

## BUSINESS REVIEW



### CHANGE RESISTANCE MANAGEMENT AND THE TRANSITION TO DISTANCE LEARNING DURING COVID-19: MODERATING ROLE OF EDUCATION TECHNOLOGY

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#### **ABSTRACT**

**Purpose**: Current study aimed at examining the moderating role of education technology on the relationship between change resistance management (Efficient Managing, Participation, Communication, Organizational Culture, and Managerial Practices) and the transition to distance learning.

**Theoretical Framework**: It's important to remember that resistance is a natural reaction caused by Fear of the unknown and uncertainty about the goals of change and, in some cases, a lack of sufficient information about reform, and that it shouldn't be viewed as a bad thing in and of itself.

**Design/Methodology/Approach**: Quantitative methodology was adopted, and a questionnaire was distributed on a convenience sample of (391) lecturers of different tanks within private universities in Jordan. SPSS was employed in order to screen, process and analyze gathered primary data.

**Findings**: Results of study indicated that education technology moderated the relationship between change resistance management and the transition to distance learning that was attributed to managerial practices as the highest influential approach with B=.585 while organizational culture scored an influence but it was the lowest with B=0.82.

Research, Practical & Social implications: As for the main hypothesis of study, results indicated that education technology manifested the transition to distance learning through the approach which helped in managing the transition through educational technology, as it constituted a comprehensive reference guides for education and provided basic information and framework for distance education that included many channels such as television, digital technology, online platforms and mobile phone.

**Originality/ Value**: The current study showed that most of the resistance during the transitional period of distance education due to the COVID 19 pandemic was due to a lack of knowledge, information, skills, and technological capabilities, as most of the resistance appeared after identifying the platforms they dealt with, the existing infrastructure, and weaknesses. How well university IT departments can handle the massive demand caused by this rapid and unanticipated transformation.

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## GESTÃO DA RESISTÊNCIA À MUDANÇA E A TRANSIÇÃO PARA A APRENDIZAGEM DISTAMCE DURANTE A COVID-19: PAPEL MODERADOR DA TECNOLOGIA EDUCACIONAL

#### **RESUMO**

**Objetivo:** Estudo atual destinado a examinar o papel moderador da tecnologia educacional na relação entre a gestão da resistência à mudança (Gestão Eficiente, Participação, Comunicação, Cultura Organizacional e Práticas Gerenciais) e a transição para o ensino à distância.

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**Estrutura Teórica:** É importante lembrar que a resistência é uma reação natural causada pelo medo do desconhecido e pela incerteza sobre os objetivos da mudança e, em alguns casos, pela falta de informação suficiente sobre a reforma, e que ela não deve ser vista como uma coisa ruim em si mesma.

**Design/Metodologia/Abordagem:** Foi adotada uma metodologia quantitativa, e um questionário foi distribuído sobre uma amostra de conveniência de (391) professores de diferentes tanques dentro de universidades privadas na Jordânia. O SPSS foi empregado a fim de selecionar, processar e analisar os dados primários coletados.

Descobertas: Os resultados do estudo indicaram que a tecnologia educacional moderou a relação entre a gestão da resistência à mudança e a transição para o ensino à distância que foi atribuída às práticas gerenciais como a abordagem mais influente com B= .585, enquanto a cultura organizacional teve uma influência, mas foi a mais baixa com B= 0.82.

**Pesquisa, Implicações práticas e sociais:** Quanto à hipótese principal de estudo, os resultados indicaram que a tecnologia educacional manifestou a transição para o ensino à distância através da abordagem que ajudou a gerenciar a transição através da tecnologia educacional, pois constituiu um guia de referência abrangente para a educação e forneceu informações básicas e estrutura para o ensino à distância que incluiu muitos canais como televisão, tecnologia digital, plataformas on-line e telefone celular.

**Originalidade/Valor:** O estudo atual mostrou que a maior parte da resistência durante o período de transição da educação à distância devido à pandemia da COVID 19 foi devido à falta de conhecimento, informação, habilidades e capacidades tecnológicas, já que a maior parte da resistência surgiu após a identificação das plataformas com as quais eles lidaram, da infra-estrutura existente e das fraquezas. Como os departamentos de TI das universidades podem lidar bem com a demanda maciça causada por esta transformação rápida e imprevista.

**Palavras-chave:** Gerenciamento de Mudanças, Resistência a Mudanças, COVID 19, Educação à Distância, E-Learning.

## LA GESTIÓN DE LA RESISTENCIA AL CAMBIO Y LA TRANSICIÓN AL APRENDIZAJE A DISTANCIA DURANTE EL COVID-19: PAPEL MODERADOR DE LA TECNOLOGÍA EDUCATIVA

#### **RESUMEN**

**Propósito:** El presente estudio tuvo como objetivo examinar el papel moderador de la tecnología educativa en la relación entre la gestión de la resistencia al cambio (Gestión Eficiente, Participación, Comunicación, Cultura Organizacional y Prácticas Gerenciales) y la transición al aprendizaje a distancia.

**Marco teórico:** Es importante recordar que la resistencia es una reacción natural causada por el miedo a lo desconocido y la incertidumbre sobre los objetivos del cambio y, en algunos casos, por la falta de información suficiente sobre la reforma, y que no debe considerarse algo malo en sí misma.

**Diseño/Metodología/Enfoque:** Se adoptó una metodología cuantitativa y se distribuyó un cuestionario a una muestra de conveniencia de (391) profesores de distintos departamentos de universidades privadas de Jordania. Se utilizó el programa SPSS para seleccionar, procesar y analizar los datos primarios recopilados.

Resultados: Los resultados del estudio indicaron que la tecnología educativa moderó la relación entre la gestión de la resistencia al cambio y la transición al aprendizaje a distancia que se atribuyó a las prácticas de gestión como el enfoque de mayor influencia con B= 0,585 mientras que la cultura organizativa obtuvo una influencia pero fue la más baja con B= 0,82.

**Investigación, implicaciones prácticas y sociales:** En cuanto a la hipótesis principal del estudio, los resultados indicaron que la tecnología educativa manifestó la transición al aprendizaje a distancia a través del enfoque que ayudó en la gestión de la transición a través de la tecnología educativa, ya que constituyó una guía de referencia integral para la educación y proporcionó información básica y el marco para la educación a distancia que incluyó muchos canales como la televisión, la tecnología digital, las plataformas en línea y el teléfono móvil.

**Originalidad/valor:** El presente estudio demostró que la mayor parte de la resistencia durante el periodo de transición de la educación a distancia debido a la pandemia COVID 19 se debió a la falta de conocimientos, información, habilidades y capacidades tecnológicas, ya que la mayor parte de la resistencia apareció después de identificar las plataformas con las que trataban, la infraestructura existente y los puntos débiles. La capacidad de los departamentos universitarios de TI para hacer frente a la demanda masiva provocada por esta transformación rápida e imprevista.

Palabras clave: Gestión del Cambio, Resistencia al Cambio, COVID 19, Educación a Distancia, E-Learning.

#### **INTRODUCTION**

The permanent organizational quest for stability does not mean that the organization remains static in its place, but rather it means that it be continuous efforts in order to keep pace with the developments taking place and try to reach the level of advanced organizations in terms of the technology used, tools and devices in addition to the administrative and educational thought in all its forms (Gratz and Looney, 2020).

This quest is not a matter of contradiction. Rather, the meeting of change with development is an inevitable matter that cannot be avoided, whether in the internal environment or the external environment in a way that coincides with successive developments (Cameron and Green, 2019).

Therefore, the trend towards change entails two behaviors, one is positive, and the other is negative. With regard to positive behavior, it is usually in the interest of the change process and greatly supports it and establishes correct frameworks and infrastructure for the change process (Clarke et al, 2020).

As for the negative behavior resulting from the change process, it usually leads to what is known as resistance to change, which swings between stagnation and very severe resistance, which required administrative intervention in order to address this resistance, which accompanied the transition from face-to-face education to distance education as one of the precautionary measures to contain the spread of the COVID-19 pandemic (Alqatawenah, 2018; Hawi et al.,2015).

As a result of the spread of the Covid-19 pandemic in 2020, the need for education to move to the virtual environment through distance education, and many doubts and disputes emerged about the eligibility of the infrastructure and its ability to withstand the sudden transition towards distance education, and about the ability of the administrative body and teaching staff to accept the idea of a virtual classroom and the possibility of offering educational material through distance learning and synchronous learning platforms (Franklin et al, 2021).

From here, the current study is launched to determine the role of change resistance management in facilitating the transition to the virtual distance education environment during the COVID 19 pandemic by looking at the modified role of educational technology within a group of faculty members in private Jordanian universities. In other words, the main objective of the study is to expose the concept of resistance to change that accompanied the transition to distance education and to identify the way to manage resistance to change, the factors and how to deal with resistance to change in order to make its management mechanism successful.

The need to examine change resistance management and the transition to distance learning during Covid 19 is important because it highlights the impact of the changes brought on by the pandemic. It is important to understand the changes people are being asked to make in order to implement and adjust to remote learning, as well as the challenges associated with resistance to change. Examining this issue will help educators develop strategies to manage resistance to change while transitioning to remote learning, which is important for the success of online learning initiatives. Additionally, understanding how people adapt to change in a stressful situation such as the global Covid-19 pandemic can help us better prepare for future disruptions and their inevitable effects.

The current research study was carried out based on adopting the following objectives:

- A. Identify the need to the educational transition to distance learning due to COVID 19
- B. Explore the role of educational technologies in supporting the transition to distance learning due to COVID 19

#### LITERATURE REVIEW

#### **Change Management**

Change management is considered one of the most important administrative approaches that have been widely used in the last years of the twentieth century, and many studies and academic research have diversified in providing a clear and general definition of the concept of change management and explaining its methods and strategies and the most appropriate way to deal with it (Shahbaz et al, 2020).

Change management is the sum of the rules and principles for planning business strategies and the changes that may occur in it (Cameron and Green, 2019; Syafitri et al.,2022). In another definition, the management of change is nothing but the administrative and organizational reaction to the deterioration of organizational activities, or as a matter of change for the better based on well-studied goals and a clear vision (Dzwigol et al, 2019).

Whereas, change management is only the main driver in order to support the organization to face developments and rearrange its papers in order to take advantage of strengths and exploit them, and improve various weaknesses in order to reach positive change (Ali and Anwar, 2022).

Black & Mouton was one of the first to use the term change in 1956 in reference to the comprehensive organizational effort for change to reach a more effective situation within a specific period of time by means and methods known and understood (Aini et al, 2020). Change management is moving from the state existing in the organization to a new, better state as

according to Frankel et al (2022), it is also adopting new organizational procedures and behaviors that change the internal activities of the organization.

#### **Change Resistance**

Change management expresses the organized efforts in order to achieve the strategic objectives of the organization and bring about the required change. Change management starts by influencing employee behaviors and skills, in addition to enhancing their technological skills by adopting the most appropriate processes to reach quality (Palm et al, 2020).

Change management means the tendency towards adopting a new situation in the organization, arranging internal and external matters, implementing positive changes and avoiding negative ones (Valoyes-Chávez, 2018). Change management is applied either by the traditional method based on waiting for change and then dealing with it and adjusting organizational strategies in order to confront it, and adopting the right strategies while taking advantage of the positive opportunities that can be the result of change (Franklin et al, 2021).

The state of dissatisfaction with change and responding to it is a natural state that represents the natural reactions of the human element working in the organization, and this is what is called resistance to change (Fisher et al, 2019).

Change resistance refers to individuals' refraining from and responding to change or non-compliance with it and attempting to comply with the change and the tendency towards maintaining the status quo (Fierro-Moreno et al, 2021). On the other hand, change resistance refers to the individual's realization that the change may not be in his interest or even in the interest of the organization, and therefore refuses to comply with the change through protest and slowing down to the stage of striking, or threatening to transfer or resign (Maak et al, 2021).

Change resistance refers to individuals and groups taking a negative attitude out of dissatisfaction with the modifications or changes made by the organization based on theories that it may see in the interest of the organization in improving performance levels and increasing quality and effectiveness (Tang, 2019).

One of the most important reasons for resistance to change by employees in organizations is that the change in one place, activity, or place will not have the required positive impact on the organization as a whole, and there may be individual reasons and personal interests that may affect the change, such as losing their jobs, In addition, resistance to change may be due to the threat of certain powers within the organization and the transfer of powers from one group to another (Sarkar and Clegg, 2021).

Generally speaking, change resistance refers to behavior designed to promote the

maintenance of a status quo in the face of pressures to change (Pollock et al, 2020).

#### **Change Resistance Management**

When talking about resistance to change, it should be noted that there are many forces of resistance to change, including Mishra et al (2020), (Kalloo et al, 2020), Pereira et al (2019):

- **a)** Rejection Forces: It is one of the most dangerous forces resisting change, which attacks change and tries to stop and thwart it, especially if it conflicts with the interests of this group.
- **b**) Refuse Forces: These forces reject everything, not only change, but sometimes reject their existence and themselves as a result of the rejection of the roots in their path
- c) Sization Forces: They are forces that try to put change in a certain size based on laws and rules
- **d**) Traditional Forces: They are forces that try to put change in a certain size based on laws and rules
- **e**) Freezing Forces: Those forces that are much closed to themselves and do not welcome change in any way, and their movements are coupled with their own desires and personal interests.
- **f**) Indifference Forces: They are the marginal individuals who appear on the sidelines of events without interest and go according to the trend and are usually passive.

Usually individuals with experience and competence in organizations are assigned to manage the change process, and these individuals are usually aware and aware that the change process may result in resistance to change, which leads to the need to manage resistance to change by dealing with resistance on the one hand Scientific and administrative and create the appropriate conditions in the organization to run the plan of change and to deal with resistance and obstacles that may result from it (Aguayo, 2019).

The management of resistance to change can be viewed as a positive matter, regardless of the fact that resistance to change itself is negative, but the management of resistance to change stems from the organization's attempts to clarify the objectives and expected results, and to reveal areas of weakness in the communication process, in addition to analyzing the causes of resistance and trying Work to solve them through decision-making, problem-solving and brainstorming processes (Cameron and Green, 2019).

#### The Transition to Distance Learning due to COVID 19

With the world entering the COVID 19 shock in 2019, life moved to another level in

activities that continued to escalate to the stage of the World Health Organization declaring the COVID 19 virus as a pandemic and it is necessary to employ all existing resources and facilities in order to control its spread and try to reduce the number of infections To the extent that mortality can be controlled (Aini et al., 2020; Yusof et al., 2022).

In 2020, the need to move from real life to virtual life was announced, including all educational, service and commercial sectors, and the medical sectors were maintained in order to mobilize their efforts to control the spread of the pandemic and at the same time preserve the progress of life and the interests of individuals and groups and organizations down to the minimum (Jayatilleke & Lai, 2018).

In keeping with global initiatives, in March 2020, Jordan imposed a comprehensive ban on movement and curfew as one of the measures to combat the COVID 19 virus, and transferred all community activities to be through the Internet, including school and university education at all stages, and platforms were allocated for providing school lessons and university lectures for students through the Internet (Mello et al, 2020). This is what is known today as distance education, which is one of the most important tools of modern education, which refers to the transfer of lessons, curricula and lectures to be remotely through modern technology means without the need for students to attend schools and universities and receive education in person. This step is considered as one of the precautionary measures to achieve social distancing to prevent the spread of the virus (Rodríguez-González et al, 2019).

The transition to distance learning electronic platforms posed a major crisis for parents, lecturers and teachers, as the transition was sudden and the infrastructure was not ready to bear the burden of moving private and government education to distance platforms, which led to the emergence of a lot of resistance by the teaching staff, which was coupled with the lack of commitment of the students, the lack of follow-up, the lack of readiness of the infrastructure, and the lack of knowledge of the lecturers and teachers with the mechanism of dealing with electronic platforms (Almaiah et al, 2020).

Studies have multiplied over time on this subject, and many solutions have been proposed in order to deal with this type of resistance associated with an epidemic and an emergency situation in which there is not much time to arrange strategies for dealing with resistance to change, given that the epidemic is still spreading among individuals and the development of vaccines is not It is still in its infancy and there are no definitive results about how long the disease will spend in killing individuals (Ellis et al, 2020). On this subject Lattarulo et al (2019), Zhang and Ma (2020), Dzwigol et al (2019), and Jnr and Noel (2021) presented many urgent strategies to solve the crisis of resistance to change and the transition to

distance education. These strategies included:

#### - Efficient Managing

Which consisted in enhancing the administration's involvement in the transition process and the educational leadership's participation in the transition to distance education by providing all possible tools and devices for stakeholders from the teaching staff, and directing the various departments in the Ministry of Higher Education in order to intensify resources and support the educational process and identifying areas in which urgent development is needed for the next stage.

#### Participation

Participation and empowerment were among the most important methods that facilitated the transition process and reduced the burdens of resistance to change in this regard, as the teaching staff was able to share the problems and obstacles they were exposed to, and urgent training mechanisms were provided to improve their ways of dealing with electronic platforms. Standing on all complaints related to teaching procedures through electronic platforms, taking into account the observations of the teaching staff and solving problems accurately.

#### - Communication

Communication was one of the most important measures that ensured the smooth progress of the educational process, as the concerned authorities ensured communication 24 hours a day, all days of the week, and the inquiries of the teaching staff were answered, their problems were listened to, and the foundations through which the educational process is supposed to be supplemented by remote methods were answered. And systematic and thoughtful methods that ensured solving the problem and completing the communication effectively.

#### Organizational Culture

The organizational culture within the educational organization was one of the most influential factors on the percentage of resistance and the way to deal with it, and the educational organizations that adopted technological tools during the educational process in abundance and on a regular basis were less resistant than those educational organizations that adopted the minimum educational technologies, the matter Which led to facilitating the transition from face-to-face education to distance education with the least possible resistance.

#### - Managerial practices

Here, the importance of administrative practices appeared significantly, as they developed the general approach to dealing with resistance to change by adopting practices in the interest of the educational process and not putting pressure on the teaching staff, and a lot

of the efforts of the IT departments were directed towards supporting and supporting the teaching staff In order to reach acceptable educational outcomes during the pandemic period.

#### Role of Educational Technologies in Resistance-free Transition

Education technology in Jordan represented the main reference for the provision of educational services in Jordan during the Covid-19 pandemic, as the technological infrastructure affected educational outcomes during the past two years in which education was provided through electronic educational platforms in Jordan, which raised many doubts about the effectiveness of educational infrastructure in Jordan for this sudden transition, and the ability of Jordanian educational organizations to bear this transition .

However, Jordan was one of the countries which enjoyed an accepted level of technology regarding education, and the government managed – through its ministries – to control the sudden change and supported the educational community with all the needed equipment, devices and infrastructure that can hold up the process and make sure it doesn't fail (Akbar et al, 2019; Gratz & Looney, 2020).

A study attempted to determine the percentage of faculty members' willingness in universities to teach remotely and the extent of their resistance to this change. The study also tried to combine resistance to change and the obstacles that stand in the way of distance teaching. The quantitative approach was adopted and (131) questionnaires were distributed to faculty members of all ranks at the University of Los Angeles. The study proved that there were many factors that contributed to creating resistance to change towards distance education, which included the lack of opportunity for training, lack of skills, and lack of confidence in teaching via the Internet. Increasing administrative flexibility, and keeping pace with different teaching methods (Franklin et al., 2021).

The study of Al Lily et al (2020) aimed to find out the impact of the shift to distance education during the COVID-19 pandemic and the reasons for the tendency of many faculty members to resist this change. The analytical approach was applied through a focus group for a group of faculty members in two schools and three Arab universities in (UAE, Sudan, Saudi Arabia, Jordan, Egypt, and Kuwait).

The study came to the conclusion that the sudden shift in distance education represented a difficult and strong transition, which led to resistance to this change due to its educational repercussions and the inefficiency of the infrastructure, in addition to the faculty members realizing that staying at home will result in multiple problems such as introversion, anxiety, depression, violence, and divorce, which affects the outcomes of the educational process. And

as solutions to manage the resistance to change towards distance education, the study suggests adopting risk management strategies in a more efficient and effective manner, and considering distance education platforms as key and important as important as face-to-face education.

A study attempted to identify the causes of teachers' resistance to change and ways to treat and manage resistance. The qualitative approach was adopted through interviews with (20) teachers, and through content analysis, the study came to the conclusion that most of the resistance was of personal and organizational reasons, coupled with negative effects of distance education such as emotional and organizational negatives, damaging the relationship between colleagues and the outcomes of the educational environment. In order to manage teachers' resistance, the study suggested that the transition be logical coupled with a healthy and appropriate virtual environment, in addition to bridging the gaps in the stage of organizational decision-making and addressing personal views towards change (Akbar et al, 2019).

#### MATERIAL AND METHODOLOGY

Current study adopted the quantitative approach in order to realize the main aim, and decide the acceptance and rejection of its hypotheses presented earlier. The quantitative approach launched through utilizing a questionnaire as a tool. The questionnaire was built on likert 5 scale (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree. The questionnaire was built on two sections, the first took into perspective demographic variables (age, gender, education and experience) while the other section consisted of independent and dependent variables of study including (Change resistance management approaches (efficient managing, participation, communication, organizational culture, managerial practices) as independent variable, transition to distance learning as dependent variable and education technology as moderating variable.

Researcher depended on articles, journals and previous literature in order to build questionnaire statements; the main previous studies which were employed included Franklin et al (2021), Akdeniz and Konakli (2022), and Aninkan (2018).

In its final version, the questionnaire consisted of (37) statements according to the following table:

Table 1. Statements' Distribution

Variable	# of		
	Statements		
Change resistance management			
approaches			
Efficient managing	5		
Participation	5		
Communication	5		
Organizational culture	5		
Managerial practices	5		
Transition to distance learning	5		
Education technology	7		

(Source: SPSS, prepared by the author)

In order to comply with COVID 19 precautions that are still valid till today, and which focuses on preserving social distancing, researcher uploaded an electronic version of the questionnaire online and distributed a link to the questionnaire on the sample of study.

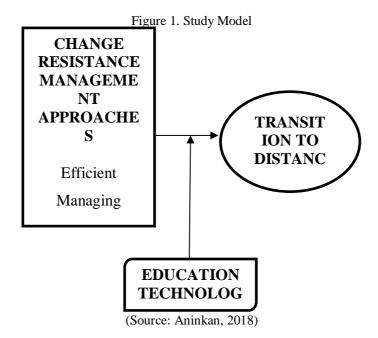
Population of study consisted of members of the teaching staff in private Jordanian universities for the academic year 2021-2022. A convenient sample of (450) professor from all ranks was chosen to represent the population. After application process, researcher was able to retrieve total of (391) properly filled questionnaires which indicated a statistical response rate of (86.8%) as accepted and valid.

SPSS was used in order to tackle and process the collected primary data, Cronbach's Alpha was calculated and it scored 0.961 which higher than 0.70 and indicated the reliability and consistency of study tool.

Other statistical tools used included:

- Percentages and frequencies
- Means and standard deviation
- Coefficient
- NOVA test

In accordance with the main aim and goal of current research study; the researcher has built a model that identified the relationship between variables and extracted the hypotheses as follows:



According to the above model of study; following set of hypotheses was extracted:

**H1:** Change resistance management approaches had a statistical significant influence on the transition to distance learning during COVID 19

**H2:** Educational technologies moderated the relationship between change resistance management approaches and the transition to distance learning during COVID 19

#### RESULTS AND DISCUSSION

Following section presented statistical analysis and processing of collected primary data, the below table 2 presented statistics of sample demographic, it was seen through the table that majority of sample were within age range of 36-46 years old forming 36.8% of total sample followed those who were within 25-35 years old forming 30.2% of the sample. Regarding gender, 53.2% of the sample were female educators and lecturers and held PhD degree forming 61.4%. As for experiences, 32.4% of the sample had an experience of 10-13 years followed by those who had an experience of 14-17 years forming 21.5%.

Table 2. Descriptive Statistics of Demographics

		Frequenc	Percent				
		y					
Age							
	25-35	118	30.2				
	36-46	144	36.8				
	47-57	100	25.6				
	+58	29	7.4				
Gender							
	Male	187	47.8				
	Fema	204	52.2				
	le						
Education							
	MA	151	38.6				
	PhD	240	61.4				
Experience							
	2-5	65	16.6				
	6-9	52	13.3				
	10-13	127	32.4				
	14-17	84	21.5				
	+18	63	16.1				
	Total	391	100.0				
(C	2202		.4 \				

(Source:SPSS, prepared by the author)

Table 3 below presented mean and standard deviation to respondents' answers to questionnaire statements, it appeared that the statements were well-received by respondents as all of them scored higher than mean of scale 3.00. The table showed that the highest statement articulated "Employees are part of the changing process they are not left out" scoring a mean of 4.00/5.00 compared to the least statement which scored a mean of 3.85/5.00 and articulated "Management is aware that all employees managing change resistance has to be qualified". On a higher level, analysis showed that the highest mean was scored by the variable of efficient management with a mean of 3.71/5.00 compared to the least variable which was transition to distance learning scoring a mean of 3.47/5.00 but still positive as it was higher than mean of scale.

Table 3. Descriptive Statistics of Variables

Statement	Mean	Std.
		Deviation
The management tries to read through change resistance in order to present solutions	3.78	.96
Management knows that change resistance management isn't a picnic	3.78	.92
Management is aware that all employees managing change resistance has to be qualified	3.85	.86
The management are aware of predicted obstacles and has plans to face such obstacles	3.62	1.01
The management gives resisting employees time and space to deal with change	3.54	1.02
Efficient Managing	3.71	.78
Employees engagement is a crucial part of managing change resistance	3.27	1.11
Employees are always aware of the change process and know its process and purpose	3.77	.92
The management involve the employees in every decision it makes	3.35	1.09
Employees are part of the changing process they are not left out	4.00	.87

## Change Resistance Management And The Transition To Distance Learning During COVID-19: Moderating Role Of Education Technology

Employees get heads up when any change takes place  Participation  There is an ongoing communication between leaders and higher management There is an ongoing communication between leaders and team members The management makes sure that all communication channels are open All communications are written and stored for easier back up The transition of change happens through walking and talking not all of a sudden  Communication  The organizational culture is supportive when it comes to positive change The culture of the organization has the ability to lead employees through change The management makes sure that the culture has the needed factors for managing resistance Most of resistance managing took place due to a positive culture Employees feel identified with their organization  Organizational Culture  All practices of the management are based on the benefit of employees and organizational goals  Managerial practices takes into perspective all level of employees The management adopted practices to deal with resistance in accordance with HR management  HR management is always involved when dealing with resistance All employee has access to HR management when they have a problem with change  Managerial Practices  The transition to distance learning was hard to manage due to the spread of the pandemic  It was seen that the infrastructure wasn't ready for sudden changes  The sudden changes were done based on connection between team members, leaders and management	3.73 3.62 3.61 3.23 3.47 3.54 3.73 3.52 3.84 3.96 4.00 3.81 3.71 3.87 3.69 3.79 3.66 3.54 3.48 3.63 3.57	.99 .69 1.00 1.15 1.02 1.00 1.06 .77 .99 .94 .94 .98 1.08 .79 .95 .91 1.02 .97
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The sudden changes were done based on connection between team members, leaders		1.03
· · · · · · · · · · · · · · · · · · ·	3.21	1.10
	3.41	1.04
IT departments were of great help in managing the transitions	3.43	1.07
There were differences in accepting the transition with older employees compare to younger ones	3.72	.95
Transition to distance learning	3.47	.85
Technological tools were used in order to train educators into accepting distance learning	3.82	.94
Educators were involved in seminars and workshops regarding education technologies	3.69	1.02
The infrastructure needed more improvement	3.57	.97
The infrastructure wasn't ready to accept high numbers of students to get distance learning	3.52	1.02
The technological infrastructure was moderately ready to accept sudden transition	3.60	1.03
The management considered adopting plans to improve educational technology infrastructure after COVID 19	3.26	1.12
The management adopted many risk management plans to recover a virtual educational environment	3.45	1.05
Educational Technology		.80

(Source:SPSS, prepared by the author)

#### **HYPOTHESES TESTING**

H1: change resistance management approaches had a statistical significant influence on the transition to distance learning during COVID 19

Table 4. H1 Testing

Model		Unstandardized Coefficients		oefficients Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta			R	R Square
1	(Constant)	270	.150		-1.800	.073	.821	.674
	Efficient Managing	.138	.049	.127	2.832	.005		
	Participation	.130	.058	.106	2.237	.026		
	Communication	.090	.043	.081	2.082	.038		
	Organizational Culture	.082	.041	.076	1.986	.048		
	Managerial Practices	.585	.048	.551	12.274	.000		

(Source:SPSS, prepared by the author)

To test the aforementioned hypothesis, multiple regression was used; r = 0.821 suggests a strong relationship between the independent and dependent variables. Furthermore, the independent variables were found to account for 67.4% of the variation in the dependent variable. The F value was likewise shown to be significant at the 0.05 level, demonstrating that change resistance management measures had a statistically significant influence on the transition to distant learning during COVID 19. Also it was found that t value for each variable is significant at 0.05 that means each variable has an influence on the transition to distant learning during COVID 19.

# H2: Educational technologies moderated the relationship between change resistance management approaches and the transition to distance learning during COVID 19

Table (5) below showed that there was a statistically significant influence of change resistance management approaches and the transition to distance learning during COVID 19, with a value of (R2 = 0.618, p $\le$ 0.5). In the second phase, the Role of Digital Accounting variable was introduced, and it was discovered that it contributed  $\Delta$  R2 = 18.7 % of the overall interpretation factor, which is a substantial number.

In the third phase, the interaction between Educational technologies and the Role of change resistance management was introduced, and it was discovered that it contributed  $\Delta$  R2 = 0.6% of the overall interpretation factor, which is a substantial number.

This meant that the role of Educational technologies moderated the relationship between change resistance management approaches and the transition to distance learning during COVID 19.

Table 5. H2 Testing

	Model Summary										
Mode	R	R	Adjusted R	Std. Error	Change Statistics						
1		Square	Square	of the	R Square	F	df1	df2	Sig. F		
				Estimate	Change	Change			Change		
1	.786a	.618	.617	.52719	.618	629.192	1	389	.000		
2	.897 <sup>b</sup>	.805	.804	.37707	.187	372.383	1	388	.000		
3	.900°	.811	.809	.37192	.006	11.831	1	387	.001		
	NOVA										

			NOVA				
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	174.872	1	174.872	629.192	.000b	
	Residual	108.115	389	.278			
	Total	282.988	390				
2	Regression	227.820	2	113.910	801.136	.000°	
	Residual	55.168	388	.142			
	Total	282.988	390				
3	Regression	229.456	3	76.485	552.944	.000 <sup>d</sup>	
	Residual	53.531	387	.138			
	Total	282.988	390				

(Source:SPSS, prepared by the author)

Current study aimed at examining the modifying role of educational technologies in managing change resistance to the transition to distance education during the spread of COVID 19 pandemic in Jordan within the academic year 2021-2022.

Depending on the quantitative approach, a questionnaire was distributed on a convenient sample of (391) lecturers of different tanks within private universities in Jordan. SPSS was employed in order to process and analyze the gathered primary data; results of study indicated the following:

- It was seen that respondents were aware of the concept of change resistance and had the ability to manage through the questionnaire in a well-built manner
- The main aim of study was realized in a positive way, and it appeared that educational technologies moderated the relationship between change resistance management approaches and the transition to distance learning during COVID 19
- The second hypothesis was also accepted, and results supported the fact that change resistance management approaches had a statistical significant influence on the transition to distance learning during COVID 19

The study was able to prove the hypotheses adopted and based on the idea that the transition to distance education must be based on technological foundations that enhance the educational process so that it appears as it is actually and face to face in the classroom. The resistance here emerged based on many factors and reasons, which included the unwillingness of the teaching staff to enter the fray of distance education and the need to receive training courses on the mechanism of dealing with the technology of educational platforms, in addition

to their feeling that the educational process has now become complicated, and no longer They have a class room to teach students in. Rather, it has become a virtual room in which there is no sense of gathering or control or the ability to receive information in the way they are acquainted, which led to their resistance to this type of change.

In addition to that, the study indicated that the management of resistance to change starts from how to deal with individuals and reach their requests and desires in order to implement change successfully, in addition to motivating them to succeed in the change process, starting with the things that individuals need to hear and put them in the picture that change will be the reason In teaching them a new skill, and training them to show different and positive behaviors to reach a stage where change is a natural part of the organization's culture and thus implement change strategies in a successful and smooth manner (Al Lily et al ,2020).

When looking at the independent variable (resistance to change management), we find that the results of the study demonstrated the ability of the practices of resistance to change management to control the resistance that appeared by supporting the teaching staff with the sub-variables that were adopted, which included (Efficient Managing, Participation, Communication, Organizational Culture, Managerial Practices). In addition, the study proved that one of the most important sub-variables (management practices of resistance to change) was (managerial practices) with a value of B = .585 compared to the least influential variable recorded, which is (organizational culture) with B = 0.82, but the effect remained positive considering The culture of the organization contributes greatly to addressing resistance to change and facilitating the transition process. This agreed with previous studies Franklin et al (2021) and Al Lily et al (2020).

The current study indicated a vital and important idea, which is that the resistance that occurred during the transitional period of distance education due to the COVID 19 pandemic was actually and mainly coupled with a lack of knowledge, information, skills and technological capabilities of individuals, as most of the resistance appeared after identifying the platforms that They were dealt with, and the existing infrastructure was identified and weaknesses were identified, and thus the inability of the teaching staff to deal with these obstacles, in addition to the waste in the time that would occur if the IT departments were used, even if there were great doubts The extent to which the IT departments in universities are able to deal with the huge amount of pressure as a result of this sudden and unplanned transition agreeing with what came along with (Akbar et al, 2019; Akdeniz and Konakli, 2022).

#### **CONCLUSION**

In general, the resistance is not accompanied by rejection, as the change is not rejected, but rather it is resisted in order to change the way that individuals see as more successful for them, and therefore it should not take place to view the resistance as a negative thing, but in general it is a natural reaction caused by Fear of the unknown and uncertainty about the goals of change, and it may be the lack of sufficient information about reform, so communication and participation are required in order to ensure that the educational staff at the university is aware of the benefits of change and how it will be introduced and applied in the educational process.

Future research should analyze the role of school administrators in managing change resistance and promoting the successful transition to distance learning during the COVID-19 pandemic. In particular, research should focus on the leadership strategies that enable school administrators to successfully support teachers in transitioning to a distance learning format. Additionally, research should investigate how the use of education technology assists with mitigating change resistance and gauging successful adaptation to the distance learning model. Finally, research should focus on how student-teacher relationships are affected by the transition to distance learning and whether they have a moderating role in making the transition smoother.

Based on above results, discussion and conclusion; current study recommended the following:

- Focus on treating behavioral resistance such as controlling the reactions and perceptions of individuals within the educational organization
- The tendency to appreciate resistance and to think that it is a positive rather than a negative resistance
- Listening to the people who are resisting the change, they may have ideas and solutions to current problems

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