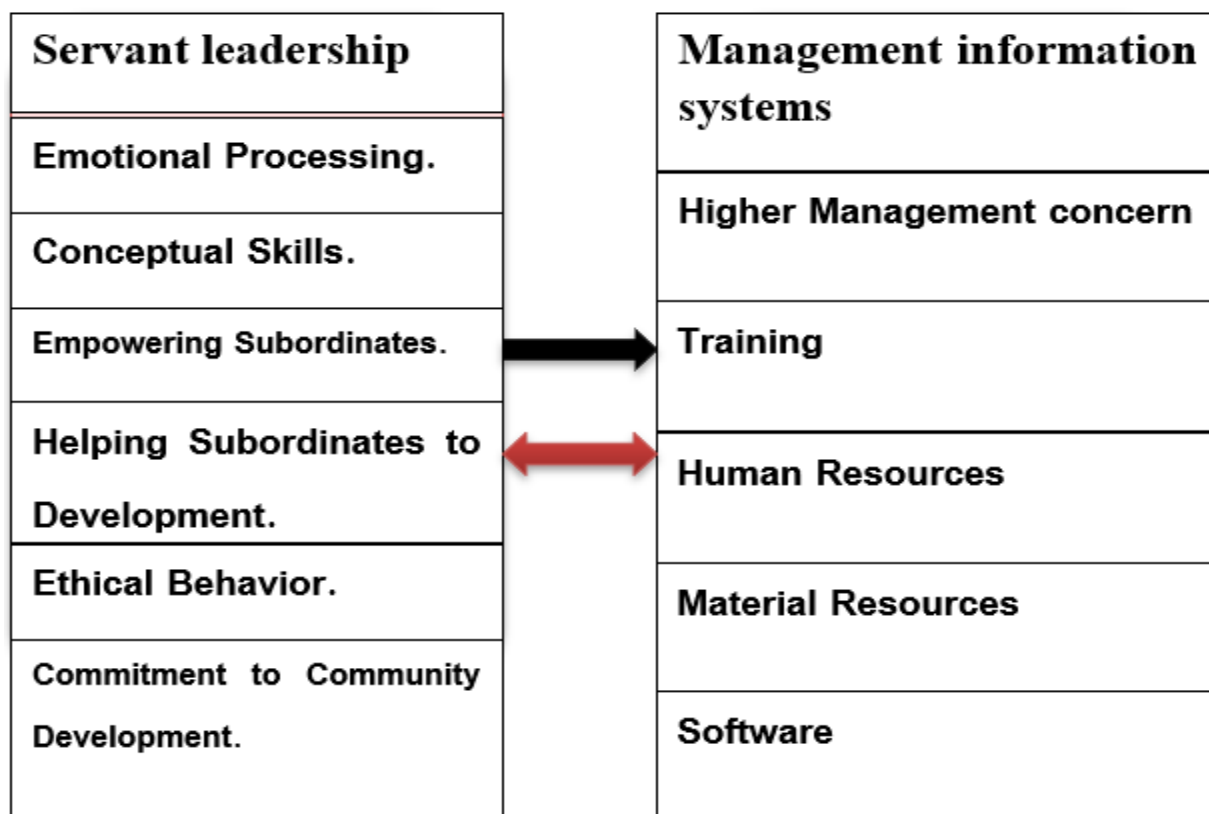

Fig.1: The hypothetical outline of the research

Source: Prepared by the researcher.

INTRODUCTION

The organizations of the Ministry of Interior are among the organizations that have an important role in the stability and security of society, For the contributions it makes to the implementation of the law and the achievement of safety and security for citizens , The success of security organizations is linked to two parallel factors of great importance, the first factor is the nature of leadership, and the second factor is the extent of development of management information systems, There is no doubt that the security organizations do not need leaders who only issue orders, but goes beyond that to motivate their employees, sharpen their motivation, and

raise their morale, after meeting their requirements and needs, and establishing bridges of social communication and human relations between them and their leaders to achieve the desired goals of the organizations. Over the years, many leadership theories have been devised with the aim of achieving the goals of organizations, improving the performance of their members, developing them professionally, raising their efficiency, and their participation in decision-making, as transactional leadership, transformational leadership, participatory leadership, and finally servant leadership that received great attention from researchers, it is a theoretical one. A humanitarian leadership with an ethical dimension that aims to care about subordinates and serve them, and take care of their interests, as it gives priority to care, service provision and cooperation through communication with others, and it also encourages subordinates to strike a balance in their lives between practicing Leadership and service to others, as the primary goal of servant leadership is to improve the lives of subordinates first, and then raise the level of their organizations later, as it seeks to empower its subordinates, delegate powers, and encourage them to assume work responsibilities.

On the other side, management information systems are a human system and not a purely automatic system, as the human element forms the basic base on which the system is based, influencing and influencing all the organizational environment variables. Individuals working in management information systems are the ones who invent, innovate, innovate, renew, manage, organize, design, and implement information systems. Administrative, human resources with the help of buildings, devices, equipment and software are the ones that manufacture and develop management information systems, and from this point of view, management information systems affect and are affected by the leadership pattern prevailing in the organization.

Through the foregoing, the researcher aims in this research to uncover the impact of the concepts of management information systems, the factors that would develop its techniques, tools and technical methods, and their implications for the efficiency of the organization's performance. Hence, this research came to clarify the importance of studying the two variables (servant leadership - and management information systems). In the field of the security sector, which faces great challenges due to the expansion of its work on the one hand, and the size of the responsibility entrusted to it on the other hand.

SERVANT LEADERSHIP CONCEPT

Servant leadership was defined by its view (Greenleaf): "by practicing leadership that places the interest of following above the self-interest of the leader" (Greenleaf, 1977: 7) The philosophy of servant leadership is based primarily on the method of providing assistance, sacrifice, self-denial and extending a helping hand to the success and fulfillment of others' hopes by building a relationship with them in order to contribute to their well-being and society. Ciulla 2003 provided a definition of servant leadership in reference to the interpretation of (Greenleaf) Servant leadership begins with the natural feeling that one wants to serve, and to serve first, then conscious choice makes one aspire to leadership ... The difference is in the care provided by the servant leader. First, to make sure that the needs of others are met with the highest priority, as they are served ... they become healthier, wiser, free and independent (Ciulla, 2003: 217). A style of servant leadership is often presented and understood in parallel with authoritarian or hierarchical leadership styles. Servant leadership takes into account the fact that traditional forms of leadership are insufficient to motivate people today to follow it (Page & Wong, 2000: 2). Servant leadership is also a philosophy based on influencing and motivating workers in order to achieve the desired goals through the use of all available resources of the organization (Liden et al., 2008: 161).

THE IMPORTANCE OF SERVANT LEADERSHIP

Many researchers and thinkers have agreed on the importance of servant leadership as a leadership style and practice suitable for all organizations working in the business environment (Olesia et al., 2013: 87) . The reason for this is due to the distinguished results achieved by the servant leadership in serving subordinates, especially as it works to advance the interests of the subordinates over the personal interests of the leader, making it a pattern that includes all moral and humanitarian trends ((Barbuto & Wheeler, 2006: 302). Servant leaders realize the impact of their practices and behavior through their understanding of their subordinates, meeting their needs and aspirations, and this is reflected in turn on their social relations that bind them to "the family - and the group - the organization - and society as a whole" and leads to the prosperity of the social relations movement in general (Spears, 2010: 56).

DIMENSIONS OF SERVANT LEADERSHIP

1. **Conceptual skills:** visualization refers to the servant leader's overall understanding of an organization - its purposes, complexities, and mission.This ability allows service leaders to think through multiple aspects of problems, to see if something is wrong, and to creatively address problems according to the organization's overall goals. (Ehrhart, 2004: 70).
2. **Emotional therapy:** emotional processing involves being sensitive to personal concerns and the well-being of others, including identifying others' problems and being willing to allocate time to address

them. Servant leadership that pays attention to emotional therapy allocates time to listen to subordinates, stands by them, and provides them with the required support (Neubert el at., 2008: 1225).

3. **Putting the followers first:** Putting the followers first is an indispensable condition for servant leadership - the distinguishing feature, and this means the use of verbs and words that clearly explain to the followers that their concerns are a priority, including placing the interests of the followers and their success on the interests of the leader, this may mean that the leader cuts About his duties to assist his followers in their missions (Gergen, 2006: 65).

4. **Helping subordinates grow and succeed:** The behavioral pattern refers to knowing the professional or personal goals of subordinates and helping them achieve those aspirations. Servant leadership makes the career development of subordinates a priority, including directing subordinates and providing them with support. Helping subordinates grow and succeed is to help these individuals to achieve these aspirations. Self-realization, and reaching their fullest human potential (Spears, 2010: 14) .

5. **Acting ethically:** Ethical behavior does the right thing the right way, adhering to strong moral standards, including being open, honest and fair with followers, and servant leaders do not compromise their moral principles in order to achieve success (Barbuto, 2006, 305).

6. **Empowerment:** Empowerment refers to allowing followers the freedom to be independent and to make decisions on their own and to be self-sufficient. It is a way for leaders to share power with their followers by allowing them to have control. Empowerment builds the confidence of subordinates in their own abilities to think and act on their own because they are given the freedom to deal with difficult situations the way they feel It is the best, as well as providing the necessary facilities by determining when and how tasks are accomplished in an appropriate manner (Patterson, 2003: 17).

7. **Generating value for the community:** Servant leadership generates value for society by giving back to the community intentionally and consciously, and it participates in community activities and encourages subordinates to also volunteer to serve the community, servant leadership adopts community value in a unified manner to link the goals and objectives of the organization with the broader goals and objectives of society (Covey, 2002): 12).

The Concept of Management Information Systems

Management information systems are defined as a system consisting of people, machines, equipment, procedures, and laws for the purpose of classifying, analyzing, transmitting and distributing the information required for decision makers (Kotler , 1997 :56), It also defines a system for transferring data from inside and outside the organization, processing it, transforming it into appropriate and understandable information, and providing it to managers to enable them to perform the administrative tasks and functions entrusted to them in efficient and effective decision-making processes (Bee . 1999: 3), While the latest definition of management information systems is a set of devices, software, equipment, personnel, and procedures that are used to collect, process, store, retrieve and deliver data to the beneficiaries using various means of communication (Hussein, 2021: 20).

The Importance of Management Information Systems

Among the most important factors that have increased the importance of information systems in organizations are the following: (Al-Maghrabi, 2001: 33):

1. Empowering management and managers to make decisions on an informed and rational basis by providing the information they need and in a timely manner.

2. Avoidance of mistakes made by managers and management, whether on the planning or organizational side.

3. The complexity of jobs and businesses, which in turn led to the complexity of the activities of the organizations and the expansion of their scope of work, which calls for the necessity of coordination and follow-up by obtaining modern and advanced information and finding specialized devices for the completion and storage of information.

4. Good information systems help the manager to make timely decisions, as our present age requires us not to wait, even for specific hours, in the decision-making process.

5. One of the reasons for the deterioration of the quality of public services in most governmental organizations is the lack of accurate information in a timely manner and poor communication on the one hand, and on the other hand the use of old methods in the process of producing and storing information.

Dimensional Administrative Information Systems

1. **The interest of the higher management:** the keenness of the higher management to overcome the obstacles and solve the problems facing the workers, and to provide all the devices and equipment and everything that would support the development of management information systems.

2. **Training:** A process aimed at making a skill, cognitive and behavioral change in the current and future characteristics of an individual worker in order to be able to fulfill the requirements of his job.
3. **Human resources:** represented by the working and specialized skills of the management information system, and they are program designers, analysts and distributors of information.
4. **Physical resources:** It includes all the equipment and physical tools that make up the system, such as screens, printers, their physical components, storage media, and the infrastructure of the organization.
5. **Software:** A group of computerized programs and applications that are used in the database by means of which all data is processed.

THE PRACTICAL SIDE OF THE RESEARCH

Table 1: Analysis of Servant Leadership and Management Information Systems (n = 255)

S	Dimensions of servant leadership	Arithmetic mean	standard deviation	Relative importance	Coefficient of variation%
1-	Emotional therapy	3. 57	0.777	71.4	21.7
2-	Conceptual skills	4.03	0.756	80.6	18.7
3-	Empowering subordinates	4.01	0.629	80.2	15.6
4-	Helping subordinates develop	3.85	0.713	77	18.5
5-	Ethical behavior	4.16	0.630	83.2	15.1
6-	Commitment to community development	3.97	0.730	79.4	18.3
servant leadership		3.93	0.531	78.6	13.5
S	Dimensions of management information systems	Arithmetic mean	standard deviation	Relative importance	Coefficient of variation%
1-	Top management interest	3.81	0.660	76.2	17.3
2-	Training	3.98	0.748	79.6	18.8
3-	Human Resources	4.11	0.614	82.2	14.9
4-	Material resources	3.52	0.495	70.4	14
5-	Software	4.11	0.716	82.2	17.4
management information systems		3.91	0.495	78.2	12.6

Source: SPSS V.26 Output

In order to understand the impact of the six dimensions of servant leadership (**emotional processing, conceptual skills, empowering subordinates, helping subordinates to develop, ethical behavior, commitment to community development**) in management information systems, and through the use of (SPSS V.26) program in the (Enter) method, it is Table (26) results, the following can be seen:
The value of the correlation coefficient was (0.683 **), positive, directly positive, at the level of significance (0.000), while the value of the coefficient of determination was (0.467), while the value of the modified coefficient of determination was (0.454), indicating that the combined dimensions were able to interpret a ratio of (45.4. %) Of the changes that occur to the administrative information systems in the Directorate of Communications and Information Systems at the Ministry of Interior, which is an acceptable model, with a value of (F) calculated for the form (36.172) at the level of significance (0.000) and it exceeds its tabular value (5.41) at the level of significance (0.01).
As for the effect of the dimensions, after commitment to community development, the ranking was issued with the value of the marginal slope (0.305) at the level of significance (0.000), with the value of (T = 5.084), and the conceptual skills (s = 0.147) at the level of significance (0.049) and with a value of (T = 1.978).), And moral behavior with the value of (s = 0.134) at the level of significance (0.034), and at the value of (T = 2.127), and helping the subordinates to develop (s = 0.133) at the level of significance (0.019), with the value of (T = 2.352), and emotional processing (βs = 0.115) at the level of significance (0.045) with a value of (T = 2.018), while the empowerment of the subordinates had no effect on the model, while the estimated equation for the model was as follows:

Management Information Systems = 1.534 + 0.305 * (Commitment to Community Development) + 0.147 * (Conceptual Skills) + 0.134 * (Ethical Behavior) + 0.133 * (Helping Subordinates Develop) + 0.115 * (Affective Processing)

From all of the above, the null hypothesis is rejected, and the alternative hypothesis is accepted.

Table 2: The effect of the combined dimensions of servant leadership on management information systems as a whole (n = 255)

Independent variable	management information systems								
	a	B	R^2	AR^2	Sig	TB	F	Ta	D-W
Emotional therapy		.115				2.018			
Conceptual skills		.147				1.978			
Empowering subordinates		.055				.871			
Helping subordinates develop	1.534	.133	0.467	0.454	0.00	2.352	36.172	8.460	2.110
Ethical behavior		.134				2.127			
Commitment to community development		.305				5.084			

Source: SPSS V.26 Output

CONCLUSIONS

1. It became evident that the Directorate of Communications and Information Systems in the Ministry of the Interior is interested in obtaining initial university degrees for its members, in which they rely on the male side at the expense of the females who have experience, but they do not have a doctorate.
2. The directorate showed its interest in emotional treatment and what improves the level of servant leadership through the tendency of its managers to help their subordinates when they face personal problems, and that may lead the subordinate to feel upset at times.
3. The directorate showed its interest in emotional treatment and what improves the level of servant leadership through the tendency of its managers to help their subordinates when they face personal problems, and that may lead the subordinate to feel upset at times.
4. The directorate was able to direct commitment to community development and help subordinates to develop, ethical behavior, emotional processing and conceptual skills in improving the level of management information systems in light of its lack of resort to empowering its employees to participate in that improvement.

RECOMMENDATIONS

1. The Directorate should open up to colleges, universities and institutes that specialize in management information systems without regard to gender, in addition to attracting holders of higher university degrees (masters and doctorates), and integrating them with those with experience in a way that secures the improvement of the performance of their tasks.
2. The directorate should give more attention to its conceptual skill and to enhance the level of servant leadership through the additional tendency of its managers and employees to credibly discuss the lapses and lapses in which they fall into, and solve them through a discussion aimed at strengthening the ranks.
3. The Communications and Information Systems Directorate of the Ministry of Interior should direct its servant leadership practices in improving management information systems, particularly through commitment to community development, retention of conceptual skills, ethical behavior, and subordinate empowerment and assistance in developing them, as well as emotional handling individually.
4. The Communications and Information Systems Directorate should pay extra attention to improving management information systems by directing commitment to community development, preserving conceptual skills, adopting ethical behavior, and working to assist subordinates in the development and emotional treatment of that interest and improvement.

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