THE ROLE OF SUPPORTIVE LEADERSHIP PRACTICES IN ADDRESSING ELECTRONIC MANAGEMENT OBSTACLES - AN ANALYTICAL STUDY AT AL-FURAT AL-AWSAT TECHNICAL UNIVERSITY - REPUBLIC OF IRAQ

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**ABSTRACT**

**Purpose:** The research is aimed at testing the role of supportive leadership in addressing electronic management obstacles.

**Theoretical framework:** The conceptual frameworks of the two research variables were clarified, the independent variable, the supportive leadership in its dimensions (of empowering employee, inspirational motive, and treatment fairness), and the dependent variable, the electronic management obstacles (The organizational obstacles, The Technical obstacles, and The human obstacles).

**Design/Methodology/Approach:** The study sample is taken from education sector employees at Al-Furat Al-Awsat Technical University, to determine the differences among them at dimension level and study variables. 102 valid questionnaires were collected to distribute the statistical analysis after conducting an electronic survey questionnaire. Three study hypotheses were tested using a statistical program (SMART PLS) to determine whether there is a correlation and effect between the study variables.

**Findings:** The research found that there is a significant effect of supportive leadership on the obstacles of electronic administration. In other words, the more reliance on supportive leadership practices, the fewer obstacles electronic management will have.

**Research, practical and social implication:** Managements should take into account employee satisfaction by providing financial compensation (incentives) and maintaining their pays at satisfactory levels.

**Originality / value:** the study recommends the need to raise awareness about the supportive leadership and conduct future studies that can focus on concrete and feasible strategies that managements may use to address the electronic management of education sector employees in line with this study recommendations.

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Estrutura teórica: Os quadros conceituais das duas variáveis de pesquisa foram esclarecidos, a variável independente, a liderança solidária em suas dimensões (de capacitação do funcionário, motivação inspiradora e equidade de tratamento), e a variável dependente, os obstáculos de gestão eletrônica (Os obstáculos organizacionais, Os obstáculos técnicos e Os obstáculos humanos).

Design/Metodologia/Abordagem: A amostra do estudo é obtida dos funcionários do setor de educação da Al-Furat Al-Awsat Technical University, para determinar as diferenças entre eles no nível de dimensão e variáveis do estudo. Foram coletados 102 questionários válidos para distribuir a análise estatística após a realização de questionário eletrônico de pesquisa. Três hipóteses de estudo foram testadas usando um programa estatístico (SMART PLS) para determinar se há correlação e efeito entre as variáveis do estudo.

Constatações: A pesquisa constatou que há um efeito significativo da liderança solidária sobre os obstáculos de gestão eletrônica. Em outras palavras, quanto mais confiança nas práticas de liderança, menos obstáculos terá a gestão eletrônica.

Investigação, implicação prática e social: os gestores devem ter em conta a satisfação dos trabalhadores, proporcionando compensação financeira (incentivos) e mantendo os seus salários a níveis satisfatórios.

Originalidade / valor: o estudo recomenda a necessidade de aumentar a conscientização sobre a liderança solidária e realizar estudos futuros que possam se concentrar em estratégias concretas e viáveis que os gestores podem usar para abordar a gestão eletrônica dos funcionários do setor de educação em linha com as recomendações do estudo.

Palavras-chave: Liderança Solidária, Gerenciamento Eletrônico, Obstáculos ao Gerenciamento Eletrônico.

EL PAPEL DE LAS PRÁCTICAS DE LIDERAZGO DE APOYO EN LA REDUCCIÓN DE LOS OBSTÁCULOS DE GESTIÓN ELECTRÓNICA - UN ESTUDIO ANALÍTICO EN LA UNIVERSIDAD TÉCNICA AL-FURAT AL-AWSAT

RESUMEN
Objetivo: La investigación tiene por objeto poner a prueba el papel del liderazgo de apoyo en la solución de los obstáculos a la gestión electrónica.

Estructura teórica: Se han aclarado los marcos conceptuales de las dos variables de investigación, la variable independiente, el liderazgo solidario en sus dimensiones (empoderamiento de los empleados, motivación inspiradora y trato justo), y la variable dependiente, los obstáculos electrónicos a la gestión (barreras organizativas, barreras técnicas y obstáculos humanos).

Diseño/Metodología/Enfoque: La muestra de estudio se toma del personal docente de la Universidad Técnica Al-Furat Al-Awsat para determinar sus diferencias en el tamaño y las variables del estudio. Se recopilaron 102 cuestionarios válidos para distribuir el análisis estadístico después de la realización de un cuestionario electrónico de encuesta. Se probaron tres hipótesis de estudio utilizando un programa estadístico (SMART PLS) para determinar si existe una correlación y efecto entre las variables de estudio.

Hallazgos: La encuesta encontró que hay un efecto significativo del liderazgo solidario en los obstáculos de la administración electrónica. En otras palabras, cuanto más confianza haya en las prácticas de liderazgo, menos obstáculos tendrá la gestión electrónica.

Investigación, participación práctica y social: los administradores deben tener en cuenta la satisfacción de los empleados proporcionando una compensación financiera (incentivos) y manteniendo sus salarios en niveles satisfactorios.

Originalidad/valor: El estudio recomienda la necesidad de crear conciencia sobre el liderazgo solidario y de realizar futuros estudios que puedan centrarse en estrategias concretas y viables que los directivos puedan utilizar para abordar la gestión electrónica de los empleados de educación electrónica con las recomendaciones del estudio.

Palabras clave: Liderazgo Solidario, Gestión Electrónica, Obstáculos a la Gestión Electrónica.

INTRODUCTION
Given the rapid environmental changes, intense competition and the Coronavirus disease (COVID-19) outbreak and continuation, organizations were compelled to adapt to these variables in order to survive and continue practicing business. The adoption of electronic work
has become an imperative necessity for organizations' survival at work environment. Especially, at educational institutions, such as universities, which have swiftly switched to electronic approach completely when the corona virus outbreak and strict health measures were imposed, causing those institutions to suffer from multiple obstacles, including organizational, technical and human obstacles. All that are attributed to lack of specialized knowledge as well as lack of essential academic infrastructures and material capabilities (Qanbar & Abbas, 2019: 2900).

Nowadays, applying the electronic management is regarded as one of the main factors related to the efficiency and effectiveness of academic and administrative work. Universities need a high degree of human interactions, information exchange and holistic thinking and effort. Apparently, the availability of technology on a wide scale, has become the foundation for completing effective tasks in academic work. Therefore, the electronic management is considered an essential and vital element in constructive interpersonal relationships and communication and the exchange of useful knowledge are seen as a significant variable that do influence individual or group behavior. Furthermore, a leader's success is mainly related to employ the appropriate leadership skills and influence subordinates under his supervision. According to Robert House, leader's task is to smooth the followers' path to the collective goal (Shin et al., 2016: 55). Through removing roadblocks and fostering motivation using one of the four leader behavior styles that he identifies, such as the supportive leadership style. Leaders can express concern for subordinates' needs and well-fare and create an environment that demonstrate and generates mutual respect, which motivates them to contribute effectively and strengthens their confidence in their organization (Grint, 2013:91). In this type of leadership, leader can empower working individuals, i.e. delegating them with required and sufficient power, sharing information with them.

Hence, they can perform the tasks assigned to them freely and encourage them to create and present new ideas. Moreover, the supportive leadership also participate in inspiring employees by providing the appropriate environment for teamwork and instilling team spirit, and cares about individuals' feelings and aspirations, fair treatment fairness among them and dealing with them with honesty and integrity and developing effective work teams. Based upon all of the above mentioned, supportive leadership is one of the modern management methods that, through its practice of empowerment, inspirational motive and fairness treatment, is based on granting and delegating broader powers to employees and selecting the most appropriate
ones to hold responsibility and focus on training them, developing their knowledge and enhancing their abilities

LITERATURE REVIEW

The leadership should examine and evaluate the transformation processes of electronic work and not be satisfied with the continuous interaction with the organizational structure, strategy and processes (Alasiri & AlKubaisy, 2022:6). The electronic management obstacles are one of the most important topics that arise for researchers, and its importance also lies in the reciprocal relationship between teachers and students. Undoubtedly, supportive leadership is the one that instills the appropriate and balanced culture with a university's objectives by setting the foundations to create a fertile work environment dominated by harmony and excellent relationships. Clearly, this would increase university's interest in its creative human resource to achieve its objectives and then ensure viability. A successful leader is the one who can provide an atmosphere of supportive values and trends to address the roadblocks of electronic management.

The Concept of Supportive Leadership

Leadership can be defined as the activity practiced by an administrative leader in decision-making, order-issuance, and administrative supervision over others. Leadership is a process of influencing activities of an individual or group in an attempt to achieve objectives in certain circumstances. At the same time, leadership is defined as the capability of mobilizing, influencing, motivating, inviting, directing, instructing, guiding, commanding, prohibiting and even punishing (if necessary), and strengthening leadership with the intention that humans as management media are willing to work in order to effectively and efficiently achieve administrative goals (Mulyasa, 2007). The behaviors of some leaders can be considered supportive behaviors, while others constitute obstacles to work. Therefore, the success of organizations requires the presence of leaders who are able to influence and manage employees in order to achieve the required performance) Hamour, 2023:5). In this field, many leadership patterns emerged that illustrate the style and behavior that leaders follow to influence their subordinates, and among these patterns is the supportive leadership style. This leadership style was initiated by (Mitchell & House, 1971), who presented path-goal theory (Shin et al., 2016:56). Through type of leadership, the ability and effectiveness of a leader's influence on his subordinates and how to support them were discussed. Also, how to comprehend the methods
and means that can serve as a road map leading to achieve the desired objectives at organizational and individual levels, which is positively reflected in employees' behavior, guiding them, and supporting them by accepting leader’s behavior. The theory source is based upon previous theories that rely on motivation and expectation of individuals' behavior and trends of their job satisfaction through the degree of leadership behavior and its outcomes. This theory emphasizes that leadership behavior should be a motivation factor for employees and guide them to work in order to achieve goals.

Supportive leadership has attracted a lot of attention in a range of academic disciplines and research areas and has become one of the types of leaderships that represents a style focusing upon concerns associated to subordinates well-fare and needs facilitating the desired workplace environment (Shin et al., 2016: 56). Obliviously, the supportive leadership concept is linked to individualized considerations of transformational leadership, as both sorts of leadership include expressing interest in subordinates and paying attention to their personal needs and responding to them (Rafferty & Griffin, 2004: 66). However, in addition to such individualized attention to subordinates, individualized consideration encompasses developmental features, such as providing advices and guidance to subordinates concerning their careers and professions, closely monitoring and observing their performance and progress, and providing appropriate training according to actual training needs (Bass, 1985:44).

In the field of differentiating between supportive and transformative leadership, the supportive leadership places a strong emphasis on emotional and social support, which displays itself in actions like attention, empathy, and listening to subordinates. While transformational leadership focuses on the entire organization. As a key aspect of effective leadership, the supportive leadership places a tremendous emphasis on providing individualized, emotional support for subordinates (Shin et al., 2016: 56). Supportive leadership style refers to behaviors of a leader who shows individualized interests to develop subordinates and show unlimited support for subordinates in to achieve the most challenging tasks and goals (Northouse, 2013). (House, 1981:22) defined the supportive leader as an individual who provides instrumental, informational, emotional, effective, and appraisal support to subordinates while emphasizing on the emotional support, which includes providing an element of evidence of liking, empathy, interest, caring, and listening to them. Supportive leadership is also defined as a pattern of leadership that occurs when a leader expresses concern and takes into account the needs and preferences of subordinates when making their decisions (Rafferty, A.E., & Griffin, 2006:39).
It is also defined as leadership that facilitates goal achievement by directing subordinates to be effective and learn in their roles by paying attention to them and making them provide assistance in independent decision-making, and allow learning through mistakes and present a realistic package of plans for guiding action (Banai & Reisel, 2007:33). Leaders who understand their duties and responsibilities and can encourage their subordinates are supportive leaders. Besides, supportive leaders create a favorable workplace environment to foster respect, trust, cooperation, and emotional support (Zafar et al., 2012:489). Given the aforementioned, it can be inferred that supportive leadership is concerned in inspiring workers and encouraging them to work in a team spirit, as well as being keen to empower them and create a suitable organizational environment.

Electronic Management

Views and perspectives on the concept of electronic management vary, with some believing it to be a modern term that resulted from the cognitive revolution in communications and information, particularly following the development of the so-called digital revolution. As a result, applying the concept of electronic management in educational institutions will inevitably lead to a boost in the efficiency and effectiveness of both the educational and administrative systems (Horton, 2001; 58). Dale, 2001:65 defines E-management as "a general framework and an integrated technical system that differs from traditional management practices. It incorporates a considerable transformation in administrative work including social, economic, and human activities. To deliver services better than those offered by traditional management do. Whereas electronic management is defined as "a group of communication networks in which data and documents are transmitted from social organizations to educational and pedagogical organizations". (Lam, 2004:5). Electronic management is also defined as "using information and communication technology to change the way individuals and academic organizations interact with government to allow individuals to participate in decision-making processes, finding the best ways to access information, increase transparency and strengthen civil society" (Riyadh, 2009: 3). Another definition of the e-management is “the ability to use information and communication technology (ICT) and new technologies to perform administrative tasks electronically through the internet and automated computer networks” (Dayni, 2010:1). Electronic management can be described as a network of knowledge spread throughout the world. Knowledge database stems from the ability of electronic management to
receive, pack, store, update, analyze, disseminate knowledge, conduct activities, make decisions, and learn from this process and its outcomes. (Huthaifa Samman, 76: 2013).

Whereas (Badawi, 2013:103) confirmed that e-management is a sophisticated, competitive and interactive production system that expands the boundaries of any organization to include the whole world. Obviously, e-management is viewed as a more collaborative type of management, with greater cooperation with external parties in policy-making and service delivery as well as greater coordination within workplace and university stakeholders (Reema, 2021: 254). According to this review, the researchers believe that their definition of e-management in education “means creating accessible opportunities to provide services to students through computers, through a set of electronic communication networks in which data and documents are transmitted from virtual organizations to educational organizations”.

**Requirements of the Electronic Management Application**

The electronic management's success is associated with the need to provide a set of necessary requirements, including human, financial, and organizational ones. In addition, to make the most of these technological revolutions, an integrated image must be formed, as well as an accurate and thorough evaluation of reality in terms of the availability of information technology, appropriate infrastructure, human resources, and essential financial support. (Abdulrahman, 2018:199) identified several important criteria for the application of electronic management in universities, which can be summarized as follows: (Bataineh, 2017:86)

- Top-level management's commitment in promoting and implementing e-management initiatives.
- Strategic preparation for digital transformation.
- Designing an integrated strategy among all parties for comprehensive communication.
- Emphasizing on researching and meeting customer requirements.
- Paying attention to employees who facilitate the electronic management.
- Focusing on technical skills and capabilities.

**Obstacles Facing the Implementation of Electronic Management**

The researchers discovered many obstacles that may prevent the use of electronic management. Which are classified as follows: (Hussein, 2017: 317)
Organizational (administrative) obstacles

Those are related to the essence of the organizational structure, absence of electronic transaction systems and laws, central administration of organizations and others. (Turban et al., 2008:521) identified some organizational obstacles include lack of planning and coordination at top-level management concerning e-management programs, and failure to determine the time when it is necessary to start applying and implementing electronic services and information. Additionally, there has been no follow-up by top-level management over lower-level management on implementing the electronic management. Not to mention that university's administration could not convinced of the reasons and requirements of this type of transformation. More importantly, lack of computer literacy among administrative employees who have the decision to introduce this technology within universities. The university's failure and shortcomings to offer sufficient specialized training on a large scale in concerned departments as well as poor media literacy programs that encourage to apply the electronic management in universities.

Technical and financial obstacles

Those types of obstacles include: slow and weak internet services, insufficient protection to users from network intrusion, lack of financial resources and maintenance, high cost of internet, communications, and computers. (Al-Qahwach, 2020:20) listed a lot of technical and financial obstacles as follows:

- Even within in a single university, there is a lack unified specifications and standards for the devices used.
- Depreciation of computer hardware and software used in the educational environment as a result of rapid development encompassing all parts of life.
- Many educational institutions' poor infrastructure and absence of preparation to receive such technology.
- Poor infrastructure of communication network in some areas.
- Due to a lack of sufficient technical skills and adequate manufacturing capacity, the modern technologies sector is poor in developing countries in general and in Iraq in particular.
- Concern about how modern technology may affect their interests negatively, leading to a decline in employment and low incentives.
Human obstacles

These obstacles can take the shape of human nature, closed-door culture, lack of confidence in privacy and confidentiality of personal transactions and their security, and lack of inspirational motivation for teaching staff, some of whom have poor English language proficiency. These challenges are also represented by individuals, whether they are university employees or dealing with it and among the obstacles agreed upon by the researchers are the following: (Basu, 2004:109)

- Poor cultural awareness of information technology at social and organizational level within universities.
- Lack of training programs in the field of advanced modern technology at universities.
- Some leaders and those in power are increasingly concerned that change poses a threat to them.
- Lack of presenting financial incentives to managers and teaching staff and the lack and disparity of their knowledge.
- Insufficient knowledge of computer technologies.
- Lack of confidence in protecting the confidentiality and security of personal information and transactions.
- Employees' resistance and unwillingness to apply this technology, and their reluctance to adopt it due to psychological and health concerns, in addition to human nature and tendency to resist change. The following is a description of the conceptual basis of this study:
METHODOLOGY

The study used a questionnaire form to measure its variables, and supportive leadership variable is measured using (Samuel et al., 2018), which contains fifteen (15) items distributed across three dimensions (empowering employees, inspirational motive, and treatment fairness). Whereas the variable of the electronic management obstacles is measured using (Hussein, 2017), which includes (12) items distributed over three obstacles (organizational obstacles, financial and technical obstacles, and human obstacles). 5-point Likert scale is used for the respondents’ answers. The reliability of the research scale will be verified by relying on obtaining the reliability coefficient (Cronbach Alpha). Furthermore, a descriptive analysis (mean, standard deviation, percentage) will also be conducted to verify the availability level of research variables in the studied university.

The study hypotheses will be tested using the statistical program (SMART PLS) to determine the nature and intensity of the impact among the research variables.

RESULTS AND DISCUSSION

In order to verify the extent to which a scale with its main variables and their subdimensions is consistent with the required constancy, the researchers calculated the Cronbach Alpha coefficients, as in Table (1):

<table>
<thead>
<tr>
<th>The study variables</th>
<th>item number</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of empowering employee</td>
<td>5</td>
<td>0.832</td>
</tr>
<tr>
<td>Dimension of inspirational motive</td>
<td>5</td>
<td>0.817</td>
</tr>
</tbody>
</table>

Figure 1: the relationship between the study variables

Source: Prepared by the authors (2023)
The data of table (1) relevant to Cronbach's alpha indexes indicate that the study scale is characterized of having the required reliability at the overall scale, and the total reliability rate of the scale reached (94%). Moreover, the study variables with their sub – dimensions range between(0.799-0.922) and these data indicate that the study scale has high reliability.

### The Descriptive Analysis of Research Variables

**Descriptive analysis of the supportive leadership variable**

The researchers calculated the statistical descriptive values represented by (mean, standard deviation, and percentage), as shown in table (2). The mean the supportive leadership reached (3.51), which is higher than the hypothetical mean of the current research estimated at (3) because the study used 5-point Likert scale. The value of the standard deviation reached (0.779) and the studied university's level of interest, in this variable, reached (0.703). The dimensions that represented this variable can be explained as follows: regarding the university's level of interest, the dimension of treatment fairness ranked first reaching (73.5%), and the dimension of the inspirational motive ranked second reaching (69%). Then, the dimension of empowering employee reaching (68.6%). Table (2) shows these results.

<table>
<thead>
<tr>
<th>The study variables</th>
<th>mean</th>
<th>standard deviation</th>
<th>interest rate</th>
<th>Order of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee empowerment</td>
<td>3.432</td>
<td>0.755</td>
<td>0.686</td>
<td>3</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>3.470</td>
<td>0.731</td>
<td>0.694</td>
<td>2</td>
</tr>
<tr>
<td>Treatment fairness</td>
<td>3.676</td>
<td>0.866</td>
<td>0.735</td>
<td>1</td>
</tr>
<tr>
<td>Supportive leadership variable</td>
<td>3.517</td>
<td>0.797</td>
<td>0.703</td>
<td></td>
</tr>
<tr>
<td>Organizational obstacles</td>
<td>3.226</td>
<td>0.968</td>
<td>0.645</td>
<td>2</td>
</tr>
<tr>
<td>Financial obstacles</td>
<td>3.072</td>
<td>1.165</td>
<td>0.614</td>
<td>3</td>
</tr>
<tr>
<td>Human obstacles</td>
<td>3.417</td>
<td>0.968</td>
<td>0.683</td>
<td>1</td>
</tr>
<tr>
<td>The electronic management obstacles</td>
<td>3.225</td>
<td>0.938</td>
<td>0.645</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS V.23 output.
Second: Testing the study hypotheses

The main hypothesis: There is a reverse effect with a statistical significance of supportive leadership on the electronic management obstacles at the overall level of the two variables. The main hypothesis branches off into three sub-hypotheses:

1. The dimension of empowering employees has an adverse impact with a statistical significance on the variable of electronic management obstacles.
2. The dimension of inspirational motive has an adverse impact with a statistical significance on the variable of electronic management obstacles.
3. The dimension of treatment fairness has an adverse impact with a statistical significance on the variable of electronic management obstacles.

To test the main hypothesis, the researchers used the statistical program (Smart pls). A structural model is designed including the items for the study's two variables, which contains 27 items. The items from q1 to q15 represent the dimensions of the supportive leadership variable. The items from q16 to q27 represent the electronic management obstacles. When the test is conducted, it turned out that most of the model items achieved acceptable saturation percentages greater than (0.50), except the following four items (q1, q5, q13, q27), they were excluded from the model because their saturations fell below the permissible threshold.

Figure (2) and Table (3) illustrate the results of testing the main hypothesis.

Figure (2) the testing model of the main effect hypothesis.

Source: SMART PLS
The data presented in Figure (2) and Table (3), indicate that the supportive leadership variable has a negative significant impact on the variable related to electronic management obstacles at the total level of the two variables, having an impact factor of (-0.762) at significance level of (0.001). This is evidence that the electronic management obstacles are reduced by (76.2%) when the supportive leadership changes by one unit. Additionally, the supportive leadership can explain (58%) of the total changes occurring in the electronic management obstacles, namely the coefficient of determination value (R²=0.580), which is a good value that can be adopted when explaining changes in the electronic management obstacles. When taking into account these results, the main impact hypothesis is accepted in our study, which stated that there is an inverse impact with statistical significance of supportive leadership in the electronic management obstacles at the total level of the two variables.

Table (3) shows the outputs of the main impact hypothesis

<table>
<thead>
<tr>
<th>The path of the hypothesis</th>
<th>β</th>
<th>R²</th>
<th>standard deviation</th>
<th>t-value</th>
<th>significance level</th>
<th>the result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstacles to electronic management &gt; Supportive leadership</td>
<td>-0.762</td>
<td>0.580</td>
<td>0.149</td>
<td>5.114</td>
<td>0.000</td>
<td>accepted</td>
</tr>
</tbody>
</table>

Source: SMART PLS outputs

To verify the validity of the sub-impact hypotheses, the researchers designed a structural model includes the items relevant to the two variables of the study, which contain 27 items. The items from q1 to q15 represent the dimensions of the supportive leadership variable, and items from q16 to q27 represent the items relevant to the electronic management obstacles. When the test is conducted, it turned out that most of the model items achieved acceptable saturation percentages greater than (0.50), except the following four items (q1,q5,q13, q27) and they were excluded from the model because their saturations fell below the permissible threshold, as in Fig (3)
Figure (3) illustrate the model of testing sub-impact hypotheses.

The results presented in Figure (3) and Table (4) indicate the following inferences:

1. There is a significant and inverse impact of the empowering employee dimension in the variable of electronic management obstacles, as the impact value reaches (-0.724) with significant level of (.0000), which is less than the acceptable and the estimated significance level of (0.05). This indicates that the electronic management obstacles decrease by (72.%) when the empowering employee dimension increases by one unit.

2. There is no negative significant impact of the inspirational motivation dimension in the variable of the electronic management obstacle, as the impact value reaches 0.027 with significant level of 0.0433, which is much greater than the acceptable and the estimated significance level of (0.05). This indicates that the electronic management obstacles increase by (2.7%) when the inspirational motivation dimension increases by one unit.

3. There is a significant and inverse impact of the treatment fairness dimension in the variable of electronic management obstacles, as the impact value reaches (-0.571) with significant level of (.0000), which is less than the acceptable and the estimated significance level of (0.05). This indicates that the electronic management obstacles decrease by (57.%) when the treatment fairness dimension increases by one unit.
In addition, the dimensions of the supportive leadership combined can explain (62.9%) of the total changes occurring in the electronic management obstacles, namely, the coefficient of determination value ($R^2=0.629$), which is a good value that can be adopted when explaining changes in the electronic management obstacles.

When these results are into account, the sub-impact hypotheses of the two empowering employees and treatment fairness dimensions are accepted. In addition, the impact hypothesis of the inspirational motive dimension is rejected due to it being non-significant, has a negative impact, and increases the degree of obstacles.

Table (4) shows the path of these hypotheses.

<table>
<thead>
<tr>
<th>The path of the hypothesis</th>
<th>Beta</th>
<th>$R^2$</th>
<th>standard deviation</th>
<th>t-value</th>
<th>sign. level</th>
<th>the result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstacles of electronic management - &gt;</td>
<td>0.726</td>
<td>0.086</td>
<td>8.433</td>
<td>0.000</td>
<td></td>
<td>accepted</td>
</tr>
<tr>
<td>empowering employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstacles of electronic management - &gt;</td>
<td>-0.65</td>
<td>0.083</td>
<td>0.785</td>
<td>0.433</td>
<td></td>
<td>rejected</td>
</tr>
<tr>
<td>inspirational motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstacles of electronic management - &gt;</td>
<td>-0.595</td>
<td>0.072</td>
<td>7.433</td>
<td>0.000</td>
<td></td>
<td>accepted</td>
</tr>
<tr>
<td>treatment fairness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SMART PLS outputs

CONCLUSIONS

It turns out that the studied university is interested in supportive leadership at fairly good levels, and this implies that this university recognizes the importance of establishing supportive leadership behaviors within it. On other hand, the university is paying a great deal of attention to the treatment fairness dimension, demonstrating that it is aware of the value of inspirational motivation and its necessity due to its favorable effects on its work. However, the empowering employee dimension records the lowest level of interest in the university. Although it has a medium level of attention, it falls short of the significance of this dimension, which is necessary to avoid not completing the work as required. While the inspirational motive dimension is recorded at a medium level of interest and in the second order in terms of its importance to the university, compared to the rest of the supportive leadership dimensions.

This implies that university leaders practice inspirational and motivational behaviors. Clearly, due to a lack of training and job cadres with specific expertise in working with electronic technologies, it has turned out that human limitations are the greatest barrier to achieve the successful implementation of electronic management. It also turned out that there are obvious technical and financial obstacles in the studied university, and this is due to the
The role of supportive leadership practices in addressing electronic management obstacles - An analytical study at Al-Furat Al-Awsat Technical University - Republic of Iraq

poor level of infrastructure required for electronic management applications. The supportive leadership contributes positively and effectively to the promotion of these practices; that is, supportive leadership practices, in general, have a substantial impact on overcoming and addressing barriers of applying the electronic management. The practices adopted by the university regarding the motivational motive dimension did not truly help in solving or addressing the obstacles of electronic management, indicating that these practices and motivational strategies do not lessen these challenges. It was also found, that leaders' contacts with teaching staff and employees without discrimination, their appreciation of efforts presented by them, and encouraging and promoting e-management practices between them and the university, all play a tremendous role in tackling the obstacles of electronic management at the university.

The study recommends conducting comparative research to find any potential differences in outcomes after the coronavirus pandemic has ended. According to the study's results, future research should concentrate on creating a supportive workplace environment, cultivating positive working relationships, and promoting teamwork because these factors boost employees' morale and readiness to work in a way that results in advanced levels of performance in electronic management.

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